CBI Product Factsheet:

Frozen vegetables in Germany
Introduction

Germany is the third largest frozen vegetable market in Western Europe and the fifth importer of frozen vegetables in the world. Imported frozen vegetables are mainly intended for domestic consumption. This product fact sheet provides information on product specifications, statistics, trends, market channels and segments, and competitiveness of frozen vegetables in the German market.

Product Description

Freezing is a method of long-term preservation for vegetables. The main advantage of preservation by freezing is the extended usage of vegetables during the off-season. Additionally, frozen vegetables can be transported to remote markets that could not be accessed with fresh vegetables. In this product fact sheet the focus will be on frozen vegetables. They are defined as the products preserved by freezing and prepared from fresh, clean, sound edible parts of fresh vegetables which have been sorted, washed, sufficiently blanched to ensure adequate stability of colour and flavour during normal marketing cycles and properly drained. Examples of frozen vegetables are: peas, beans, sweet corn, cauliflower, spinach, bamboo shoots, mushrooms and Brussels sprouts. This product fact sheet covers general information regarding the market of frozen vegetables in Germany which is of interest for producers in developing countries. The trade data used in this fact sheet is based on the Harmonized System (HS). HS is an international nomenclature for the classification of traded products developed by the World Customs Organization by means of a six-digit code system1. See table 1 below for the HS codes of products within the category of frozen vegetables.

Table 1: HS codes for products in the product group of frozen vegetables

<table>
<thead>
<tr>
<th>Text</th>
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<tbody>
<tr>
<td>07102100</td>
<td>Frozen peas (Pisum sativum)</td>
</tr>
<tr>
<td>07102200</td>
<td>Frozen beans (Vigna spp, Phaseolus spp)</td>
</tr>
<tr>
<td>071029</td>
<td>Other frozen leguminous vegetables (Uncooked, Cooked By Steaming or Boiling)</td>
</tr>
<tr>
<td>071030</td>
<td>Spinach, New Zealand spinach and orache spinach (garden spinach)</td>
</tr>
<tr>
<td>071040</td>
<td>Frozen sweetcorn</td>
</tr>
<tr>
<td>07108010</td>
<td>Frozen olives (uncooked or cooked)</td>
</tr>
<tr>
<td>07108051</td>
<td>Frozen sweet pepper (uncooked or cooked)</td>
</tr>
<tr>
<td>07108059</td>
<td>Frozen vegetables of genus capsicum or pimenta (uncooked or cooked)</td>
</tr>
<tr>
<td>07108061</td>
<td>Frozen mushrooms of the genus agaricus (uncooked or cooked)</td>
</tr>
<tr>
<td>07108069</td>
<td>Other frozen mushrooms (uncooked or cooked)</td>
</tr>
<tr>
<td>07108070</td>
<td>Frozen tomatoes (uncooked or cooked)</td>
</tr>
<tr>
<td>07108080</td>
<td>Frozen artichokes (uncooked or cooked)</td>
</tr>
<tr>
<td>07108085</td>
<td>Frozen asparagus (uncooked or cooked)</td>
</tr>
<tr>
<td>07108095</td>
<td>Other frozen vegetables (uncooked or cooked)</td>
</tr>
<tr>
<td>07109000</td>
<td>Mixture of frozen vegetables (uncooked or cooked)</td>
</tr>
<tr>
<td>20049010:</td>
<td>Frozen sweetcorn prepared or preserved other than by vinegar or acetic acid</td>
</tr>
<tr>
<td>20049030</td>
<td>Frozen sauerkraut, capers and olives, prepared or preserved other than by vinegar or acetic acid</td>
</tr>
<tr>
<td>20049091</td>
<td>Frozen cooked onions</td>
</tr>
<tr>
<td>20049098</td>
<td>Other frozen vegetables and mixtures of vegetables, prepared or preserved other than by vinegar or acetic acid</td>
</tr>
</tbody>
</table>

1 The EU Export Helpdesk provides you with a twelve-digit code system. This classification is preferably used when doubting tariffs applicable, but can be used for a detailed insight in the Harmonized System.
Product Specification

