

Swedish food production



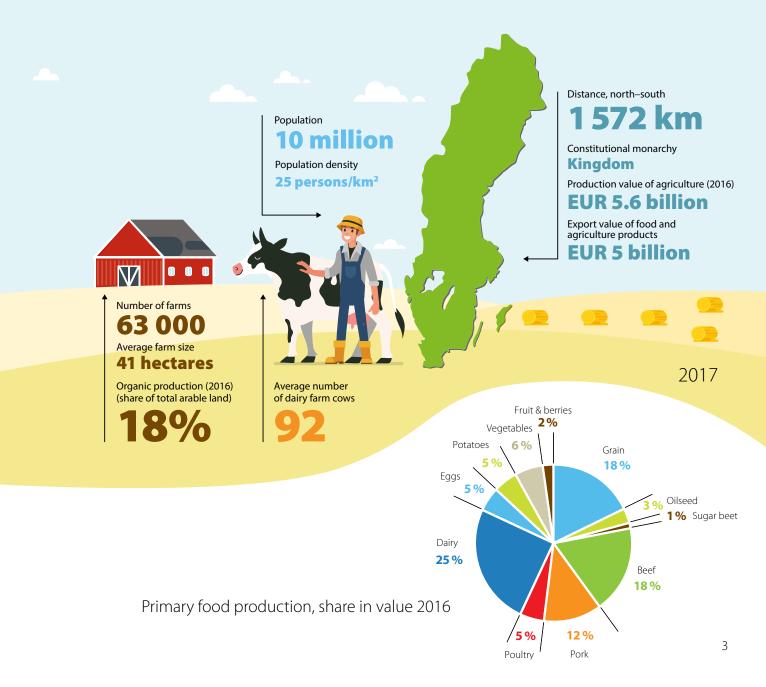
Quality from the north

Swedish food production involves a wide variety of traditions, crafts and flavours that stems from a favourable climate with different climatic conditions between the south and the north of the country. This creates opportunities for differentiation and high-quality products. Sweden is one of the largest countries in Europe in terms of size and is located on the Scandinavian Peninsula. Colder temperatures might limit agricultural production but naturally enhance food quality by reducing the pressure of pathogens and pests. Another contributory factor to the high health status is the protected geographical location with most of the border being coastline.

The low temperatures and high level of daylight in the summer stimulate the formation of aroma in Swedish fruits and vegetables, which enhances the taste. Sweden has a long and successful tradition of industry and authorities working together to ensure quality, making Swedish food stand out as a healthy and sustainable choice.

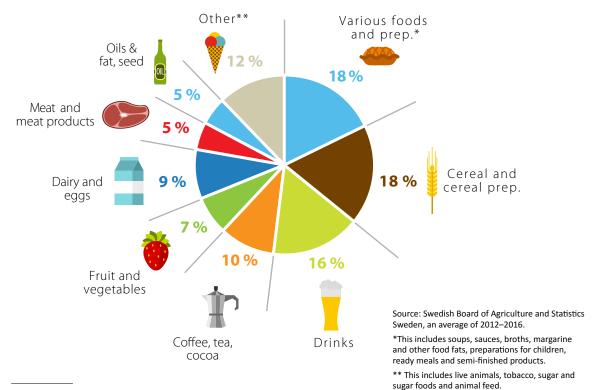


Facts about Sweden



Swedish exports

Sweden is an EU member since 1995, which has been an important factor for the increase in Swedish exports and trade in general. Swedish exports of food and agricultural products currently amount to EUR 5 billion¹. Cereal and cereal preparations, various foods and preparations (such as soups, sauces, baby food and ready-to-eat meals) and beverages, comprises more than 50 percent of Swedish food exports. The export of food and agricultural products from Sweden is steadily increasing. In fact, it has increased by over 50 percent in the last six years. The most important destinations are Norway and countries in the EU, but Swedish exports to countries outside Europe are also increasing. Sauces, fats, cereals, bread and pastry, vodka, beer, cider, chocolate and coffee are some of the larger export products from Sweden.



¹ 2017.

The food industry

The food industry is Sweden's fourth¹ largest manufacturing industry and it plays an important role in raising value by transforming agricultural produce into high-quality food and drinks.

