



CBI  
*Ministry of Foreign Affairs*

# **CBI Product Factsheet:**

## **Cardamom in Europe**

## Introduction

Although the market for cardamom is relatively small, this spice is widely used in the EU. Most of the cardamom used in the EU comes from Guatemala, with smaller amounts coming from India and a few other countries. Import volumes rose by an average 9% per annum between 2010 and 2014. Smaller suppliers such as Sri Lanka, Honduras and Colombia are also increasing their exports to the EU. Suppliers that operate according to sustainable principles have an important competitive advantage in the EU market.

## Product description

Cardamom (or cardamon) refers to several plants of the similar genera *Elettaria* (small cardamom) and *Amomum* (large cardamom) in the ginger family Zingiberaceae. *Elettaria* and *Amomum* *Elettaria* pods are light green in colour, while *Amomum* pods are larger and dark brown. The statistical data in this document are based on Combined Nomenclature (CN) codes. The CN uses Harmonised System (HS) codes to classify products. The HS codes included in this study can be found below. Two new product codes for cardamom were introduced in 2012, in order to make it possible to distinguish between whole and crushed/ground cardamom.

HS Code	Description
09083000 – used until 2012	Cardamom
09083100 – used from 2013 onwards	Cardamoms, whole
09083200 – used from 2013 onwards	Cardamoms, crushed or ground

## Product specification

**Quality:** *Product quality* is a key issue for buyers in the EU and also includes food safety. The [European Spice Association](#) (ESA) has published the [Quality Minima Document](#), which is a vital source of information 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 lists the chemical and physical parameters that determine the minimum quality requirements for cardamom:

Ash (max.)	Acid insol. ash (max.)	Moisture (max.)	Volatile oil (min.)	Ash (max.)
9.0%	2.5%	12%	4 ml/100gr	9.0%

Cardamom is graded in accordance with the relevant national standard of the country of production. In addition, [ISO standard 882-1](#) provides some general guidelines on the grading, handling and packing of cardamom. The variables for grading are:

- Colour (deep green, green, light green and pale brownish)
- Size
- Clipping (i.e. pods with the tips trimmed)
- Bleached or unbleached
- Proportion of extraneous matter present
- Burst or not

There are three types of quality products on the cardamom market: (1) 2 - 3 mm seeds, ranging in colour from white through brown to black, which are the most valuable form of the spice; (2) green pods (also known as 'greens'): harvested before they are fully mature and dried in curing installations, so ensuring that they retain their green colour; and (3) yellow pods: fruit capsules that have matured to a yellow colour and have a lower oil content.

**Labelling:** Incorrect labelling is a major source of frustration for European buyers. You must therefore take care to label your product properly. The CBI Product Factsheet [Consumer Packed Spices and Herbs in the EU](#) gives information on consumer packaging requirements. The labelling of bulk products should 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, and any further information that can be used to trace the product back to its origin.

PACKAGE NUMBER: **BLO0000383**

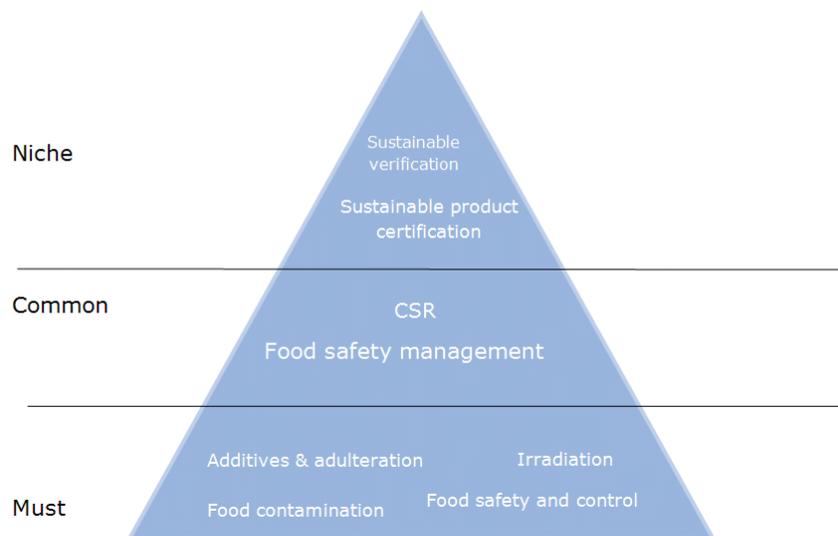


<b>NET WT</b>		<b>GROSS WT</b>	<b>DATE</b>
447.11 LB		567.5 LB	11/16/2009
202.80 KG		257.41 KG	

If 95% of the cardamoms correspond to one colour group (deep green, green, light green or pale brownish), this colour group should be mentioned on the label to indicate the grade of the cardamom. When the cardamoms are not of any one uniform colour, the colour is not indicated on the label. The EU does not have product standards for cardamom, so private standards such as those laid down by ESA and ISO are voluntary, but become mandatory if all parties concerned subscribe to them.