Quality

Most vegetables are known to freeze well. Frozen vegetables can retain their quality over long storage periods. Freezing of vegetables is generally regarded as superior to canning and dehydration, with respect to the retention of sensory attributes and nutritive properties. Quality requirements differ per vegetable type but in general frozen vegetables have to be:

- Free from foreign flavour and odour, taking into account any added optional ingredients;
- Clean, free from sand and grit and free from other foreign material;
- Of a normal colour for the variety used

and with respect to visual defects or other defects subject to a tolerance which differ per frozen vegetable, like: reasonable free from extraneous vegetable material (E.V.M.), loosely structured buds, trimmed or mechanically damaged units, damage by insects or diseases, and loose leaves.

More specific information on quality requirements for specific frozen vegetables can be found in the Codex Alimentarius (international organisation of the WHO and FAO setting food standards or 'codes').

Labelling

In accordance with regulations regarding the provision of food information to consumers, food should be labelled with appropriate information. EU Regulation (EU) No. 1169/2011 lays down the general rules on the labelling of pre-packaged food sold on the EU market. Notice that this regulation has replaced the previous one and became effective from 13 December 2014. In addition to these regulations, the Codex Alimentarius provides a voluntary standard and a reference for countries when they are developing food law.

Several basic requirements are recommended for the labelling of frozen vegetables:

- The name of the food as declared on the label shall include the name of the ingredient mentioned in the product definition.
- The form (or style) of vegetables, such as whole, slices, or halves. If the form is visible through the package, it need not be stated on the packaging.
- The liquid in which a vegetable is packaged must be listed near the name of the product. For example: "with (name of sweetener or syrup)"
- Either the words "quick frozen" or "frozen" should be mentioned on the label (use of terminology differs between countries and depend on which term is customarily used for describing the product).
- For some vegetables the variety or colour should be mentioned.
- Total contents (net weight) must be stated in grams for containers holding 1 kilogram or less.

For frozen vegetables that are sold in bulk, the above information must either be placed on the container or be given in accompanying documents, except that the name of the food accompanied by the words ")quick) frozen" and the name and address of the manufacturer or packager must appear on the container. Retail packs should provide information about ingredients (such as spices, flavouring, colouring, or special sweetener), nutritional information and expiration date. This information is required on the label, although not on the front of the panel. In addition, directions for storage and directions for preparation of the product should be given.

It is common in the frozen vegetables processing industry that different types of frozen vegetables should be marked according to sizing classification. Cut frozen vegetables should also be labelled by the size and type of cut (for example straight cut, crinkle cut, short cut, diagonal cut, sliced etc.)

In the case of quick frozen vegetables in bulk, the information required above must either be placed on the container or be given in accompanying documents, except that the name of the food must be accompanied by the words "quick frozen" and the name and address of the manufacturer or packer must appear on the container.

Size and packaging

Proper packaging of frozen vegetables is important to preserve the quality of the food and to protect the product from contamination and damage during transportation. According to the Codex Alimentarius packaging used for (quick) frozen vegetables must:

- protect the organoleptic and other quality characteristics of the product
- protect the product against microbiological and other contamination
- protect the product from dehydration and, where appropriate, leakage as far as technologically practicable;
- not pass on the product any odour, taste, colour, or other foreign characteristics throughout the processing (where applicable) and distribution of the product up to the time of final sale.

Germany applies EU-harmonized legislation to packaging and containers. Germany applies additional requirements regarding packaging waste and recycling of packaging material known as the green dot system; see the German Packaging and Waste Avoidance Law.
Be aware that since January 1, 2009, the recycling law no longer requires the "Green Dot" to be printed on product packaging to prove that the material will be recycled in a proper manner. However, if the manufacturer or the importer chooses to continue using the Green Dot symbol, a licensing contract needs to be signed with the Duales System Deutschland GmbH (DSD).

