

Lower Saxony Ministry of Food, Agriculture
and Consumer Protection



The Agriculture and Food Industry in Lower Saxony



Niedersachsen



Lower Saxony – true taste comes naturally

Lower Saxony is one of the most important locations for agriculture in Europe. Agriculture and the food industry are important economic sectors. The production of delicious food has shaped the state's people and districts for centuries. Fish from the North Sea, apples from the "Old Country", asparagus from Nienburg, ham from Ammerland, potatoes from the Lünenburg heath, spirits from Haselünne (the "City of Korn" [grain brandy]) and beer from Einbeck – the products are as diverse as the landscape itself.

The people of Lower Saxony enjoy food and drink – and like to share them with the rest of the world. Around 22 percent of the food produced in Lower Saxony is exported, with non-domestic turnover at around 11 billion euros. 82 per cent of exports remain in Europe, although China, South Korea and the United States are also trading partners. With a turnover of more than 35 billion euros (2018) the food industry is the second most important processing sector, ahead even of machine construction, the chemical industry and the electrical sector. And it is not just good, natural location factors, expertise, innovation and entrepreneurial spirit which make Lower Saxony competitive.

A dense network of scientific institutions, consultancy organisations and foreign representations support the com-

panies with knowledge transfer, marketing and internationalisation. LI Food – the Agrifood State Initiative, DIL – Deutsches Institut für Lebensmitteltechnik e. V., the Marketinggesellschaft der niedersächsischen Land- und Ernährungswirtschaft e. V., Food – Made in Germany e. V., Enterprise Europe Network and numerous other organisations operate as service providers and network partners. Agrifood in Lower Saxony – this includes both small owner-

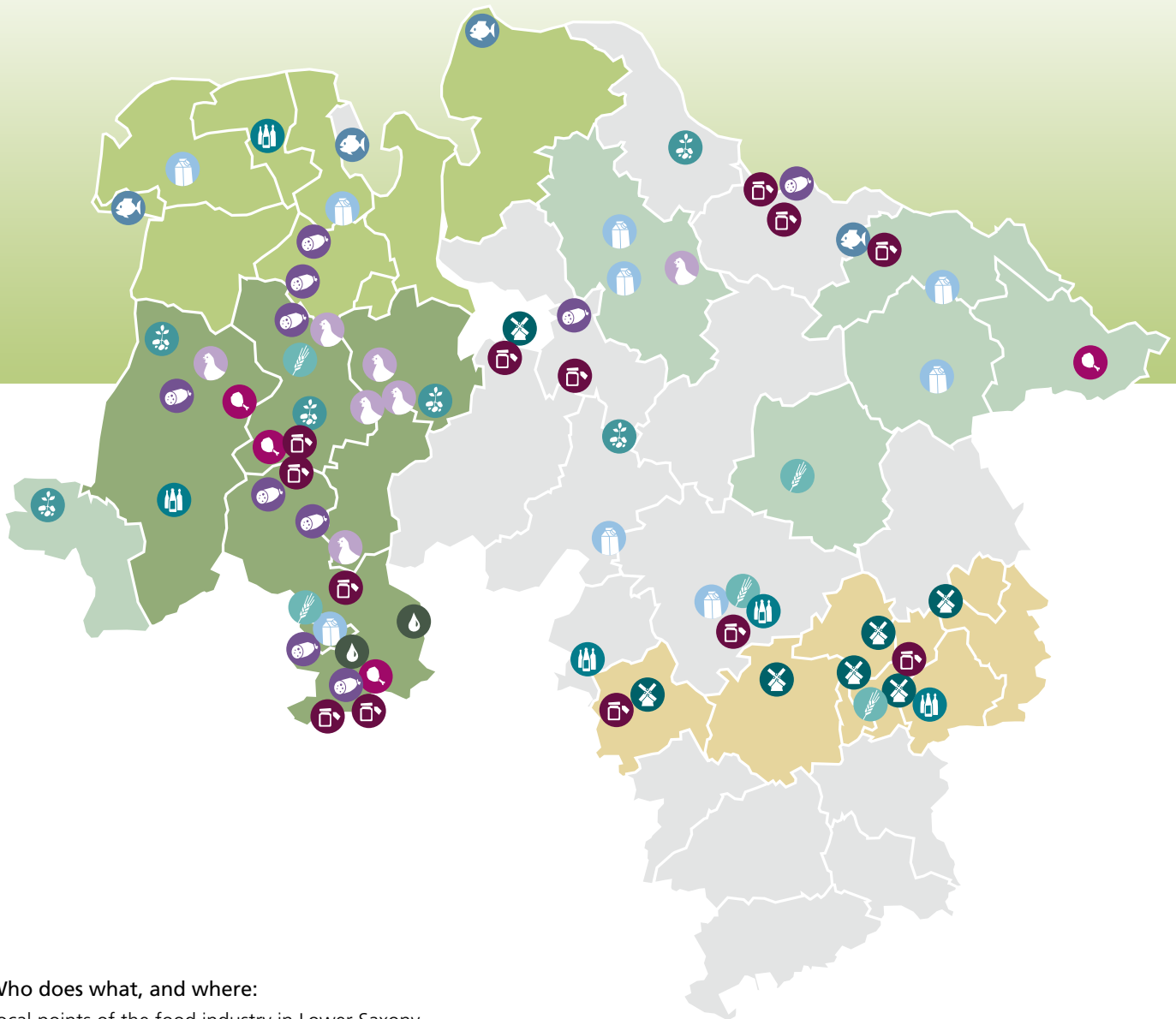
run craft enterprises and large, internationally renowned brands. More than half of the companies are still craft-based outfits. At the same time, there are 20 food manufacturers in the state's top 100 companies in terms of turnover. Some of the nationally – and also internationally – renowned brands include Berentzen, Bahlsen, Jägermeister, Rügenwalder Mühle and Wiesenhof.