There are many examples. One is the great demand for Swedish fruit cider on some export markets. The brewery sector has also increased more than tenfold in the last decade, especially the microbreweries, due to the increased demand for trendy and local beers. Many gluten- and lactose-free products are nowadays produced due to an increasing intolerance in the population. Finally, the demand for health products has seen an increase. Therefore low alcohol and innovative health products have taken an upturn.



¹ By number of employees and production value.



High safety food from Sweden

Swedish food safety standards are high. Official food control in Sweden is mainly regulated through European Union food legislation and is in some cases complemented by additional Swedish national regulations.

Control of the whole chain from farm to fork

Food and feed companies are regularly checked for compliance in accordance with relevant legislative provisions to ensure good practices for producing safe and properly marked food. This covers the entire food production chain, including quality of seeds, soil, feeding and breeding, all the way to sales and food serving. The control is risk-based. Food and feed companies need to be aware of potential hazards when they produce, serve or distribute food, feed and drinking water and have risk-based own control programmes, according to the HACCP principles. The authorities ensure that the controls are effective and that companies rectify any deviations from the requirements in the legislation. The controls are always independent of financial or other interests.

Standards and certification schemes

In addition to public controls, many companies have chosen to follow private standards according to customer requirements. For example, the British Retail Consortium, FSSC22000, ISO 22 000, GlobalGap and the Swedish IP Food standard. Controls are carried out by independent private actors accredited by Swedac, Sweden's national accreditation body.



The RASFF system (Rapid Alert System for Food and Feed) means, for example, that Sweden quickly receives information from other countries that allow authorities to react rapidly when food and feed constitutes or is likely to constitute a direct or indirect risk. Sweden is also obliged to report its own findings to other member states and to provide the EU Commission with requested information.

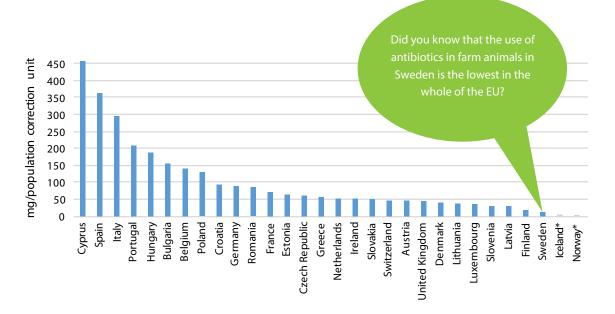


Taking the lead in sustainability

Sweden has very ambitious targets when it comes to sustainability and values in food production, such as animal health, animal welfare, restrictive use of antimicrobials and pesticides. These values have for a long time been a focus for Swedish consumers, companies, authorities and government. The Swedish Parliament has also agreed on a Food Strategy that sets out the direction of national policy towards 2030, which includes continued work on a competitive and sustainable food supply chain.

Very high health status

Swedish animals are free of several animal diseases common to other countries. The high health status leads to a lower need of using antibiotics, and Sweden banned the use of antibiotics for growth promotion as early as 1986. The restrictive use of antibiotics reduces the risk of antimicrobial resistance (AMR). This is very important for our possibility to treat infections in the future.



Sales of antibiotics to food producing animals in 30 European countries 2016. Source: Data from the eight ESVAC report EMA 2016. Sales of veterinary antimicrobial agents. *non-EU country

Cows and sheep are grazing – pigs keep their tails

The stricter Swedish animal welfare legislation requires that all cows and sheep get to spend a certain number of months grazing during the summer. Pigs get to retain their entire tail, which presupposes good housing conditions. The higher standards, due to a stricter legislation for all Swedish animal production, is in most other countries only found in certain welfare concepts.

Ambitious environmental targets

The Swedish Government has ambitious targets regarding the protection of the environment through National Environmental Objectives such as:

at in the

- A Varied Agricultural Landscape
- A Non-Toxic Environment
- Good Quality Groundwater

Sweden is one of the countries in Europe that uses the least amount of pesticides per area. Swedish farmers use Integrated Pest Management, which means that cultivation is thoroughly planned to optimise the use of pesticides, fertilisers, water and other inputs. Natural factors such as a colder climate also play an important role since this leads to a lower impact from pests and insects than in many other countries.

Sweden has a long coastline and many lakes and streams, which provide good access to high-quality water. Sweden is among the countries in the EU with the lowest groundwater pressure, with a water stress index of about 1 percent.