For further information on the Green Dot packaging material disposal and recycling programme contact your potential German importer and/or one of the following companies, which are registered as Green Dot recycling enterprises. See the Codex Alimentarius standards for fill and weight requirements for specific frozen vegetables. Marketing requirements for packaging differ widely among customers and markets segments. Therefore, it is crucial that you discuss with your customers their preferred packaging requirements.

**Processing**

The procedure for processing vegetables is as follows. Vegetables are selected and sorted, washed and peeled. After this initial preparation, vegetables that are to be frozen are usually blanched, or slightly pre-cooked. This pre-cooking process ensures that the frozen vegetables will retain much of their natural appearance and flavour for long periods of time in storage. Without blanching, the product would prematurely turn brown or oxidize before it could be marketed. The vegetables, after freezing, are packaged in polyethylene bags of varying sizes or may be packaged in retail-size fibre cartons with a labelled overwrap that identifies the product.

The freezing operation is to be carried out in such a way that the range of temperature of maximum crystallisation is passed quickly. The quick freezing process should be regarded as complete unless and until the product temperature has reached -18°C (0°F) at the thermal centre after thermal stabilisation. The recognised practice of repacking quick frozen products under controlled conditions is permitted.

![Peas and vegetable mixture sources](all-free-download.com)

**Buyer requirements**

Buyer requirements can be divided into (1) musts, requirements you must meet in order to enter the market, such as legal requirements, (2) common requirements, which are those most of your competitors have already implemented, in other words, the ones you need to comply with in order to keep up with the market, (3) niche market requirements for specific segments.

A general overview of the EU buyer requirements for processed fruits and vegetables you can find on the Market Intelligence Platform of CBI.
Legal requirements are a must – food safety and informing consumers correctly

Here you can find requirements you must meet when marketing your products in the EU. Pay attention to the indications of which materials / products are concerned per requirement described.

The following ‘musts’ apply to the products and uses listed here:

- **Food safety and health control** – applicable to all food products
- **Contamination** – applicable to all food products
- **Composition** – for all food products, specific requirements for fruit juices and fruit jams, jellies, marmalade and sweetened chestnut purée apply
- **Labelling** – for all pre-packed food products, specific requirements for fruit juices and fruit jams, jellies, marmalade and sweetened chestnut purée apply
- **Food contact materials** – for all pre-packed food products

**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. An important aspect to control food safety hazards is defining critical control points (HACCP) by implementing food management principles. Another important aspect is subjecting food products to official controls. Products that are not considered safe will be denied access to the EU. Directive 89/108/EEC lays down the specific requirements for quick-frozen foods intended for human consumption marketed in the EU.

**Tips:**

- Search in the EU’s Rapid Alert System for Food and Feed (RASFF) database to see examples of withdrawals from the market and the reasons behind these withdrawals.
- EU buyers will often ask buyers to implement a food (safety) management system based on HACCP-principles (see under Common requirements).
- Read more about HACCP and health control in the EU Export Helpdesk
- More information on specific requirements for frozen foodstuffs can be found on the CBI Market Intelligence Platform on EU legislation: Quick-frozen food

**Control of food imported to the EU**

In the event of repeated non-compliance of specific products originating from particular countries can only be imported under stricter conditions such as having to be accompanied with a health certificate and analytical test report. Products from countries that have shown repeated non-compliance are put on a list included in the Annex of Regulation (EC)
At the moment frozen vegetables (pesticide residues) from different countries (e.g. Brazil, India, Ghana, Thailand) are on the list.

Avoid contamination to ensure food safety

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

The different forms of contamination are:

- Nitrate: a maximum level of 2,000 mg NO-3/kg applies for frozen spinach (see section 1 of Annex of Regulation (EC) No 1881/2006)
- Heavy metals: there are restrictions for lead (fruit, fruit juices, various kinds of vegetables), cadmium (fruit and vegetables) and tin (canned food and beverages) (see section 3 of Annex of Regulation (EC) No 1881/2006)
- Microbiological: according to EU legislation salmonella is an important source of contamination in unpasteurised fruit and vegetable juices and cannot be present. There are no EU requirements for frozen vegetables. Food safety authorities, however, can withdraw imported food products from the market or prevent them from entering the EU if salmonella is found to be present. For E coli of the 5 samples only two can have a value between 100 cfu/g and 1 000 cfu/g. For other processed fruit and vegetables there are no EU requirements. Food safety authorities however can withdraw imported food products from the market or prevent them from entering the EU when salmonella is found present.
- 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.
- Foreign matter: contamination by foreign matter like plastic and insects are a threat when food safety procedures are not carefully followed.