**Packaging:** Cardamom is generally packed in double-layered jute bags (42-50 kg). Single-ply fabric bags lined with polythene are also increasingly used. Black polythene bags are used to protect the better, green grades from light. The bags should be sealed to prevent the entry of moisture. Premium grades are packed in vacuum-sealed bags and shipped in 5 kg cartons, each master carton containing 8 such cartons. Polythene-lined gunny bags (strong sacks made from jute fibres) inside wooden boxes are used for long-term bulk storage. It is essential that the cardamom capsules should be completely dry before they are placed in the gunny bags for storage.

## Buyer requirements



### What legal requirements must cardamom comply with?

Please be aware that your product will have to comply with EU legislation the moment it enters the EU. This compliance is a must. You should therefore only consider exporting to the EU when you can meet all the relevant requirements.

### 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 permit 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 the definition of critical control points on the basis of the hazard analysis and critical control points (HACCP) approach by implementing food management principles. Another important requirement is that your delivery system must allow official controls of your food products. Products that are not considered safe will be denied access to the EU. Some spices and herbs are subject to increased controls but cardamom is currently (August 2015) not on the relevant list (see the following Tip).

**Tips:**

- EU buyers will often ask buyers to implement a food safety management system based on HACCP principles (see ***Food safety management and traceability*** below).
- 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 [health control](#) on the EU Export Helpdesk.

**Contamination of spices and herbs**

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

**Tips:**

- Guatemalan farmers often [lack](#) the agronomic knowledge for cardamom cultivation. It is important to have a clear understanding of the best practices in the cultivation, drying, processing and storage of your product to prevent contamination, and you should discuss these factors with your suppliers. Valuable guidelines in this field are provided by: [Code of Hygienic Practice for Spices and Dried Aromatic Plants](#) (Codex Alimentarius) and [Good Manufacturing Practices \(GMP\) Spices](#) (IPC).
- Consult the [website](#) of the Transport Information Service for information on safe storage and transport of spices and herbs.

**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. Pests can represent a serious threat to cardamom. It has been estimated for example that *Sciothrips cardamomi* can sometimes wipe out [30% of the harvest](#) in Guatemala. Insecticides can be used to control this and other pests; however, great care must be taken not to use too much pesticide or the wrong type of pesticide. This is an important issue in the cultivation of cardamom, especially in [India](#). [Unregistered pesticides](#) are also occasionally used in the cultivation of cardamom, and this practice must be avoided.

**Tips:**

- The EU [MRL database](#) lists all harmonised MRLs. You can use your product or the pesticide employed as search terms, and the database will show the relevant MRLs.
- Insecticides and other pesticides must be carefully selected and applied. Refer to the [study](#) by the Department of Export Agriculture in Sri Lanka to learn how to combat *Sciothrips cardamomi*. Apart from using insecticides, farmers need to remove alternative hosts and plant debris within and outside the field. In addition, removal of dried shoot peels at the base of the stem of the cardamom plant helps to reduce the thrips populations. Renewal of old plantations is also a crucial step.
- In addition, you should promote integrated pest management (IPM) amongst the farmers you work with to reduce pesticide levels in your product. Further information is available on the website of the [Indian Spice Board](#).
- Read more about [MRLs](#) on the EU Export Helpdesk.

**Microbiological**

EU legislation does not lay down specific microbiological requirements for cardamom as it does for other [products](#). However, Article 11 of the [General Food Law](#) states that food products placed on the EU market must be safe. It follows that spices and herbs are banned from the market if mould or fungi are found on them. Cardamom suffers from the attack of various pathogenic microbial agents, of which fungal infections are of major concern. Steam sterilisation is the preferred method for combating microbiological contamination in the EU, especially for cardamom destined for the retail market. It is important to be able to provide this service, since buyers prefer cardamom that has been steam sterilised. Please note, however, that many forms of microbiological contamination cannot be neutralised by steam sterilisation.