Table 1: Lower Saxony at a glance

Economic measure	Unit	Germany	Lower Saxony	Lower Saxony as a proportion of Germany
Area	in km ²	357,582	47,710	13.34 %
Population	mil.	82.792	7.963	9.52 %
Population density	inh./km ²	232	167	x
Agricultural holdings	000s	275.4	37.8	13.73 %
Manufacturing operations for food purposes	absolute value	24,426	685	2.08 %
Area used for agriculture	000s of hectares	16,658.90	2,598.20	15.60 %
ha/operation	Ha	60.5	68.7	x
Employed in agriculture	000s	940.1	130.3	13.86 %
Employed in production of food	absolute value	823,085	74,668	9.70 %
Cattle	mil.	12.093	2.572	21.27 %
Pigs	mil.	26.898	8.5	31.60 %
Laying hens	mil.	51.936	19.502	37.55 %
Broiler chickens	mil.	93.791	61.352	65.41 %
Milk production	mil. T	32.598	7.05	21.63 %
Cereals	mil. T	34.604	4.769	13.78 %
Sugar beet	mil. T	26.191	7.203	27.50 %
Potatoes	mil. T	8.921	4.162	46.65 %

Federal Statistical Office: Figures for 2018












Figure 1: Focal points of the food industry at a glance



Who does what, and where:

Focal points of the food industry in Lower Saxony.

Companies with turnover of over €100 mil./year

 Slaughterhouses	 Potato processors	 Areas with a focus on animal husbandry
 Meat processors	 Drinks	 Areas with a focus on grassland management
 Producers of poultry products including eggs	 Mills grinding over 100,000 t per year	 Areas with a focus on potato cultivation
 Fish processors	 Processors of fats and oils	 Areas with a focus on wheat cultivation
 Milk processors	 Other, in food sector (e. g. spice manufacturers, deli products)	
 Processors of cereal products		

Source: Marketinggesellschaft der niedersächsischen Land- und Ernährungswirtschaft e. V., 2010



A place for business with the best of conditions

Lower Saxony combines many favourable location factors, resulting in a successful agriculture and food industry. In this respect, it is not only the natural conditions, such as climatic factors and soil quality that play a role, but also the geographical location, the qualification and motivation of the people, as well as the framework conditions, policies and management.