More specifically, when tested by appropriate methods of sampling and examination, frozen vegetables:

- shall be free from microorganisms in amounts which may represent a hazard to health;
- shall be free from parasites which may represent a hazard to health; and
- shall not contain any substance originating from microorganisms in amounts which may represent a hazard to health.

Tips:

- To help you answer key questions about health control refer to the guidance document of the EU.
- Check if there are any increased levels of controls for your product and country. The list is updated regularly. Check the website of EUR-Lex for the most recent list (see under Amended by).
- Read more about health control in the EU Export Helpdesk.

Nutrition and health claims - Nutrition and health claims suggest or indicate that a food has a beneficial characteristic. They cannot be misleading. Therefore, only EU approved nutrition and health claims can be made. If new nutrition or health claims are made these have to be approved in advance by the European Food Safety Agency (EFSA).
Allergens - Pre-packed products that contain allergens have to be labelled in such a way that it is clearly visible to consumers that they contain allergens.

**Tips:**
- In December 2014 [EU Regulation 1169/2011](https://eur-lex.europa.eu) came into effect. This new labelling legislation changed current legislation considerably. For example, allergens have to be highlighted in the list of ingredients and requirements for allergen information also cover non pre-packed foods, including those sold in restaurants and cafés. Read more about the new labelling legislation on the [EU website](https://ec.europa.eu).
- Labelling must include the sales name and batch identification. The other compulsory information varies according to the intended recipient of the product (consumers, restaurants). It could include: a “quick-frozen” indication, the date of minimum durability, the period for which the product may be stored by the purchaser, storage temperature, storage equipment required and a clear message along the lines of “do not refreeze after defrosting”. For others the label should contain information about the net quantity and the identity of the manufacturer, packer or seller.
- Read more about [food labelling](https://ec.europa.eu) in the EU Export Helpdesk.
- For more information about [nutrition and health claims](https://ec.europa.eu) refer to the website of the EU.
- Refer to Annex IIIa of Directive [2001/13/EC](https://eur-lex.europa.eu) for the list of allergens that must be labelled.

Food contact materials

For consumer packaging materials that come in contact with food (e.g. cans, jars) specific [health control provisions](https://ec.europa.eu) apply. Food contact materials must be manufactured so that they do not transfer their constituents to food in quantities that could endanger human health, change the composition of the food in an unacceptable way or deteriorate the taste and odour of foodstuffs.

**Full overview of requirements for processed fruit and vegetables and edible nuts:**

For a list of requirements consult the [EU Export Helpdesk](https://ec.europa.eu) where you can select your specific product code under chapter 07, 08 and 20.

**Tip:**
- The EU legislation on food contact materials is quite extensive and it is not easy to prove to your EU importer that your product complies with all requirements. Therefore, EU importers of food products will require documentation on toxicology and risk assessment of chemical migration from food contact materials and/or declarations of compliance.

Common requirements: food safety management is crucial, addressing sustainability is gaining ground

**Food Safety Certification as a guarantee**

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](https://www.brcglobalstandards.com), [IFS](https://ifsinternational.com), [FSSC22000](https://www.fssc22000.org) and [SQF](https://sqf.com). Different buyers may have different preferences for a certain management system, so before considering certification against one of these standards, it is advised to check which one is preferred (e.g. UK retailers often require BRC and IFS is more commonly required on by other European retailers). All the mentioned management systems are recognised by the [Global Food Safety Initiative (GFSI)](https://www.gfsi.com/), which means that any of them should be accepted by several major retailers. However, in practice some buyers still have preferences for one specific management system.