**Tips:**

- Refer to the study [Strategies to Curtail Fungal Diseases in Cardamom Plantations](#) to understand more about the different diseases affecting cardamom and the ways you can help farmers to combat them.
- Moulds and fungi can occur at all stages of production including growth, harvesting, processing, storage, packaging and sale. The maintenance of good manufacturing and hygiene practices, together with the application of HACCP principles, is therefore of great importance during growth, harvesting and processing.
- Steam sterilising yourself can be costly but it can earn you a premium. Working together with reliable local service providers may be an option.
- Read more about [contaminants on the EU Export Helpdesk](#).

**Food additives and adulteration**

Many of the spices and herbs rejected by custom authorities or buyers contain undeclared, unauthorised or excessive amounts 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 may not contain added colours.

Cardamom, whether whole or crushed/ground, is often intentionally adulterated with cheaper varieties such as Siam cardamom, Nepal cardamom, winged Java cardamom or bastard cardamom. Adulteration is a widespread problem in many countries of origin such as India, where [30-40%](#) of all food sold is intentionally adulterated. An important reason for 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 is quite common in spices and herbs, including cardamom. 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:**

- If you use additives, make sure the way you use them 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 if you want to sell processed cardamom to EU buyers. It is impossible for buyers to test spices and herbs for every possible extraneous material. They will therefore tend to refrain from buying processed spices and herbs 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.
- Further information on food additives, enzymes and flavourings is available on the EU [website](#).

**Irradiation**

Irradiation of spices and aromatic herbs including cardamom is permitted. This is a safe way of killing pathogenic organisms, and affects the taste of spices and herbs less than steam sterilisation. The maximum overall average absorbed radiation dose is 10 kGy. This method is not widely used in the EU, however, since consumers generally prefer unirradiated products.

**Tips:**

- While irradiation has less effect on the taste of spices and herbs than steam sterilisation, this method is not widely used in the EU because consumers here generally prefer unirradiated products. There are fewer consumer objections to irradiation in other countries such as the USA. Ethylene oxide fumigation for combating microbiological contamination is prohibited in the EU. It is however permitted in the USA.
- Read more about [irradiation](#) on the EU website.

**What additional requirements do 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 the form of certification. Many EU buyers (e.g. traders, food processors or retailers) require the implementation of a food safety management system, preferably based on HACCP principles. The most important food safety management systems in the EU are [BRC](#), [IFS](#), [FSSC22000](#) and [SQF](#), all of which are recognised by the [Global Food Safety Initiative \(GFSI\)](#) and hence by major retailers.



#### Tips:

- EU market entry requirements are more likely than not to include implementation of a food safety management system. This makes it important to familiarise yourself with such systems.
- Different buyers prefer a particular management system. Check which one is preferred (for example, UK retailers often require BRC, while IFS is more commonly required on the mainland of Europe).
- Further information on Food Safety Management Systems is available in the [Standards Map](#).

### Corporate social responsibility

EU buyers (especially those in Western and Northern EU countries) are increasingly aware of their corporate responsibilities regarding the social and environmental impact of their business. This also affects you as a supplier. Important issues in the cardamom supply chain are the correct use of pesticides, soil degradation, deforestation, the impact on biodiversity and fair payment for farmers. Different 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 can 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.

#### Tips:

- Exporters interested in supplying the EU market should at least address the most important CSR issues. Many buyers already use this as a selection criterion for new suppliers. Prioritise CSR issues by considering your impact on various social and environmental factors, what you can feasibly do to improve your impact and what is appreciated by EU buyers. List relevant CSR issues with reference to existing standards such as [ISO 26000](#)).

### What are the 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 (DCs) by paying them a premium. The [Rainforest Alliance \(RA\)](#), a mainstream sustainability scheme with a focus on both social and 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 spices and herbs 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 RA's [Chain of Custody standard](#).



#### Tips:

- [ITC](#) and [Organic Bio](#) provide information on companies in the EU or in your own country that supply organic spices and herbs. Refer to the Fairtrade [producer database](#) for details of certified suppliers. The Fairtrade [price list](#) gives an indication of the price you should pay farmers for Fairtrade or Fairtrade/Organic spices and herbs.
- Refer to the ITC [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 \(SAC\)](#) and 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.



