



CBI  
*Ministry of Foreign Affairs*

# **CBI Product Factsheet:**

# **Sunflower seeds in Europe<sup>1</sup>**

---

<sup>1</sup> *European Union (EU) and EFTA (European Free Trade Association)*

## Introduction

The European market for sunflower seeds is highly dynamic. Even though the majority of sunflower seed production is destined to the production of sunflower oil (and sunflower meal as a by-product), the market for confectionery-grade seeds is growing. Sunflower seeds are used in bakery products, but also in a number of health products (e.g. healthy snacks) and for direct consumption. Europe is one of the most important producing regions of sunflower seeds, but its market demand exceeds production, which provides interesting opportunities to suppliers elsewhere.

## Product definition

Sunflower seeds originate from the sunflower plant (*Helianthus annuus*), named after its sun-shaped flower head, and native to North-America. During the Spanish exploration of the Americas sunflower spread to Europe and in more recent times has become a major commercial crop. Globally, the leading producers are Russia, Ukraine, Argentina and China.

The light weight sunflower seeds provide a firm texture and mild nutty taste, making both the oil and edible seeds excellent as a food ingredient. The high vitamin E and multiple nutrients and minerals content make sunflower seeds a healthy ingredient for human consumption. The seeds can be salted or roasted for direct consumption, but are often processed in baking or confectionery industries.

### Codes for sesame seeds:

- Harmonised System (HS) → sunflower seeds, whether or not broken (excl. for sowing) are included in:

HS code	Description
1206 00 91 / 99	Sunflower seeds, whether or not broken, excl. for sowing

## Product specification

### Quality

#### General

- Sunflower seeds are categorised into two main types that differ in size, colour of the hull and application:
  - Confectionery grade: large-sized, striped sunflower seed husks are processed or used for direct consumption (roasted, salted – common in Mediterranean countries). The seeds are often shelled and the kernel is sold in the bakery industry, e.g. used as a topping in breads, cakes, etc. In-shell sunflower seeds are used widely in the bird feed industry.
  - Black grade / crushing grade: The thin and smaller black sunflower seeds are mainly used for crushing (sunflower oil). The black sunflower seeds have a relatively high oil content (between 39-49%). The distinct size also makes them directly usable for bird feed.
- Make sure that the raw material (i.e. sunflower seeds) is fresh and that there are no long delays between harvesting and extraction. Sunflower seeds should also be free from sand, stalk, plant debris and other foreign materials.
- Some of the most important quality factors concerning sunflower seeds are: odour, flavour, oil content, moisture content, colour, size, uniformity of seeds, purity and damaged/mouldy seeds.
- Sunflower seeds should also be free from mycotoxins and harmful microbiological activity. Aflatoxin B1 and ochratoxin contamination are known to be a problem for many producers, and buyers closely monitor these aspects by testing prior shipment and after arrival.
- Prevent contamination by keeping facilities and equipment clean.
- Ensure proper storage and transportation (see 'Packaging').

#### Organic (if relevant)

- Comply with organic standards for the production of sunflower seeds. Refer to the section on 'Niche requirements' for further details on organic production and labelling.

### Labelling

- Ensure traceability of individual batches.
- Use English for labelling purposes, unless your buyer has indicated otherwise.
- Labels must include the following:
  - Product name and grade