**Tips:**
- EU market entry preparation is more likely to include implementing a food safety management system than not, and it is therefore important to familiarise yourself with them.
- When you plan to target one or more markets, check which specific food safety management systems are most commonly requested. In any case choose for a management system that is GFSI approved.
- Read more on the different Food Safety Management Systems at the [Standards Map](https://www.foodstandardsmap.com).

Corporate responsibility

EU buyers (especially large ones in western and northern EU countries) pay more and more attention to their corporate responsibilities regarding the social and environmental impact of their business. This also affects you as a supplier. Common
requirements are the signing of a suppliers’ code of conduct in which you declare that you do your business in a responsible way, meaning that you (and your suppliers) respect local environmental and labour laws, stay away from corruption etc. Furthermore importers may also participate in initiatives such as the Ethical Trading Initiative (ETI) in the UK, or the Business Social Compliance Initiative (less present in the UK). These initiatives focus on improving social conditions in their members’ supply chains. This implies that you, as a supplier, are also required to act in compliance with their principles.

Tips:
- When targeting other EU markets it might be interesting to assess your company’s current performance by doing a self-assessment, which you can find on the BSCI website.
- Be aware that many of the environmental and social sustainability issues take place at farm level. To test to what extent your farmers are sustainable you could ask them to fill in the Farmer Self Assessment by the Sustainable Agriculture Initiative.
- Consider defining and implementing your own code of conduct. This is not required by buyers, but may be a good way to show potential buyers your views on corporate responsibility. Refer to the Code of Practice of the Fruit Juice Association (AIJN) for inspiration. The AIJN represents a large share of the European fruit juice producers.
- Implementing a management system such as ISO14000 (environmental aspects), OHSAS 18001 (occupational health and safety) or SA 8000 (social conditions) is away to address sustainability and possibly gain a competitive advantage. Research with your buyer whether this is appreciated.

Niche requirements: a growing market for certified products

Fairtrade Certification
- Fairtrade products are produced with extra focus on the social conditions in the producing areas. Having your products certified is the most far-going way to prove your business performance for social conditions in your supply chain. After certification by an independent third party, you may put the Fair Trade logo on your product. In general, premium prices are paid for fair trade products. Although growing, the market for Fair Trade certified processed fruit and vegetables and edible nuts is still a niche market.

Tips:
- Check the Fair Trade Standards for small producer organisations.
- Consult the Standards Map database for more information on the Fair Trade label.

Organic, niche market

Organic processed fruit and vegetables and edible nuts are produced and processed by natural techniques (e.g. crops rotation, biological crop protection, green manure, compost). Although growing, the size of the market is still relatively small. To market processed fruit and vegetables and edible nuts in the EU as organic, they must be grown using organic production methods which are laid down in EU legislation and growing and processing facilities must be audited by an accredited certifier, before you may put the EU organic logo on your products, as well as the logo of the standard holder (e.g. Soil Association in the UK, Naturland in Germany). In Germany, individual certification bodies may produce their own standards which can be more stringent than the general regulations in force, usually in response to specific consumer demands. Although these are not legally enforceable, private certifiers may be more restrictive than is actually required by law. All agricultural products and foodstuffs from organic farming may be labelled with the national Bio-Siegel (eco label) of Germany. Examples of individual organic certifiers include: Naturland, Demeter, BCS Öko-Garantie, and Bioland. To decide which label to pursue, talk to your buyer or contact person in Germany.

Tips:
- Implementing organic production and becoming certified can be expensive. In the current market the return on investment may not be high. On the other hand it can increase yields and improve quality.
- Check the Soil Association standard for Food and drink to get an idea of the requirements of organic production.
- Consult the Standards Map database for the different organic labels and standards.

Rainforest Alliance

The Rainforest Alliance (RA) standard is a mainstream sustainability scheme with a main focus on environmental issues. Rainforest Alliance only certifies tropical products such as tropical fruits including bananas, pineapple, mango, avocado,
guava and citrus and different kinds of nuts. Rainforest Alliance is growing fast in the fresh fruit vegetables market. It is not very big yet in the market for frozen vegetables.