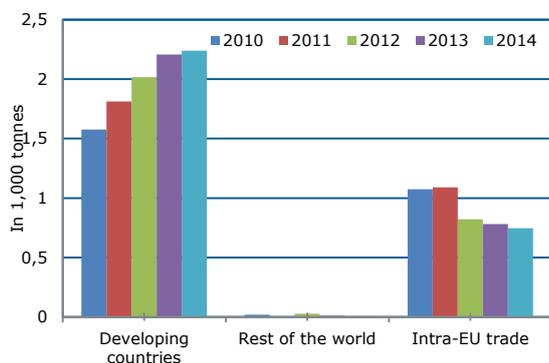
**Tip:**

- Refer to Unilever's [Implementation Guides](#) for further information on self-verification.

## Trade and Macroeconomic Statistics

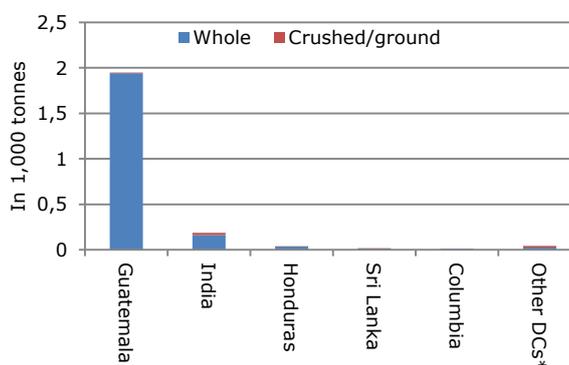
### Imports

**Figure 1: EU<sup>1</sup> imports of cardamom, 2010-2014**



Source: Eurostat, 2015

**Figure 2: Most important suppliers of cardamom from developing countries to the EU, 2014**



\* Developing countries  
Source: Eurostat, 2015

### Most important developments

The EU depends completely on developing countries for its supply of cardamom. It imported 2.2 thousand tonnes, with a value of € 18 million, in 2014. There is also significant intra-EU trade (0.7 thousand tonnes in 2014), which consists of cardamom re-exported directly or exported after being processed.

Direct EU imports of cardamom from developing countries rose at an average annual rate of 9.2% between 2010 and 2014. The value of these imports fell by an average 13% per annum during the same period, reflecting a substantial drop in the average import price of cardamom from € 13 per kilo in 2010 to € 5.30 in 2014. This is mainly due to the drop in the price of cardamom imported from Guatemala. Indian prices tend to be higher than those in other countries of origin, due to the strong domestic demand. As Guatemala has very low domestic consumption it is able to sell cardamom at a lower price than other exporting countries. The large Guatemalan crop in 2012-13 was one of the main reasons for the drop in prices. Other [important factors](#) influencing the price were the dumping of cardamom on for cheap prices on foreign markets by Guatemalan farmers, the high levels of unsold stocks and the strong impact of the pest *Sciothrips cardamomi* on the quality of cardamom.

**Tips:**

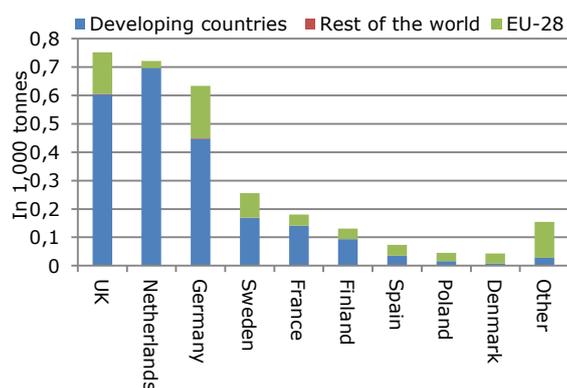
- Keep up to date on cardamom prices and harvests. Karyv Commodities (1, 2), Cardex, Hasco, Angel Commodities, Champagne Foods, the Indian Spice Board and the Economic Times of India (future prices) often publish valuable crop and/or price reports.
- Refer to the report of Karyv Commodities for the cardamom crop calendar.

The price of cardamom shows a strong annual fluctuation. Prices are generally high and stable in January to February-March but start to rise from April onwards when fresh supplies dry up at the end of the harvesting season. Prices peak in June and start to fall from July onwards as the first pickings of the new crop season arrive. The drop in prices remains limited, however, as the quality of the crop is usually not very high during the first picking. Supplies to the market peak in September-October, when prices touch yearly lows. However, prices bounce back in November due to seasonal winter demand from the US and EU (Source: [Karyv Commodities](#), 2014).

<sup>1</sup> For a list of EU countries, see the [EU website](#).