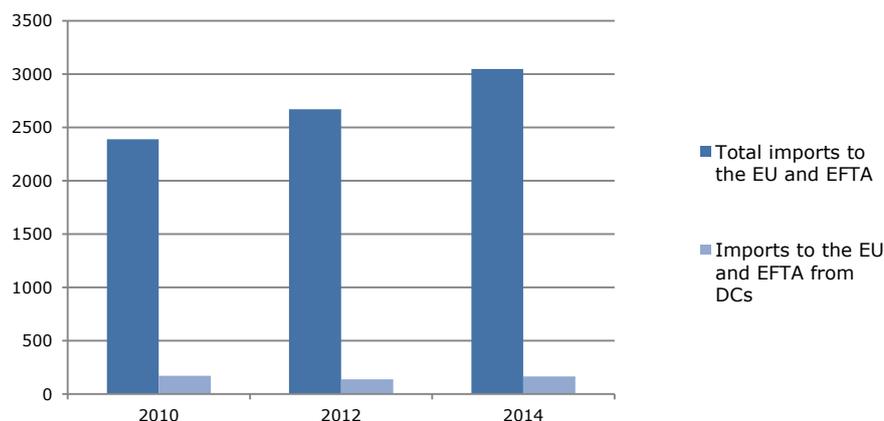
- Whether or not the product is destined for human consumption
- Manufacturer's lot or batch code
- Name and address of exporter
- Product's country of origin
- Shelf life: Best-before date / use-by date
- Net weight / volume in metric units
- Recommended storage conditions

## Packaging

- Sunflower seeds can be transported as bulk cargo or break-bulk cargo, in jute, poly-woven bags or multiwall paper bags.
- Ensure preservation of quality by:
  - Thoroughly cleaning the holds or containers before loading the seeds.
  - Protecting the cargo from moisture during loading, as to avoid mould, spoilage and self-heating.
  - Ensuring appropriate temperature, humidity / moisture and ventilation conditions during transportation.
  - The high oil percentage and high fibre content can cause sunflower seeds to undergo self-heating during transport; the product should therefore be kept from exposure to sun and heat.
  - Protecting the cargo from pests such as beetles, moths, etc.

## Trade statistics

**Figure 1: Imports of sunflower seeds to Europe, 2010-2014 in 1,000 tonnes**



Source: Eurostat (2015)

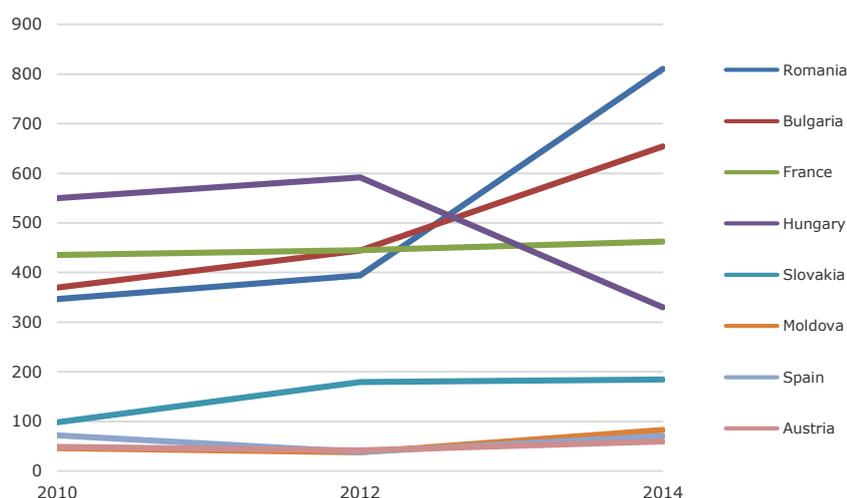
- In 2014, total imports of sunflower seeds in Europe amounted to 3.1 million tonnes (€1.2 billion). Since 2010, the average annual volume has increased by +6.3% and by +6.0% in value.
- The largest importer of sunflower seeds is the Netherlands, with a 19% share in volume in 2014. In the last five years, imports to the Netherlands have increased slightly at an annual average of +1.7% in volume as well as in value (+2.9% annually).
- Another large import market is Germany (15% share in volume). In contrast to Europe's market development since 2010, Germany recorded a small average annual decrease in volume (-1.5%).
- Other large importing countries of sunflower seeds in Europe are Spain (13% share in volume), France (11%), Portugal (8.1%) and Hungary (7.7%). In line with Europe's market development, these four countries recorded a significant annual increase of sunflower seeds in both volume and value. In the period 2010-2014, Spanish imports increased by +14% annually in volume and by +11% in value. France recorded an annual average increase of +25% in volume and +19% in value. For Portugal the figures were +13% and +12%, while Hungary recorded the sharpest average annual increase of +40% in volume and +29% in value.
- A large share (93%) of the sunflower imported into Europe is derived from intra-European trade, especially from suppliers in Romania (27% share in volume) and Bulgaria (22%). These countries recorded a sharp growth in the intra-European supply of sunflower seeds in the period 2010-2014 (above +20% annually). Other large intra-European suppliers such as France (15% share in volume) and Hungary (11%) lost market share.
- The share of European imports sourced from developing countries remains small, at 5.5% of total import volume in 2014, amounting to 167,000 tonnes (€101 million). Since 2010, imports from developing countries have decreased further at an annual average of -0.5% in volume and -3.2% in value. Because the European Union market for