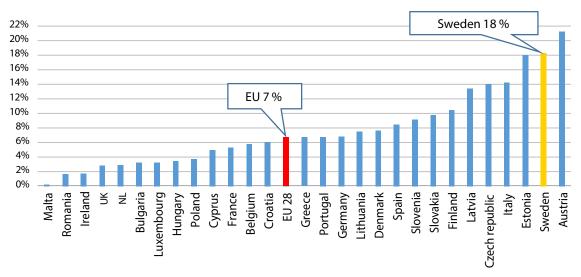
> All large Swedish food companies annually report their work on sustainability issues, such as environmental, social, diversity, equality, work environment, human rights and anti-corruption issues. Swedish industry also has a very high rate of agreements with the unions.

Organic production on the rise

Swedish organic production is increasing and has more than doubled in the last ten years. The farmed land (arable land, pastures and meadows) used for organic production is currently 18 percent. In 2017, the Swedish Government set a target that certified organic production shall increase to at least 30 percent of the cultivated area by 2030. Compared to other EU countries, Sweden has the second largest proportion of organic farmed land in the EU. Eggs, cattle, milk and grain are the largest sectors in organic production. Sweden is a large



market for organic products and has one of the top per-capita consumptions of organic food in the EU.



Organic share of farmed land in the EU 2016. Source: Eurostat.

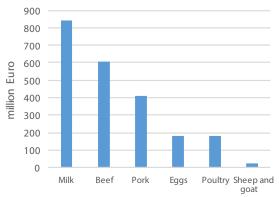
Animal production

Animal production is an important part of Swedish agriculture. Over 50 percent of Swedish farms have animal production. The Swedish dairy sector accounts for around one third of the animal production measured in production value. Poultry is the fastest growing animal sector and this production has increased by around 40 percent in the last ten years.

Health and welfare at the forefront

What really distinguishes Swedish farming is the extensive work on preventive animal health care. This has resulted in healthy animals and the lowest use of antibiotics in the EU. Swedish animal production is free of several diseases that are present in other countries.

Salmonella is extremely rare due to the Swedish salmonella control programme. The objective of the programme is to keep Swedish meat and eggs

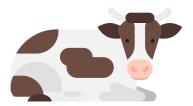


Production value of animal products in 2016.

free from Salmonella. The very low incidence of salmonella at farm level, along with control and hygiene routines in processing, results in virtually non-existent exposure to salmonella from Swedish chicken, eggs and meat. In Sweden, there is also a very low prevalence of campylobacter bacteria in Swedish poultry production. The mortality rate of dairy calves is one of the lowest in the world due to the absence of certain communicable diseases such as Bovine viral diarrhoea.



Free of Brucellosis, Tuberculosis, Paratuberculosis, IBR, BVD



Free of AD



Very low prevalence of campylobacter

Free of Scrapie and Paratuberculosis



AD=Aujeszky's disease, PRRS =Porcine Reproductive and Respiratory Syndrome, PED = Porcine Epidemic Diarrhoea (PED), IBR = Infectious Bovine Rhinotracheitis, BVD = Bovine virus diarrhoea. And an almost non-existent risk of Salmonella from Swedish chicken, eggs and meat due to the Swedish Salmonella control programme.



Pork

The pig breeds used in Sweden are three-way breeds with Hampshire or Duroc as sire lines. Both are known for their high meat quality. The RN gene in the Hampshire increases meat content and gives a juicy, tender and tasteful meat. The fact that Swedish pork production is free of several diseases is an advantage for exports.

Swedens strict animal welfare legislation states that tail docking of pigs is forbidden. Tails can therefore be offered on export markets.

| Pig production | | | |
|-----------------------------|------------------|--|--|
| Pig holdings | 1 200 | | |
| Pigs to slaughter | 2.5 million/year | | |
| Number of processing plants | 50 | | |
| Pork meat production | 230 000 t. | | |
| Pork meat export | 27 000 t. | | |

| Poultry produktion | | | |
|---------------------------------|------------|--|--|
| Poultry farms | 120 | | |
| Average number of chickens/farm | 100 000 | | |
| Number of processing plants | 19 | | |
| Poultry meat production | 137 000 t. | | |
| Poultry meat export | 17 000 t. | | |