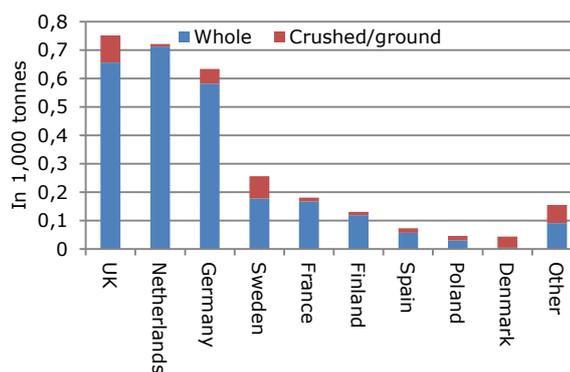
EU imports of cardamom continued to grow throughout the economic recession in the EU. The demand for cardamom is also relatively inelastic to price changes, largely because cardamom is a minor but important ingredient that contributes little to the total cost of the food in which it is used.

**Figure 3: Imports of cardamom by EU country and supply category, 2014**



Source: Eurostat, 2015

**Figure 4: EU imports of cardamom by country and level of processing, 2014**



Source: Eurostat, 2015

### Most important developments

The main suppliers of cardamom from developing countries are Guatemala (87%), India (8.3%), Honduras (1.7%), Sri Lanka (0.7%) and Colombia (0.5%). All these countries significantly increased their exports to the EU between 2010 and 2014. Especially smaller suppliers performed well: for example, Honduras increased its exports by +22% per annum, and Sri Lanka by 29%. Colombia and Ivory Coast did not supply the EU at all in 2010, but each supplied 10 tonnes in 2014.

#### Tip:

- Crushing and grinding should be considered as the last value-adding step after treatment to ensure excellent cleanliness and quality, sterilisation and grinding. These methods of adding value allow you to charge a premium, and are easy to implement. Measures aimed at achieving economy of scale are also important.

Whole cardamom accounted for 87% of the volume imported into the EU in 2014, and crushed or ground cardamom for 13%. Only 2% of imports from developing countries is crushed or ground cardamom.

#### Tip:

- The supply of cardamom oil or oleoresin is another possible way in which suppliers could add value. Further information on these products is available in the relevant [CBI Product Factsheet](#).

Cardamom is often sold and consumed in whole form. The food processing industry does buy significant amounts of processed cardamom, most of which is processed by processors located within the EU. Forty-six per cent of intra-EU trade consists of processed cardamom. Opportunities for suppliers from developing countries to supply processed cardamom are thus still limited.

#### Tips:

- It is more costly to remove contamination from ground cardamom than from the whole product. Your buyer will transfer costs to you if your products do not comply with requirements.
- Refer to the [CBI Product Factsheet Crushed and Ground Spices and Herbs](#)

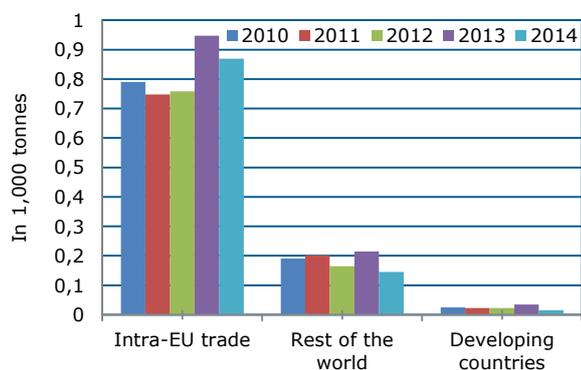
### Tip: market selection

Although the EU is a single market, there are large differences between EU regions and countries that you should consider in your export strategy. Make a statistical analysis to get an insight into these differences. Focus on the following aspects:

- **Volume of imports** – will tell which country are the biggest buyers or traders in the EU. You will find the biggest cardamom buyers in Western EU countries (78% of total EU imports in 2014). Also look at exports to determine whether a country imports for domestic consumption or for trading purposes.
- **Percentage and growth of imports from developing countries** – will tell 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, most large Western EU countries buy much of their cardamom directly from developing countries. Northern and Eastern EU countries in particular, which do not have a large processing industry, rely mostly on other EU countries for their supply.
- **Processed vs. unprocessed** – some countries prefer to do their own processing or rely on other EU countries. Large EU importers generally import a small proportion of processed cardamom; for example, the Netherlands (1.3% in 2014) and Germany (8.3%) because they have their own processing industry and/or are large traders. Smaller countries imports a large proportion of processed cardamom: Luxembourg, Malta, Slovenia and Slovakia all imported 90% or more of processed cardamom in 2014.
- **Price** – The prices paid for cardamom vary throughout the EU. These price differences 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.
- **Volume and growth of imports from your country** – The reasons why buyers in a certain EU country prefer to source from a particular country include taste preferences, presence of processing industry in the country of destination, extra-legal food safety requirements and historical trade relations. For example, the Netherlands imported 9.3% of its cardamom from Indonesia in 2014, while the UK only sourced 1.3% from Indonesia and relied much more on India (35%). Close historical links between the purchasing country and the country of origin and the popularity of ethnic cuisine are important factors here.
- 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 concerning such matters as scale, level of organisation, type of product (mainstream or niche) and ability to comply with extra-legal food safety and sustainability requirements.