sunflower seeds is very large, a 5.5% share still represents significant market opportunities for developing countries. However, African suppliers produce sunflower seeds in smallholder systems which find it difficult to compete with extensive agriculture systems employed elsewhere.

#### Tips:

- Accompany developments in the European trade for sunflower seeds and identify developments such as the emergence of new suppliers and decline of established ones. An interesting source to get acquainted with the European market and its trade dynamics is the website of the European Commission's [Export Helpdesk](#). The website of [FEDIOL](#) also provides annual industry statistics for sunflower seeds and centralises publications which are relevant to the oilseed sector.
- Alternatively look for niche opportunities for specific characteristics like high oleic or organic to gain access to the European market.

**Figure 2: Imports of sunflower seeds to Europe; the largest markets (in terms of 2014 volume) exporting sunflower seeds to Europe, 2010-2014 in 1,000 tonnes**



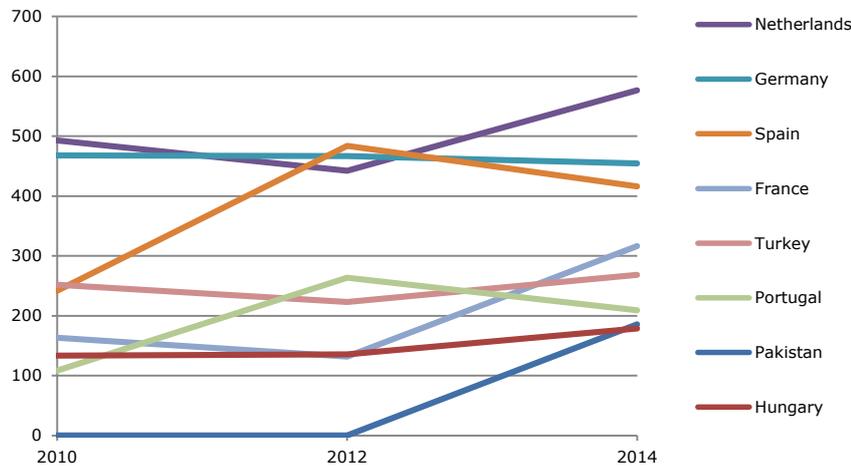
Source: Eurostat (2015)

- The largest developing country suppliers to Europe are found in the Black Sea region. Moldova is currently the largest supplier (2.7% share in total import volume), followed by Ukraine (1.2%). Other important developing country suppliers of sunflower seeds are Argentina, China and Serbia.
- In the case of Moldova, sunflower seed and sunflower oil form a quarter of the country's agricultural commodity exports ([APK Inform](#)). According to the Ministry of Agriculture and Food Industry, Moldova has reached the maximum of planted areas under sunflower seed of nearly 300,000 ha. Therefore, agrarians plan to increase the yield indices by growing new highly productive sunflower seed varieties in the coming years without expanding the planted areas. The slight annual decrease in sunflower seed imports from developing countries in the period 2010-2014 can largely be attributed to the decline of Ukraine as a supplier to Europe. Ukraine's exports to this region declined by an average annual rate of -8.1%. There are several developments that could explain the decline. Firstly, a sudden lack of production from Russia (the largest producer globally) increased Russian demand for Ukrainian sunflower seeds, lowering Ukrainian exports to European Union countries ([USDA Gain Report, 2014](#)). Secondly, the current political and economic instability in the East of Ukraine and unfavourable weather conditions have decreased sunflower seed production in 2014 ([APK Inform](#)).