Geographical location – far from ordinary, near to Europe

Lower Saxony is at the heart of Europe. Its geographic location, along with efficient transport routes and logistical have made the state a major transport hub for the entire continent. This also benefits the food industry. The distances between the producing regions and key sales areas are small. In addition to markets to the east and intensive trade with the Benelux countries, Lower Saxony companies also have affluent consumers right on their doorstep: The metropolitan region comprising Hannover, Braunschweig, Göttingen and Wolfsburg covers the south-east of the state, whilst the metropolitan regions of Hamburg and Bremen are expanding towards Lower Saxony. In addition, North Rhine-Westphalia, Europe's largest conurbation, with the associated level of

demand, is within easy reach. The "5-hour market potential" by lorry, corresponding to approximately 100 million consumers, represents significantly more than a quarter of the EU's population. Lower Saxony is thus a good starting point for supplying the European market.

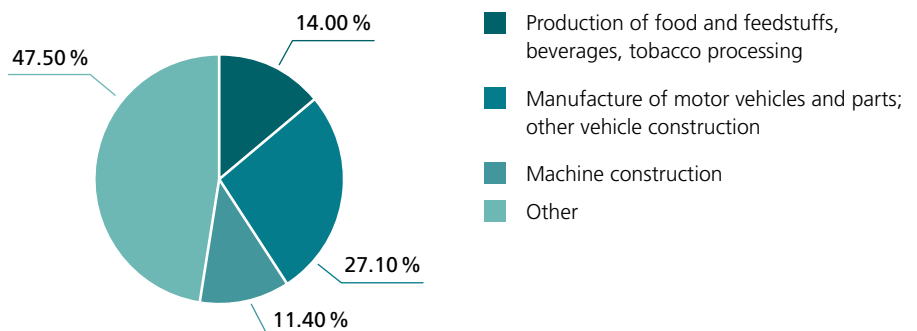
Agrifood cluster – networking knowledge

Lower Saxony is also at the forefront in terms of recognising industry trends at an early stage and setting the pace. In various regions of the state, agrifood clusters have formed, linked across all manufacturing and market levels. This is true

both for the meat-processing segment in the southern Weser-Ems region, as well as for the mill industry in the region of Hannover/Braunschweig. Solutions are also worked on here to those environmental and human challenges linked to intensive farming – challenges which are much discussed in today's society. In addition, a wide range of organisations, associations, research institutes and universities support the food industry, in the shape of up-to-date knowledge and practice-oriented research projects.

Would-be exporters have a wide range of establishments to approach for help and advice: for example, with obtaining information on the target markets; with

Figure 2: Food sector as a proportion of total exports of manufacturing industry



Federal Statistical Office: Figures for 2018

arranging contact with the administration of the target country; or in searching for suitable business partners.

Lower Saxony has representatives in China, the USA and Russia amongst other places, as well as partner offices operating in Cuba, Scandinavia, South Africa and Turkey.