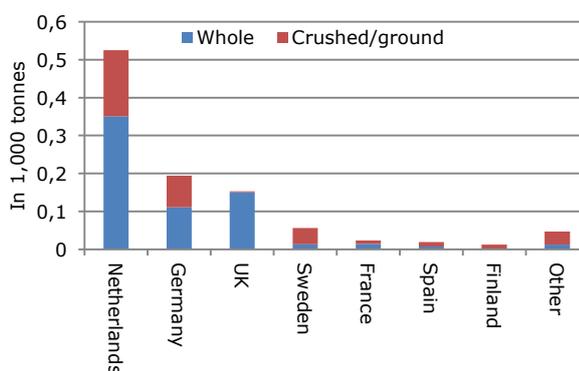
## Exports

Figure 5: EU exports of cardamom, 2010-2014



Source: Eurostat, 2015

Figure 6: Most important EU exporters of cardamom, 2014



Source: Eurostat, 2015

### Most important developments

EU exports of cardamom in 2014 amounted to 1 thousand tonnes, with a value of € 8.9 million. The volume of exports rose by an annual average of 0.5% between 2010 and 2014, while their value fell by an annual average of 13% due to the substantial drop in the global price of cardamom.

Eighty-nine per cent of all EU exports of cardamom in 2014 consisted of intra-EU trade, the main exporters being the Netherlands (51% of total exported volume), Germany (19%) and the UK (15%).

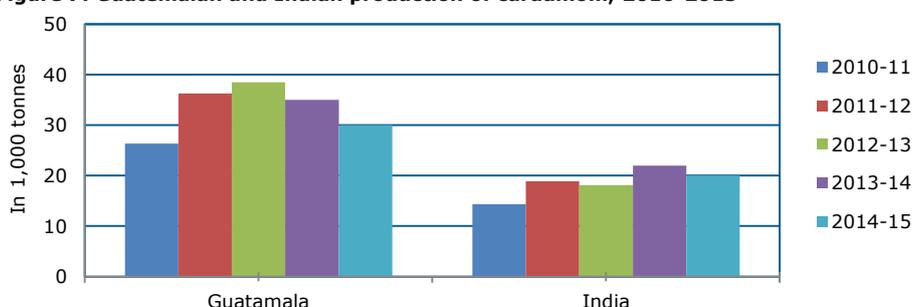
EU exporters add significant value to imported cardamom. There are thus opportunities in this field for exporters from developing countries with experience of supplying EU countries. They may decide to focus on increasing their direct sales to buyers who have so far relied on other EU suppliers. This might be a useful way of increasing such exporters' profit margins.

**Tip:**

- Explore opportunities for direct exports to the countries already supplied by other EU countries (see Figure 3). Buyers who do not deal directly with suppliers in countries of origin may have reservations regarding quality, food safety and supply security. You should therefore investigate buyer requirements in your target market and deal with their potential reservations in advance. Get references from your other EU buyers. You should also be aware that you could be asked to provide the same service levels as EU buyers (short supply times, small orders, steam sterilisation, further processing, etc.).

**Production**

**Figure 7: Guatemalan and Indian production of cardamom, 2010-2015<sup>2</sup>**



Source: Cardex, DIPLAN-MAGA /BANGUAT, Indian Spice Board

**Most important developments**

The annual global production of cardamom is estimated to be around 50-55 thousand tonnes (Source: [Commodities Control](#), 2015).

Cardamom production is in the hands of a few countries. Guatemala, the leading producer, supplied about 30 thousand tonnes of cardamom in 2014-2015. Indian production was around 20 thousand tonnes in 2014. India exports roughly 15-20% of its total cardamom production (Source: [Angeel Commodities](#), 2015). Other countries such as Sri Lanka, Tanzania, Colombia and Honduras account for about 5 thousand tonnes together. South-American countries like Honduras and Brazil are investing in cardamom production. Inadequate investment in research, technology transfer and production monitoring has led to deterioration of Guatemala's cardamom sector (Source: [USAID](#), 2014).