#### Tip:

- Identify your potential competitors and learn from them in terms of:
  - Marketing: website, social media, trade fair participation, etc. Well-structured websites are for example: [CLC Beans and Seeds](#) (Argentina) and [Northeast Cereals](#) (China).
  - Product characteristics: origin, quality, oil content, etc.
  - Value addition: certifications, processing techniques.

**Figure 3: Export destinations of sunflower seeds from the European market; the largest countries importing sunflower seeds from Europe (in terms of 2014 volume), 2010-2014 in 1,000 tonnes.**



Source: Eurostat (2015)

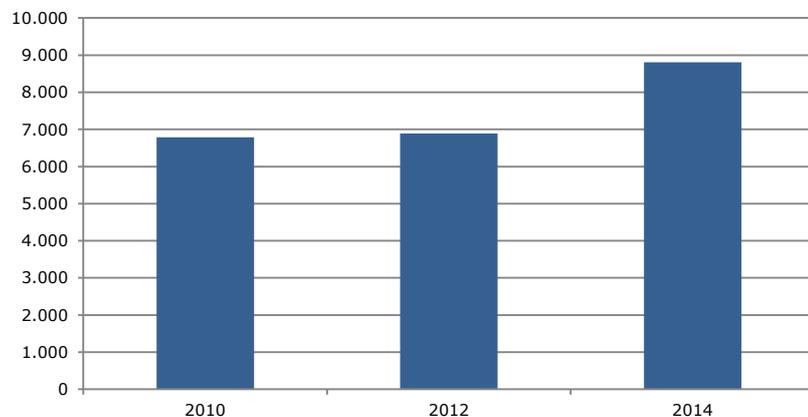
- In 2014, the total exports of sunflower seeds amounted to 3.5 million tonnes (€1.3 billion). Since 2010, exports have increased at an annual average of +7.1% in volume and +7.0% in value.
- Romania has become the largest exporter of sunflower seeds in Europe (31% share in volume). Since 2010, Romania has recorded a significant annual growth rate of +24% in volume and +20% in value.
- Bulgaria is the second largest exporter of sunflower seeds in Europe (28% share in volume). Since 2010, Bulgaria's exports of sunflower seeds have grown steadily with an average annual rate +11% in volume and +10% in value.
- Other important exporting countries are France (12% share in volume) and Hungary (11%).
- The largest export destinations of European sunflower seeds are the Netherlands (15% share in volume), Germany (15%), Spain (10%) and France (8.5%).

**Tip:**

- The website of [FoodDrinkEurope](http://FoodDrinkEurope) could be an interesting source to understand consumption patterns of food products, including the use of sunflower seeds, across different European countries.

**Consumption**

**Figure 4: Apparent consumption<sup>2</sup> of sunflower seeds in the EU, in 1,000 tonnes, in 2014**



\* The latest FAOSTAT production statistics (2013) are included in the calculation of apparent consumption for 2014. Source: FAOSTAT, 2015; Eurostat, 2015

<sup>2</sup> Apparent consumption: defined as a calculation of (imports – exports) + production.