Agribusiness – global leadership

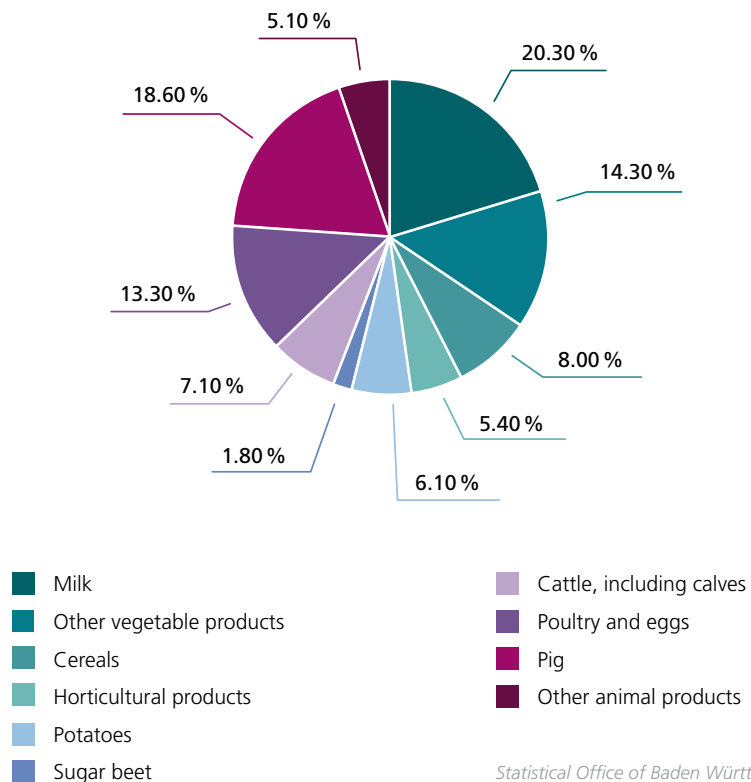
Lower Saxony's Agribusiness encompasses a variety agricultural trading companies and more than 700 companies involved in food production. In terms of suppliers, the state's manufacturers of agricultural machinery and animal-housing systems are particularly world-renowned. Some examples of these include the agricultural machinery manufacturer Grimme Landmaschinenfabrik GmbH & Co. KG (based in Damme) and Bernard Krone Holding SE & Co. KG (based in Spelle). The animal-housing company, Big Dutchman International GmbH, based in Vechta, is also a world-leader in its field.

Leading trade fairs in the international agricultural sector, such as Agritechnica and EuroTier, are regularly held in Hannover, as well as Biotechnica, the international biotechnology trade fair. They underpin the outstanding importance of Lower Saxony as a location for agricultural and food business, and offer the companies based here first-class opportunities to demonstrate their performance to an international trade audience.

Quality and safety – without compromise

Food products from Germany enjoy an excellent reputation internationally. Quality management, transparency and reliability are top priorities in the sector's production processes. Regular and luxury foodstuffs are subject to a series of quality-assurance systems on their way to the consumer, in order to comply with such claims.

Figure 3: Production value as proportion of total Lower Saxony agriculture



Statistical Office of Baden Württemberg:
Figures for 2019

The most widely used inter-company standards include the quality management system for milk (QM Milk), the QA mark for meat, potatoes, fruit and vegetables, as well as the international certification standards for agricultural production, GLOBALG.A.P. and the International Food Standard (IFS). Complementary certifications, such as "Halal" or "Organic", offer additional transparency for trade and consumers. Many of these safety systems are based on agreements between the trade and producers, guaranteeing the criteria for the safety and quality of food. This ensures that only flawless products reach the customer.

The organic food sector – a tradition with a future

There is a tradition of organic farming and the organic food sector in Lower Saxony. Back in 1932, the "Bauckhof" farm in Klein Süstedt in the district of

Uelzen started farming according to biodynamic principles. Both the surface area devoted to organic farming and the number of food manufacturers working according to ecological guidelines are growing continuously in Lower Saxony. There are currently around 2,000 organic farms and around 1,300 organic processing companies. More than a third of them are smaller farm-based processors, which have come about as part of agricultural holdings, e.g. farm bakeries, cheese dairies or slaughterhouses. In addition, there are a large number of craft processing operations, such as bakers and butchers and several small and medium-sized processing companies, such as Bauck GmbH & Co. KG, the fruit juice manufacturer Voelkel GmbH, Bohlsener Mühle GmbH & Co. KG, Ulrich Walter GmbH (Lebensbaum) and Allos GmbH.



Soil management and plant products

Lower Saxon farmers grow almost all the crops thriving in Central Europe, and some farmers do so on a large scale. They form the basis of a powerful food-processing sector and of artisanal food production.

Plant breeding – a driving force for innovation

Lower Saxony's seed breeding companies are a driving force of progress. Their aim is to develop plant varieties which are increasingly adapted to the requirements of their respective geographical locations, thus enabling optimal yields, whilst conserving natural resources. Lower Saxony also has a tradition of such skills. For example, the first monogerm sugar beet varieties were bred in Lower Saxony.