**Tip:**
- Consult the [Standards Map database](#) for more information on the RA standard.

**Trade and Macro-Economic Statistics**

General information and figures about production and trade developments for Processed Vegetables in the European market is provided in the CBI Tradewatch. In addition, information and figures about production and trade developments for (quick) frozen vegetables in the European market is provided in the CBI Product Factsheet of the same name. This section provides more detailed statistics on trade, production and consumption of frozen vegetables in Germany.

**Imports**

**Figure 1: German imports of frozen vegetables, in thousand tonnes**

![Figure 1: German imports of frozen vegetables, in thousand tonnes](image1)

*Source: Eurostat*

**Figure 2: Breakdown of German total import volume of frozen vegetables in 2013, by country of origin, in % of value**

![Figure 2: Breakdown of German total import volume of frozen vegetables in 2013, by country of origin, in % of value](image2)

*Source: Eurostat. Please note that the import structure contains frozen potatoes (including French fries) and other forms of cooked and frozen vegetables*
Analysis and interpretation

German imports of frozen vegetables mainly concern vegetables such as cabbages (e.g., cauliflower and broccoli), carrots, beans and peas. This also explains why such a large part of German imports are intra-EU imports, since most of these vegetables are grown in Europe themselves. Opportunities may lie in vegetables which are not grown in Europe and can be frozen, for example asparagus, mushrooms, specific peas and beans and (exotic) vegetables.

German imports of frozen vegetables are highly concentrated and the two leading suppliers (Belgium and the Netherlands) account for 67% of total imports.

German imports of frozen vegetables have grown by 2.3% in value and by 1.1% in quantity since 2010, reaching €536 million and 596,000 tonnes in 2014.

In the last five years intra EU imports remained stable, but imports from DC countries decreased slightly.

The largest share of German imports of frozen vegetables comprises frozen potatoes (quick frozen or in the form of French fries), where virtually all imports come from within the EU countries. This large category of imports is followed by different mixtures of frozen vegetables, spinach and peas.

The largest DC supplier in Germany is China, with frozen asparagus and frozen mushrooms as the top exporting products into Germany. Germany’s other important DC suppliers are Ecuador (frozen asparagus and broccoli), Turkey (sweet peppers), Serbia (sweet peppers) and South Africa (frozen chilli peppers).

In the range of the largest suppliers, the highest import growth in the last five years was recorded from Italy and Spain (frozen French fries).

The highest DC import growth since 2010 was from Serbia (mainly frozen sweet peppers), Thailand (frozen cooked vegetables), Guatemala (mainly frozen peas), Peru (frozen asparagus) and Mexico (frozen asparagus).
Tips:

- Consider the largest net importers for serving their domestic market. In mature markets, such as Germany, market share could be gained by offering products in niche markets such as exotic/ethnic vegetables.
- Consider the countries that show growth in imports for entering the market with frozen vegetables.
- Try to involve German experts in setting up your business. For example, CBI, the Development Cooperation Matchmaking Facility or the Netherlands senior experts network PUM could help with the implementation of many business aspects.
- Learn from DC exporters which are gaining share on the German market.
- Find a reliable intermediary or importer who can sell your products to the larger industries at a good price. In this context, it is worthwhile to explore the possibilities of long term contracts to secure your sales.
- Get information from your contact person in Germany about quality standards, delivery schedules and logistics requirements. Evaluate whether working capital, processing technology, logistics and the skill level of your company’s employees are able to keep up with these requirements.

Exports

Figure 3: German exports of frozen vegetables, in thousand tonnes

Source: Eurostat

Figure 4: Breakdown of German exports of frozen vegetables in 2013, by destination country, in % of value

Source: Eurostat. Please note that the export structure contains frozen potatoes (including French fries) and other forms of cooked and frozen vegetables.
Analysis and interpretation

German exports of frozen vegetables remained stable in the last five years, with slight fluctuations. Since 2010 exports have decreased by 0.5% in volume but increased by 2.3% in value, reaching €134 million and 100,000 tonnes in 2014. Compared to other European countries, the German share of European Union exports of frozen vegetables is rather small (3.2%).