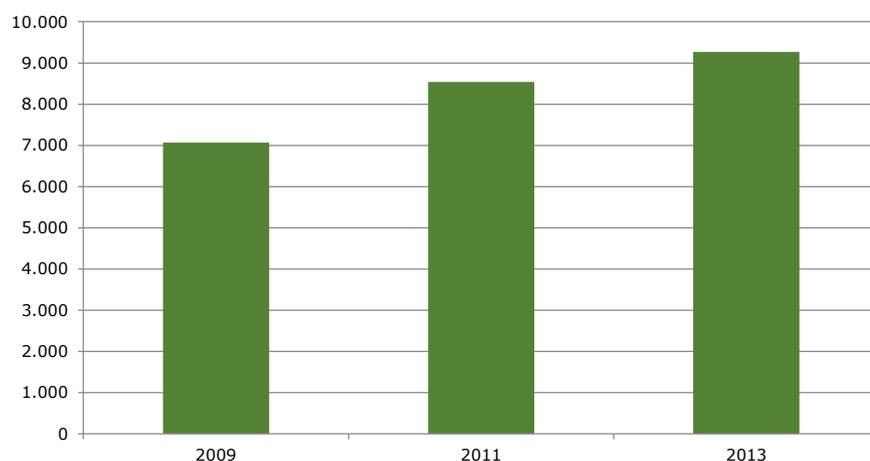
- Total apparent consumption of sunflower seeds in Europe amounted to 8.8 million tonnes in 2013/2014. In the period 2010 to 2014, annual average growth of +7.0% was recorded. Note that apparent consumption of sunflower seeds includes human consumption, industrial demand (e.g. crushing) and the (bird) feed industry.
- Consumer preferences for sunflower seeds can vary between the different European countries. In Spain, there is a high demand for 'pipas', mostly salted, roasted and in-shelled sunflower seeds for direct consumption. In the Netherlands and Germany sunflower seeds are used for bakery and confectionery purposes, processing mainly the sunflower kernels as a food ingredient. The majority of the cultivated sunflower seeds (black grade) are destined for crushing.
- In 2014, France and Spain were the largest consumption markets of sunflower seeds. French apparent consumption reached 1.5 million tonnes (17% share in volume) and Spanish apparent consumption reached 1.4 million tonnes (16%). Other large consumption markets for sunflower seeds are the Eastern European countries of Hungary, Bulgaria and Romania. Hungary consumed 1.3 million tonnes of sunflower seeds, while Bulgaria and Romania consumed 1.1 and 1.0 million tonnes respectively.

### Sunflower-seed crushing

- The largest European crusher of sunflower seeds is France; the country crushed 1.3 million tonnes of sunflower seeds in 2013 (21% of the European Union total). Of French domestic production, around 90% of the sunflower seeds are destined for crushing.
- Spain and Hungary are also large crushers of sunflower seeds; in 2013, crushing activities amounted to 1.1 million tonnes for each country (19% of the European Union total).
- Countries that engage in smaller-scale crushing of sunflower seeds are Bulgaria (574,000 tonnes), the Netherlands (545,000 tonnes), Germany (313,000 tonnes) and Romania (219,000 tonnes).

### Production

**Figure 5: Production of sunflower seed in the EU, in 1,000 tonnes, in 2013**



Source: FAOSTAT, 2015; Eurostat, 2015

- In 2013, total production of sunflower seeds in Europe amounted to 9.3 million tonnes. Since 2009, the European average annual volume has increased slightly by +1.0%, which is lower than the likely potential growth in consumption.
- Romania and Bulgaria are the largest producers of sunflower seeds in the European Union. Romania's production amounted to 2.2 million tonnes and Bulgaria's to 1.9 million tonnes in 2013. Romania accounted for 24% and Bulgaria for 21% of total European Union production. Between 2009 and 2013, their production increased significantly by an annual average rate of +19% and +10% respectively.
- Other large European producers include France (1.6 million tonnes in 2013), Hungary (1.5 million tonnes) and Spain (1.0 million tonnes).

#### Tip:

- Find out more about consumption (& crushing) and production of sunflower seeds in Europe through the statistics provided by [FAOSTAT](#) and [Fediol](#) (Federation of the European Vegetable Oil and Protein meal Industry).

## Market trends

This section describes market trends relevant for confectionery-grade sunflower seeds only (i.e. edible seed industry). Market trends related to sunflower oil and sunflower seed-crushing activities are described in the CBI Product Fact Sheet 'Sunflower Oil in Europe'.