Although the sector is characterised by small and medium-size enterprises: Companies such as Saaten-Union GmbH and KWS LOCHOW GmbH in the cereals segment, KWS SAAT SE & Co. KGaA (involved in the breeding of sugar beet, maize and rapeseed), and Europlant Pflanzenzucht GmbH (potato breeding) have had a good reputation for a long time now, even in international markets.

Arable farming – a variety of crops for humans and animals

Lower Saxony has by far the largest acreage for potatoes and sugar beet in Germany. Lower Saxon potato cultivation is characterised by its enormous variety and the highest yields in Germany.

Large amounts of Germany's wheat, rye and barley grow in Lower Saxony's grain fields. In the north there are extensive grasslands for milk production; to the south and north-east of Hannover, there are large areas given over to potato and sugar beet cultivation, mixed in between fields of grain. And maize – the basis for animal nutrition and bioenergy production – is constantly taking up an ever greater share of land in Lower Saxony.

Lower Saxony is also in one of Germany's top spots in terms of the processing of cultivated crops. For example, Lower Saxony is Germany's second biggest location for the milling of cereals, as measured by annual volume. Potatoes are sold to the consumer as consumption potatoes, or are refined (by processing companies in the growing regions) into chips, crisps, dried or frozen products, or into starch and starch derivatives.

A quarter of Lower Saxony's barley yield is attributable to malting barley. The malting barley grown in Lower Saxony

is suitable for producing high-quality brewing malts, as is done for example at Cargill GmbH in Salzgitter and by Heine Malz GmbH in Peine. It goes without saying that beer brewing in Lower Saxony has a long tradition, which can be traced back as far as the 14th century. Famous breweries include the traditional Einbecker Brauhaus AG, the Frisian brewery owned by Jever KG and Wittingen GmbH's private brewery.

Sugar – an indispensable raw material, produced from beets

In the fertile soils of the southern part of Lower Saxony in particular, and in the light soils of the eastern Lüneburg Heath (between Lüneburg and Celle), where intensive irrigation farming can be seen: a very important crop is flourishing – sugar beet. Without raw sugar, many products emanating from the food industry would be inconceivable.

There is a long tradition of beet cultivation, beet processing and sugar production in Lower Saxony. The majority of Lower Saxony's sugar beet is nowadays harvested by Nordzucker AG, one of Europe's leading sugar producers, and processed into granulated sugar and many other raw materials used in the food industry.



Sugar beets thrive particularly well in Lower Saxony.



Around 300,000 tonnes of apples are harvested annually in the Altes Land.



There is a tradition of high-quality spirits reaching back hundreds of years.

Only 20 percent of production ends up on the shelves of food retailers in the form of retail sugar. Four fifths of production is otherwise used by the food industry, for example in the production of confectionery and beverages.

Skilful marketing – fresh young vegetables and the “Old Country”

Lower Saxony's cheapness as a location for business, along with some clever marketing, has meant that it is a domestic leader not only in the growing of asparagus, but also in blueberry cultivation. Two thirds of the blueberries harvested in Germany come from Lower Saxony. In its “Altes Land” [“Old Country”] next to the Elbe in Hamburg, the state also possesses Northern Europe's largest contiguous fruit-growing area. Around 300,000 tonnes of apples are harvested annually, on average. There are also many processors manufacturing fruit juices, dried goods and frozen goods.

In terms of vegetable growing, Lower Saxon farmers regularly achieve the highest overall production value in Germany. For example, nowhere in Germany are more cucumbers or iceberg lettuce harvested. While large production companies market their products directly to food retailers and to the food industry

in general, many small and medium-sized businesses have joined forces to become powerful producer organisations, for the purpose of marketing which is in the interests of their members. These seven producer organisations – recognised under EU law – each have different focal points. The largest ones are Gartenbauzentrale eG in Papenburg, ELO Langförden, and Elbe Obst in the Altes Land region. The main products of these organisations range from herbs in pots and cut herbs, to fruit, vegetables, berries, onions and mushrooms.