The largest share of German exports consists of cooked frozen potatoes.

The majority of all German exports of frozen vegetables go to other European countries. The fastest growing German export destinations in the range of the first 20 importers are: Chile (frozen potatoes flakes) and Romania (frozen mushrooms).

Tip:
- General information on the European market for frozen fruits and vegetables can be found on the website of Profel (European Association of Fruit and Vegetable Processors).

Production and consumption

Figure 5: German total production of frozen vegetables, 2009-2013, in € million

![Graph of German total production of frozen vegetables, 2009-2013, in € million](image)

Data source: PRODCOM Eurostat

Figure 6: Apparent consumption of frozen vegetables in Germany, 2009-2013, in € million

![Graph of apparent consumption of frozen vegetables in Germany, 2009-2013, in € million](image)

Data source: PRODCOM Eurostat

Analysis and interpretation

After the sharp decline in 2009, most likely caused by the economic crisis, production of frozen vegetables remained stable at the level of €250-300 million.
The similar pattern is obvious in consumption, but the decrease in 2009 was smaller.

Germany is a medium player in Europe regarding the production of frozen vegetables (almost 5% of European production); smaller than countries such as Belgium, Spain, Poland and France, but bigger than countries such as the Netherlands and Hungary.

Belgium is by far Europe’s largest producer of frozen vegetables, also due to the fact that they are the home of some of the largest companies for freezing in the EU. The production share of Belgium increased from 23% (2008) to 29% (2012).

Most vegetables for freezing are produced in the open air. Because of its range of climatic conditions, a wide variety of crops is produced.

Unilever, Bofrost and Eismann are the top three companies in the German frozen vegetable market.

**Tips:**
- Competing successfully with products that are produced in Europe can be achieved by systematically reducing your production costs.
  - A lot of efficiency can be gained on transport and distribution; this will not only give you a competitive advantage in your own country, but also makes you more competitive on price.
  - In collaboration with local partners (government or NGO) you may be able to assist farmers in increasing their productivity and lowering their cost price.
- Try not to compete on price only, but also on added value and differentiated products.
  - Try to find matching market niches for your products.
  - Introduce new, innovative products or ‘authentic’ products. With these products you can focus on a niche market and adhere to the trend towards ‘authentic’ foods.
  - Introduce new flavours or new combinations of flavours.
- More information on the production of frozen fruits and vegetables in Europe can be found on the website of Profel.

In 2010, frozen vegetables made up 6% of the EU vegetable market (based on volume and excluding business-to-business).

More information on consumption trends can be found in CBI Product Factsheet: Frozen Fruit and Vegetables in Europe.

**Tip:**
- In targeting Germany with frozen vegetables you should take consumption differences into account. For example, you could consider exporting high-end and innovative products to specific target groups.

**Macro-economic statistics**

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Analysis and interpretation

The German population is expected to grow at a relatively slow rate from 81.1 million in 2014 to 81.9 million in 2020. The total volume of imports in Germany is expected to increase by 5.8% up to 2020, which means it is very likely that imports of frozen vegetables will increase too.

Between 2014 and 2016, German private consumption expenditure will continue to grow at an accelerating pace. This also means that consumption of frozen vegetables is likely to rise.

Tips:
- Consider exporting to Germany, as it is one of the larger markets in the EU in terms of population, with high consumption of frozen vegetables.
- The disposable income in Germany is relatively high, indicating opportunities for selling frozen vegetables.

Market trends

CBI Trend mapping provides you with general trends in the European market for processed fruits and vegetables. This section provides more details about specific trends in the German market for frozen vegetables.

Frozen vegetables relate to several relevant consumer trends in Germany. Increasing health consciousness, as well as the increasing pressure of time, the fast pace of life and increased demand for convenience due to smaller households have driven consumer demand for frozen vegetables and mixtures of frozen vegetables. Frozen products are seen healthier than processed vegetables.