## Health and wellness

- The healthy content of sunflower seeds makes it a popular ingredient for health food products. Sunflower seeds contain a high amount of proteins, vitamin B1 & E, other minerals (including calcium), as well as dietary fibre and linoleic acids. Its contents make confectionery-grade sunflower seed an interesting ingredient for healthy food products, a growing market in Europe.
- Additional to its high nutritious value, sunflower seeds also provide a valuable alternative to peanuts or tree-nuts. Unlike peanuts, sunflower seed allergies are rare. The high nutritious value and low allergy risk of sunflower seeds in food products has made the seed a popular alternative ingredient in salads, snacks and convenience foods.
- One important health trend related to sunflower oil is the growth of lighter oils (i.e. high oleic). In France and other West European countries, the market has been slowly switching to high-oleic sunflower oil, encouraging growers to adapt the raw material (sunflower seeds) accordingly. In addition, European importers report that the demand for high-oleic sunflower oil surpasses its current availability, which can be translated into prospective market opportunities for producers and exporters who can fill this gap. Read more about this trend in the CBI Product Fact Sheet 'Sunflower Oil in Europe'.

## Convenience and functionality

- Functional snacks and convenience foods represent one of the fastest growing markets in Western Europe. With the increased use of nuts and oilseeds, including sunflower seeds, exporters of sunflower seeds can benefit from this trend as well.
- This is especially true for the low-fat snack segment. The sunflower seed, following the pumpkin seed, is a popular ingredient due to its relatively low fat percentage (around 25%).

### Tips:

- Promote the various applications and health properties of sunflower seeds. Make sure to provide your buyer with accurate product specifications and composition, with a focus on:
  - Product description and code
  - Grade
  - Origin
  - Certificate(s) [if applicable]
  - Production: ingredients, additives, process
  - Sensorial properties: smell, colour, taste, appearance
  - Packing: net content, kind of packaging, size, layers
  - Shelf life
  - Nutritional values
  - Analytical properties
  - Microbiological properties
  - Allergy list
- Make sure your product characteristics and quality match your target market and end-user in terms of:
  - Taste and odour
  - Oil content
  - Purity level
  - Uniformity and appearance
  - Natural / shelled
- Stay informed on the Nutrition trends in the European Union by visiting websites such as [Food Navigator](#), [Nutraingredients](#) and [Food Ingredients First](#).

## What legal requirements must my product comply with?

### Contaminants in food:

The European Union has laid down maximum levels of contaminants in food, including ingredients such as sunflower seeds.

**Tip:**

- Check out the maximum levels for [contaminants in food set by European Union legislation](#).

**Maximum Residue Levels (MRLs) of pesticides in food:** European Union legislation has been laid down to regulate the presence of pesticide residues (MRLs) in food products.

**Tip:**

- If the sunflower seeds have been treated with pesticides, verify that residues remain within limits. For more information, consult the specific European Union legislation: [Maximum Residue Levels \(MRLs\) of pesticides in food](#).

### Additives, enzymes and flavourings in food:

The European Union has set a list of permitted flavourings and requirements for their use in foodstuffs intended for human consumption, which includes sunflower seeds. This is particularly relevant to food manufacturers. However, insight into this legislation can help you to understand their requirements.

**Tip:**

- Familiarize yourself with the concerns of the end-users of your products by checking EU legislation on [additives, enzymes and flavourings in food](#).

### Hygiene of foodstuffs:

Food business operators shall put in place, implement and maintain a permanent procedure, or procedures, based on the HACCP (Hazard Analysis and Critical Control Points) principles. This also applies to the import of food to the European Union and export from the European Union.

**Tip:**

- Ensure compliance with European Union legislation on [Hygiene of foodstuffs \(HACCP\)](#).

## What additional requirements do buyers often have?

### Food safety management:

Buyers commonly require their suppliers to have a quality/food safety management system in place. These systems require companies to demonstrate their ability to control food safety hazards in order to ensure that food is safe at the time of human consumption.

**Tip:**

- Suppliers can apply a basic HACCP system. However, if they aim to supply food manufacturers more directly, it is necessary to have a certified food safety management system recognised by the Global Food Safety Initiative, such as ISO 22000, British Retail Consortium (BRC) or International Featured Standards (IFS) Food. Visit the website of the [Global Food Safety Initiative](#) for more information.