The tables show an average for 2012–2016.



| Welfare examples | | |
|--|--|--|
| All cows graze in the summer | | |
| All pigs and sows are kept in loose housing with no permanent fixation | | |
| No tail docking of pigs | | |
| Castration & dehorning is carried out using anaesthetics | | |
| Transportation to slaughterhouses is normally no longer than 8 hours | | |
| No beak trimming in hens | | |
| Possibility of performing natural behaviors | | |
| | | |

Poultry

Swedish poultry production is rapidly increasing following an increased demand. Animal welfare standards are high and some examples is the registration of feet health and low use of antibiotics, that is an important indicator for assuring good welfare in Swedish chickens.

There is a control and monitoring programme for the entire production chain, developed by the Swedish Poultry Meat Association (SPMA) and approved by the authorities. Due to preventive work, including effective health control procedures, Swedish poultry production has a particularly low presence of campylobacter and salmonella is rarely detected at Swedish poultry farms.

Dairy

The yield of Swedish dairy cows is one of the highest in the EU, milking on average 30 kg per day. The development towards more specialised holdings with better knowledge of breeding, animal health and welfare has led to the higher production. The breeds used are primarily the Swedish Red (SRB) and the Swedish Holstein (SLB). The largest export product, in terms of value and quantity, is powdered milk. Other dairy products are mainly traded within multinational dairy companies. Sweden has a tradition of making hard cheeses such as Herrgård, Präst, Västerbotten, Svecia and Hushållsost. The latter two have achieved the Protected Geographical Indication, PGI label and Traditional Speciality Guaranteed, TSG label respectively.



| Dairy cow yield | 8 700 litre/year | Average number of dairy cows | 92 cows/farm |
|------------------------|------------------|------------------------------|--------------|
| Milk delivered/year | 2900 000 t. | Dairy companies/dairy plants | 43/57 |
| | | Dairy farms | 3 500 |
| Fresh milk | 29 % | Export of milk and cream | 45 000 t. |
| Cheese | 26 % | Export of cultured products | 13 000 t. |
| Cultured milk products | 9 % | Export of cheese | 18 000 t. |
| Cream | 4 % | Export of powdered milk | 73 000 t. |
| Powdered milk | 25 % | | |

Production figures shows an average of 2012-2016 and export figures 2012-2017.

Eggs

Swedish egg production has about 8 million laying hens. There are around 300 larger commercial farms. The dominating production system in Sweden is indoor free range (barn), followed by organic egg production (indoor free range with outdoor access). There are 126 approved packing plants for eggs and six approved plants for egg processing. More than 9 000 tonnes of eggs and 9 000 tonnes of egg products were exported in 2016. of Swedish beef is 132 000 tonnes and the production of lamb 5 260 tonnes. Export of beef is around 20 000 tonnes and lamb 243 tonnes. In addition to producing meat, these farms are also very important since their grazing animals preserve grasslands with high biodiversity values.

Beef and sheep

Around 20 percent of beef and sheep production at Swedish farms is organic. Beef production is often combined with dairy although there are also many farms that have specialised beef production. In 2017, there were 13 000 farms with specialized beef production (excluding milk farms) and 9 000 sheep farms. The production Did you know that Swedish eggs are free of Salmonella, and that is why Swedish eggs can be eaten without being fully cooked or fried?



Arable crops, fruits and vegetables

Cereals, and wheat in particular, dominate arable crops production in Sweden. Conditions for growing wheat in Sweden are favourable. Wheat, oats and malting barley are exported to a number of countries around the world. The production and export of organic grains have increased in recent years. The cool Nordic climate reduces the need for insecticides making it favourable for organic grain production.

| Number of holdings, cereal | 24 000 |
|--------------------------------|------------------------------------|
| Annual cereal production | 5–6 million tonnes |
| of which: | Wheat production 48 % |
| | Barley 31 % |
| | Oats 14 % |
| Organic farmed land for grains | 9 % |
| Organic wheat production | 335 000 tonnes |
| Rapeseed production | Oil 120 000/meal 170 000 tonnes |
| Sugar beet | 2 million tonnes |
| Protein crops | 56 000 hectares |
| Cereal export | 1.5 million tonnes |
| Average yield, cereals | 5.4 ton/ha |
| Winter wheat yield | 7 tonnes/ha |

The figures above show the average for 2012–2016.