Tip:
- Focus on the latest consumers trends: convenience, health, wellness and demand for luxury foods, are benefitting the ongoing consumer health trend and demand for quality products.

A key demographic factor in the future will be Germany’s aging population, which is already ranked among the oldest in the world. Demand for convenience, health, wellness, and luxury foods, will continue to affect food.

Ethnic-style cooking boosts demand for frozen vegetables. Despite German consumer concerns about the origins of frozen vegetables, vegetable mixes registered the highest retail value share of 38% in 2012. Vegetable mixes offer convenience, while the growing trend towards ethnic-style cooking also boosted sales.

Tip:
- Please keep in mind that sustainability is not a temporarily, but has gained solid ground. Sustainable exporters are therefore preferred by German business. Try to find matching market niches to the current sustainability and health trend. Or health and authenticity.

Sustainability is an on-going development that has gained solid ground among German consumers. This is among others translated in a demand for organic product. Germany is one of the leading countries in the EU organic market.

Tip:
- As an exporter you also have to comply with buyer (retail) requirements. Check with your buyer to determine the requirements and suitable standards for your product. Be a reliable and professional partner for a partnership or joint venture. Note: buyers are critical with whom to partner, professionalism is a must.

More consumers have growing awareness of environmental issues, i.e. they require organic, pesticide free, or ecologically responsible products. Also, frozen vegetables increasingly have to comply with environmental requirements.

Tip:
- Get information from your contact person in Germany about quality standards, delivery schedules and logistics requirements and evaluate whether your company is able to keep up with these requirements.
Frozen processed food has long been celebrated for its high level of convenience among German consumers. More recently consumers see growing concerns about the chemicals used to produce these products.

Many economies are still feeling the after effects of the global financial crisis but the German economy rebounded. While consumers in other European countries may have reduced their spending in response to the euro crisis, German consumers continued to consume higher quality foods in 2014.

Most frozen vegetables are bought by consumers in food retail. The German food market is dominated by five large retail companies (Edeka, Schwartz, Aldi, Rewe, Metro). In recent years, there has also been a trend in consumer preference toward smaller grocery formats, including convenience stores, small grocery retailers and independents.

Tip:
- Keep an eye on the dynamics between A-Brand and private labels in order to see where your growth market could lie. More information about this topic can be found on the internet (e.g., enter "private label" in the search engine, food related news sites, by contacting advocacy clubs or joining congresses in Germany and Europe).

In Germany, the market share for private label products has steadily increased to 40 percent in recent years. Nowadays consumers prefer price competitive standard private label products which also include standards of more expensive high quality premium products. Private label market share is expected to increase further. Retailers rarely import products into Germany on their own. Important A-brands in the German frozen vegetable market: e.g. Iglo and Bofrost.

Retailers control and requirements are increasing. They will put more pressure on the price asked by DC exporters through direct or indirect sourcing and/or are increasingly demanding a high level of traceability and food safety.

Prices

Frozen vegetables are sold to consumers for different prices. German consumers demand quality and low prices. A-brand frozen vegetable mixtures are sold to consumers by supermarkets for around € 4 - 5 per kg (based on 500 gram packaging). Some comments should be made. Prices of private label will be lower (€ 2 - 4 per kg, depending on packaging size). In all cases, the average price per kg is higher when the consumer unit is smaller. Finally, be aware that these figures are just indications. Price depends on the product, its quality, brand and retail outlet.

Useful Sources

Export and market entry support:
- [http://www.cbi.eu/](http://www.cbi.eu/)

Certification schemes:
- [http://www.isearliance.org/](http://www.isearliance.org/)
- [http://www.standardmap.org/](http://www.standardmap.org/)

Marketing and trade standards:

Statistics and sector information:
- [http://www.profel-europe.eu/](http://www.profel-europe.eu/)
- [http://ec.europa.eu/eurostat](http://ec.europa.eu/eurostat)