## What are the requirements for niche markets?

### Regulation (EC) 834/2007 on organic agriculture:

The European Union has established requirements on the production and labelling requirements with which an organic product of agricultural origin must comply in order to be marketed in the European Union as “organic”.

#### Tips:

- In general, the market for organic sunflower seeds is still a niche segment. If you do choose to obtain a certificate for organic production, find out more about [Organic production and labelling](#).
- Make sure that your organic certification is harmonised with the [European legislation](#).

### Fair Trade:

Fairtrade Labelling Organisations International (FLO) is the leading standard-setting and certification organisation for Fairtrade. Products which carry the Fairtrade label indicate that producers are paid a Fairtrade Minimum Price. However, FLO does not have a minimum price for sunflower seeds. Other fair trade standards available in the European market are Fair Trade Ecocert and the Institute for Marketecology's Fair for Life.

#### Tips:

- Before engaging in a Fairtrade certification programme, make sure to check (in consultation with your potential buyer) that this label has sufficient demand in your target market and whether it will be cost beneficial for your product.
- Although [FLO](#) certification is the leading fair trade certification scheme in Europe, you can also check out other schemes such as IMO's '[Fair for Life](#)' and [Ecocert Fair Trade](#).

## Market channels and segments

Figure 6: Trade channels for sunflower seeds in Europe

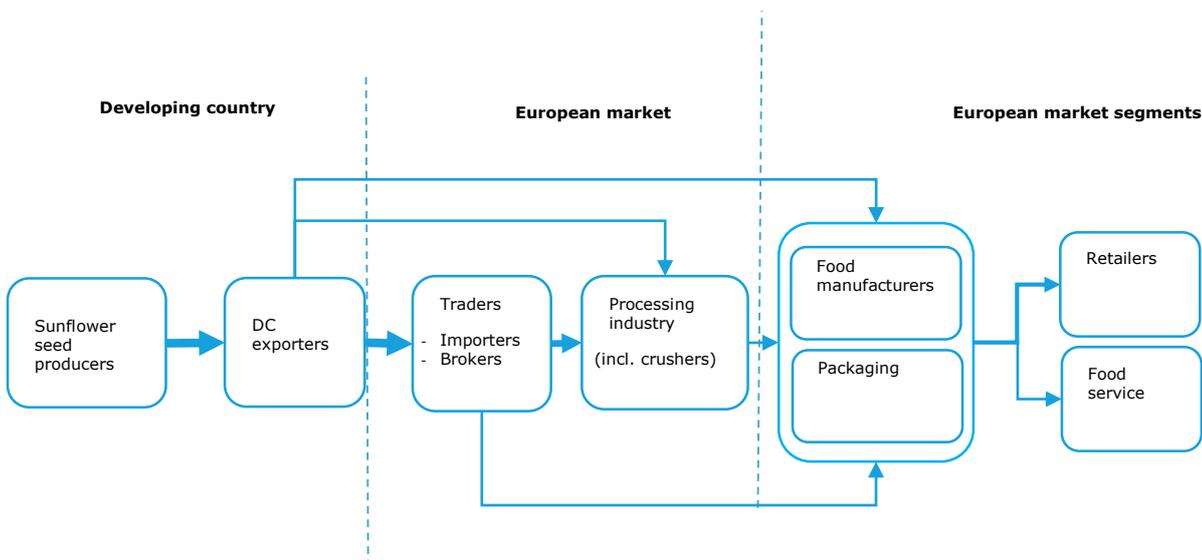
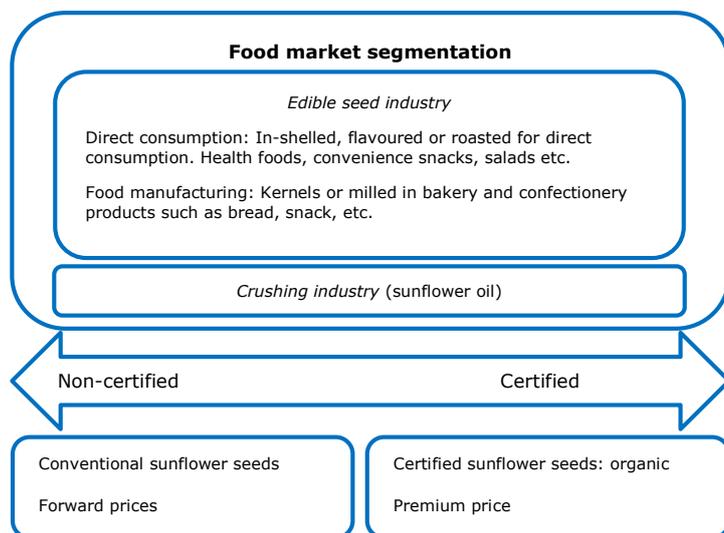