**Tip:**

- Invest in your farmers to ensure quality and supply security. One option for producers from developing countries is to work with EU spice houses that are big enough and have the resources needed for investment. You can find such spice houses in the membership lists of the various EU national spice associations. The [European Spice Association](#) (ESA) lists the contact details for these associations.

The quality of Guatemalan production is heavily influenced by extreme climatic conditions such as those caused by El Niño and La Niña. Another El Niño is expected in 2015/16, which could have a significant impact on production.

**Tip:**

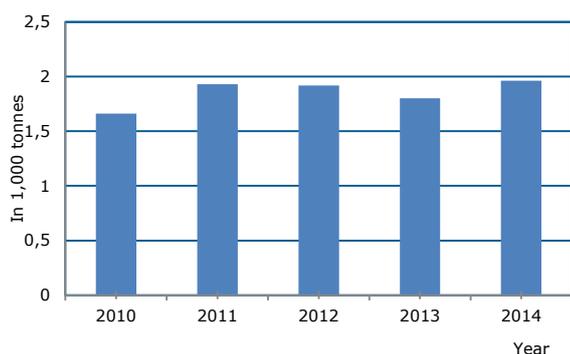
- Keep up to date on El Niño forecasts and updates with the aid of the [El Niño Portal](#).

The Indian crop in June 2015 is expected to be around 12-16,000 tonnes, which is 20-40% lower than last year, due to adverse weather conditions. Production in Guatemala is also likely to be lower this year (Source: [Economic Times](#), 2015).

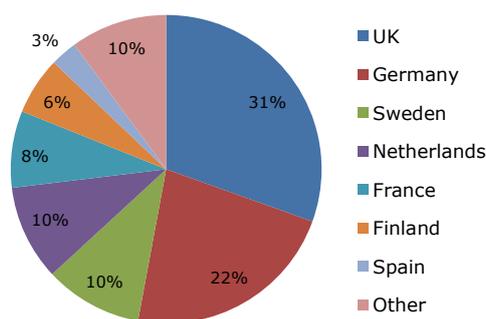
<sup>2</sup> Indian cardamom is harvested in the period from August to March, and Guatemalan cardamom from September to January. Harvesting seasons therefore refer to these periods rather than to calendar years.

**Tip:**

- Keep up to date on expected cardamom harvests worldwide. Karvy Commodities ([1](#), [2](#)), [Cardex](#), [Hasco](#), [Angel Commodities](#) and [Champagne Foods](#) often publish useful crop reports.

**Consumption****Figure 8: Apparent EU consumption of cardamom, 2010-2014** **Figure 9: Most important EU consumers of cardamom, 2014**

Source: Eurostat, 2015



Source: Eurostat, 2015

**Most important developments**

The apparent consumption (henceforth referred to simply as 'consumption') of cardamom in the EU countries in 2014 amounted to 2 thousand tonnes. Consumption increased by an annual average of 4.2% between 2010 and 2014. The EU market is a small market for cardamom compared to major markets such as Saudi Arabia and India. It may further be noted that demand in other emerging markets such as China and India is increasing.

**Tip:**

- Refer to the CBI document on [trends in the spice and herb market](#) for further information about the growing application of spices and herbs in convenience foods.

Western and Northern EU countries were the largest consumers of cardamom in the EU in 2014. Per capita consumption is also high in these parts of the EU. In the UK, Asian immigrants are responsible for most of the cardamom consumption. In the Netherlands and Germany, cardamom is widely used in spice mixes for the baking industry. Key products are the spicy cakes known as 'koek' in Dutch and 'Kuchen' in German. The Nordic countries of Sweden and Denmark have their own traditional way of using cardamom in sweet bread and cake such as the Finnish sweet bread pulla and the Scandinavian Christmas bread Julekake.

**Tip:**

- Check the [economic forecasts for EU Member States](#) issued by the European Commission to see which EU countries will enjoy a favourable economic climate in the coming years.

The global spice market is projected to grow by around 5% per annum until 2019. Growth will however be slower in developed regions such as the EU due to the fact that the industrial sector here is already mature (Source: [Markets and Markets](#), 2015). The market for cardamom is expected to grow in the coming years, albeit slower than in recent years. An important driver will be the growing appreciation of food (in particular Asian food) containing cardamom.