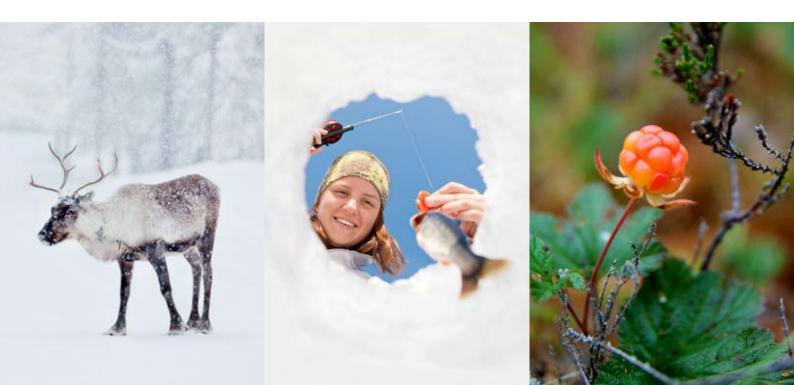




Rapeseed is by far the most important crop in the Swedish oilseed sector. There is also production of sugar beets, protein crops (peas and broad beans) and potatoes. The fruit and vegetable sector in Sweden comprises around 1 500 companies employing about 12 000 people and has a total production value of EUR 280 million. Production is concentrated in the south of Sweden. Important products are carrots, strawberries, herbs, cucumbers, tomatoes, iceberg lettuce and apples. Nordic wildberry products are sold all over the world but a high proportion of wild bilberries are actually bought by companies for use in pharmaceutical and health-promoting products. The Nordic climate affects the quality positively since low temperatures can give a higher content of nutrients and antioxidants, as well as a stronger aroma.

Treasures from the waters, forests and mountains

There is a strong tradition of catching and eating fish and seafood in Sweden. Today, there is also a small but increasing aquaculture production. The Swedish processing industry produces a wide range of fresh, chilled, canned and frozen products. These products are primarily based on herring, whitefish, prawn and roe. A Swedish delicacy is pickled herring, known as "Sill". Sports fishing is a rising trend that attracts many tourists to Sweden each year. Swedish forests not only hold treasures such as cloudberries, lingonberries and mushrooms. There are also a lot of elk and deer that are hunted during the hunting season. Wild boar is common in the south of Sweden. In the Arctic part of Sweden, the Sami population herd reindeer for their meat, skin and antlers.



Contacts in Sweden



The Swedish Board of Agriculture (SBA)

Expert authority in matters related to agricultural policy and the responsible authority for the agricultural and horticultural sectors.

Areas: Feed, animal health, welfare, plant health, etc. The Chief Veterinary Officer (CVO) of Sweden is based at the SBA.

www.jordbruksverket.se phone: +46 77 1223223



The National Food Agency (NFA)

Responsible for the control of food and drinking water at a national level. *Areas*: Food and water control, border inspection, national sampling plans, approvals, permits, prohibitions and injunctions. Responsible for reporting control results to the European Commission.

www.livsmedelsverket.se phone: +46 18 175500



National Veterinary Institute (SVA)

The national authority in veterinary medicine, providing expert advice and working for good animal and human health. The national reference laboratory for feed and animal health.

Areas: animal health, veterinary medicines and feed.

www.sva.se phone: +46 18 674000



The Swedish embassies and consulates

Sweden has 98 foreign authorities, which include embassies, representations, delegations and consulates. Together with the approximately 350 consulates led by honorary consulates, they constitute the foreign representation.

www.swedenabroad.se



The Ministry of Enterprise and Innovation

Responsible for policy areas relating to livestock, fisheries, hunting and game management, agriculture, forestry and food.

www.government.se phone: +46 8 405 10 00



Business Sweden

Business Sweden helps Swedish companies to increase their global sales and international companies to invest and expand in Sweden.

www.tryswedish.com

www.business-sweden.se phone: +46 8588 660 00



The Federation of Swedish Farmers

An interest and business organisation for the green industry such as farmers, forresters and other land-use entrepreneurs.

www.lrf.se phone +46 771 573 573



The Swedish Food Federation

An employer and industry organization for Swedish food companies.

www.li.se phone +46 8 762 65 00



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