Figure 6 depicts the different steps in the trade channels for sunflower seeds as a food ingredient. Even though sunflower seeds go through a similar route, the actual processes are different for the specific segments. As such, the European market for sunflower seeds can be segmented into:

- **Crushing industry:** Sunflower seeds are mainly used for oil extraction (80-95% of total production). According to FEDIOL, sunflower seed-crushing in the European Union amounted to 5.9 million tonnes in 2013. France is the largest crusher, with a 21% share, followed closely by Spain (18%). Hungary (18%) and Bulgaria (10%) are also significant crushers of sunflower seeds.
- **Edible seed industry:** Within the edible seed industry, sunflower seeds are used either for direct human consumption or as an ingredient in food products, mostly in bakery. Direct human consumption of sunflower seeds is increasing in Europe, following the general trend for healthy foods and convenience snacks. The seeds can also be sprinkled over

salads and sautéed vegetables. Within bakery products, sunflower seeds are often mixed with other oilseeds. In Germany and other countries in Central Europe, sunflower seed flour is used in making dark bread (*Sonnenblumenbrot*).

**Figure 7: Segmentation of sunflower seeds in Europe**



## Price

The relative benign weather conditions in large producing countries (e.g. in Russia) in 2013 have meant that global stock to use ratios (including sunflower seeds) considerably expanded, consequently reducing sunflower seed price levels. Responding to the surplus production of 2013/2014, major sunflower producing regions (incl. the European Union and Russia) have reduced their production levels. Although prices increased slightly at the end of 2014, they remained at around US\$ 400 / tonne (CIF, Amsterdam) for the first months of 2015.

**Figure 8: Sunflower seed price, CIF Amsterdam, September 2001 – April 2015, in US\$ per tonne**



## Interesting Sources

- The EU Vegetable Oil and Protein meal Industry - [www.fediol.eu](http://www.fediol.eu)
- International Sunflower Association (ISA) - [www.isasunflower.org](http://www.isasunflower.org)
- The Food and Agriculture Organisation of the United Nations has a variety of agricultural databases - [faostat3.fao.org](http://faostat3.fao.org)
- For information on the latest market developments in the Oils and seeds sector, visit The Public Ledger - [publicledger.agra-net.com/oils](http://publicledger.agra-net.com/oils)
- B2B marketplace - [europe.go4worldbusiness.com/Seeds](http://europe.go4worldbusiness.com/Seeds)

## More information

CBI market information: Promising EU export markets.

EU Expanding Exports Helpdesk - <http://exporthelp.europa.eu> - go to 'trade statistics'.

Eurostat - <http://epp.eurostat.ec.europa.eu/newxtweb> - statistical database of the EU. Several queries are possible. For trade, choose 'EU27 Trade Since 1995 By CN8'. International Trade Statistics - <http://www.trademap.org> - you have to register



**CBI Market Intelligence**

P.O. Box 93144  
2509 AC The Hague  
The Netherlands

[www.cbi.eu/market-information](http://www.cbi.eu/market-information)

[marketintel@cbi.eu](mailto:marketintel@cbi.eu)

This survey was compiled for CBI by ProFound – Advisers In Development  
in collaboration with CBI sector expert Jim Fitzpatrick

Disclaimer CBI market information tools: <http://www.cbi.eu/disclaimer>

November 2015