The Lower Saxon horticultural sector includes important segments such as fruit and vegetable cultivation, as well as ornamental plants, tree cultivation and the tree nurseries.

Drinks – famous liqueurs, schnapps and Ostfriesentee

At least one Lower Saxon drink is known to those frequenting night clubs and bars worldwide: Jägermeister. Mast Jägermeister AG, has been making this successful export in Wolfenbüttel since 1878. No other spirit from Germany is exported in larger quantities than this herbal liqueur.

Haselünne is another area famed for its production of spirits. It previously hosted up to 26 distillery plants, which

is why the former Hanseatic city is also known as Lower Saxony's “Capital of Korn”. Nowadays, along with the famous Berentzen, a producer of spirits, there are two more traditional distilleries of alcoholic specialities, which are mostly based on wheat grain: Edelkorn-Brennerei Jos. Rosche GmbH & Co. KG and Private Kornbrennerei H. Heydt GmbH & Co. KG.

But it's not just alcoholic drinks that are produced in Lower Saxony. The region of East Frisia has been known for its special tea culture for over 300 years. So it's not surprising that J. Bunting Beteiligungs AG, a subsidiary of Laurens Spethmann GmbH & Co. KG, Thiele & Freese GmbH & Co. KG, and some other companies make the world-famous “Ostfriesentee” as well as some other teas here, and sell them to tea-lovers all over the world. Lower Saxony also has its share of mineral springs and wineries, producing a variety of drinks made from fruit and mineral water. Well-known brands include VILSA Mineralbrunnen, beckers bester and Voelkel Fruchtsäfte.



Animal breeding and animal husbandry

Table 2: Products of animal origin

	Beef and veal	Pork	Poultry	Milk delivered to dairies	Butter	Skimmed milk powder	Eggs, from operations involving min. 3,000 hens
Product quantity	in 000s of tonnes	in 000s of tonnes	in 000s of tonnes	in 000s of tonnes	in 000s of tonnes	in 000s of tonnes	in millions of pcs.
Lower Saxony	172.8	1,788.30	856.8	6,373	130.4	151.6	4,706
Germany	1,129.00	5,498.20	1,514.20	31,255	547.60	430.7	12,087
Lower Saxony, as proportion of Germany	15.31 %	32.53 %	56.58 %	20.39 %	23.81 %	35.20 %	38.93 %

Federal Statistical Office: Figures for 2018

In terms of sales volumes, agricultural animal husbandry and the processing of its products into meat and meat products, milk and dairy products, as well as the production of eggs and products processed using them, are clear strong points in Lower Saxony's agriculture and food industry. Farmers generate about 60 % of their income from animal husbandry – well above the national average.

An export hit – the science of breeding

All around the world, owners of farm animals rely on the experience and profound expertise of Lower Saxony's animal breeders.

In terms of cattle breed, Holstein Friesians dominate in Lower Saxony. The large breeding associations – Masterrind GmbH, Verein Ostfriesischer Stamm-

viehzüchter eG and Osnabrücker Herdbuch eG – use state-of-the-art breeding methods to supply breeders (in Lower Saxony and throughout the world) with first-class genetics.

With regard to pig breeding, BHZP GmbH (Federal Hybrid Breeding Programme) based in Ellringen (near Lüneburg, Lower Saxony) is one of the most important breeding entities in Germany. Also the globally-operating PIC has its German headquarters in Hannover.