**Market Trends**

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

**Tip:**

- Refer to the CBI document on [trends in the spice and herb market](#) for further information on trends in the spice and herb market.

**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 who are able to provide cardamom steam sterilised at source. Investment in steam sterilisation equipment can be very costly (up to € 1 million), however. An important downside of steam sterilisation is that it reduces the volatile oil content, which is responsible for the flavour. EU buyers would switch to other methods if they were equally safe, accepted by consumers and not too expensive. At the moment there are no alternatives that meet these requirements but [GreenFooDec](#) is conducting research in this field.

**Tips:**

- Small producers from developing countries with limited access to capital will probably be unable to steam sterilise their own product. Look for local sterilisation companies that can provide this service for you.
- Steam sterilisation is only effective if food safety is taken into account during drying, storage, processing (such as sieving, mixing and grinding/crushing), packaging and transport. Steps should be taken to avoid contamination after sterilisation.
- Ascertain whether your buyers (or potential buyers) want the product to be steam sterilised before providing this service.
- Refer to [GreenFooDec](#) to keep up to date on the development of alternatives to steam sterilisation.

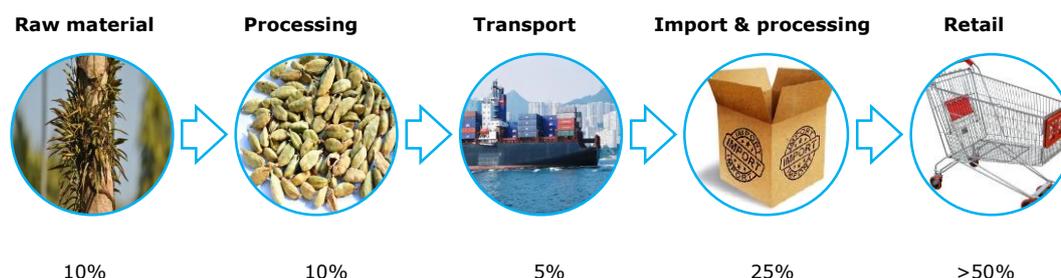
**Sustainability** is on the rise: sustainable sourcing is an important trend in the EU, especially in the UK, the Netherlands and Germany. Important issues in the supply chain are pesticide use, soil degradation, loss of biodiversity and fair payment for smallholders. As a supplier you will be increasingly faced with sustainability requirements from your buyer. Although sustainable cardamom is still a niche market, demand for products certified for compliance with sustainability standards is increasing. A large challenge for the market for certified sustainable cardamom 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:**

- Governmental and non-governmental organisations in developed countries often have programmes and subsidies available for investments in sustainability. You should therefore look for possible partners to promote sustainability with the aid of these funds. Further information is available on such websites as the [Sustainable Spice Initiative](#), the [Netherlands Enterprise Agency](#), the [German Ministry for Economic Cooperation and Development](#) and [Cordaid](#).
- As small farmers often do not have the capacity needed to process, store and export their product, exporters can play a vital role in this process. Working with NGOs and national or international governmental organisations is also a good way of attracting capital.
- Refer to the CBI Product Factsheet [Sustainable Spices and Herbs in the EU](#) for further information on long-term expectations concerning the market for certified sustainable products.

## Price

Figure 10: Snapshot of price breakdown of cardamom



Source: CREM, 2015

Please be aware that this price breakdown is only a general indication. It is influenced by many different factors including the country of origin, the current and expected future harvest situation, the quality of the raw material, demand level and price trends.

Cardamom is the third most expensive spice (after saffron and vanilla). Retail prices of cardamom depend on variables such as quality, brand and outlet, but may be as much as [€ 70 per kilo](#) when the cardamom is sold in small containers.

**Tip:**

- Keep up to date on cardamom prices and harvests. Karvy Commodities ([1](#), [2](#)), [Cardex](#), [Hasco](#), [Angel Commodities](#), [Champagne Foods](#), [Indian Spice Board](#) and the [Economic Times of India](#) (future prices) often publish valuable crop and/or price reports.

Please be aware that the value of the Euro dropped significantly in relation to the dollar during the past year. Various [sources](#) indicate that this trend 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> – provides information on the national spice associations that belong to it
- Food Ingredients Europe – <http://www.foodingredientsglobal.com> – important international trade fair for the food ingredient and health sector in Europe
- SIAL – <http://www.sialparis.com> – large international food fair held in France every year
- Biofach – <http://www.biofach.de> – largest European organic food trade fair held in Germany



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