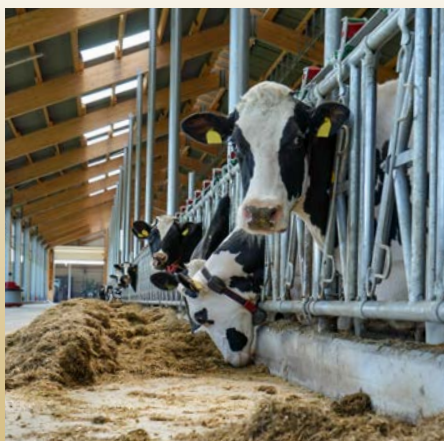
Poultry breeding and reproduction is undertaken in Lower Saxony by Aviagen Group, Lohmann Tierzucht GmbH, Geflügelzuchtbetriebe Gudendorf GmbH & Co. KG, PHW-Gruppe Lohmann & Co. AG, Moorgut Kartzfehn von Kameke GmbH & Co. KG and Heidemark Mästerkreis GmbH & Co. KG, amongst others. In addition, the state government of Lower Saxony is committed to the conservation

of endangered breeds, and supports active breeders in the form of "breeding conservation premiums". Furthermore, a large percentage of the reserves of Germany's gene bank for farm animals come from Lower Saxony.

A further important economic area is the breeding and keeping of horses for sport and leisure. Hanoverian and Oldenburg are world famous breeds, and are very much in demand as sport horses, in Germany and abroad.

Cattle farming – more milk than meat

Cattle are kept in Lower Saxony both for milk and meat production. In 2016, 172,000 tonnes of beef and veal was produced in Lower Saxony. However, the focal point of cattle farming is milk production. Approximately 9,500 entities



Milk is produced mainly in the Grasslands near the North Sea coast.



Poultry production is a significant sector in Lower Saxony.



Shrimps are the largest source of revenue for Lower Saxony's coastal fisheries.

keep around 850,000 dairy cows. Lower Saxony produces around a fifth of the milk generated in Germany – that's 7.05 billion kilograms. Most of the milk is processed in cooperative dairies.

With 7,000 milk producers and cooperative members, and sites in several federal states, the Lower Saxon DMK Group is one of Europe's largest cooperative dairies. Milk is produced mainly in the grasslands along the coast of East Frisia (in the west), round to Cuxhaven in the east, and Rotenburg in the south. However, there are also efficient dairy farms in the southern part of Lower Saxony.

Pig farming – the basis for top-quality meat and sausage products

The production of pork is another one of the strengths of Lower Saxony's agricultural sector. More than eight million pigs are in Lower Saxony's sties, i.e. approximately one third of Germany's total stock. Pig-fattening accounts for two thirds of pig operations, whilst one third focus on piglets. The regional meat processing companies process the raw material into a wide range of meat and sausage specialities for regional, European and global markets. It is not only meat products, but also live animals which are exported. They are exported for fattening or breeding purposes.

Poultry farming – 50 % of chickens come from Lower Saxony

An important part of Lower Saxony's meat production industry revolves around the keeping of poultry, such as chickens, turkeys and ducks. In 2017, around 900,000 tonnes of poultry meat was produced. Every second chicken fattened in Germany comes from Lower Saxony. Likewise, 4.7 billion eggs, that is to say around 40 % of German production, come from this federal state.

The districts of Emsland, Cloppenburg and Vechta are the focal points of pork, poultry and egg production. These areas have also developed efficient processing establishments, such as slaughterhouses, and a meat-processing segment, the products of which are successfully sold on national and international markets. Smaller companies, speciality manufacturers, and efficient and traditional butchery can be found all over Lower Saxony.

Fishing industry – North Sea shrimps bringing in the turnover

A fishing industry is a matter of course for a state with around 750 kilometres of coastline. On the North Sea coast,

between Ditzum and Cuxhaven, coastal towns like Emden am Dollart, Norddeich and Greetsiel in the Leybucht look back on a long history of fishing, as does Butjadingen – a municipality located between the Jade Bight and the River Weser. The largest source of revenue in this respect is the North Sea shrimp, a well-known and popular speciality.

Fishing is done mainly by smaller fishing vessels and inshore, and in the form of small deep-sea fishing operations. Furthermore, carp, trout and other freshwater fish are farmed in traditional inland pond farms. There are just a few professional fishermen left farming areas of the larger rivers, in particular the rivers Weser and Elbe.

Table 3: Food industry turnover compared with that of other industries

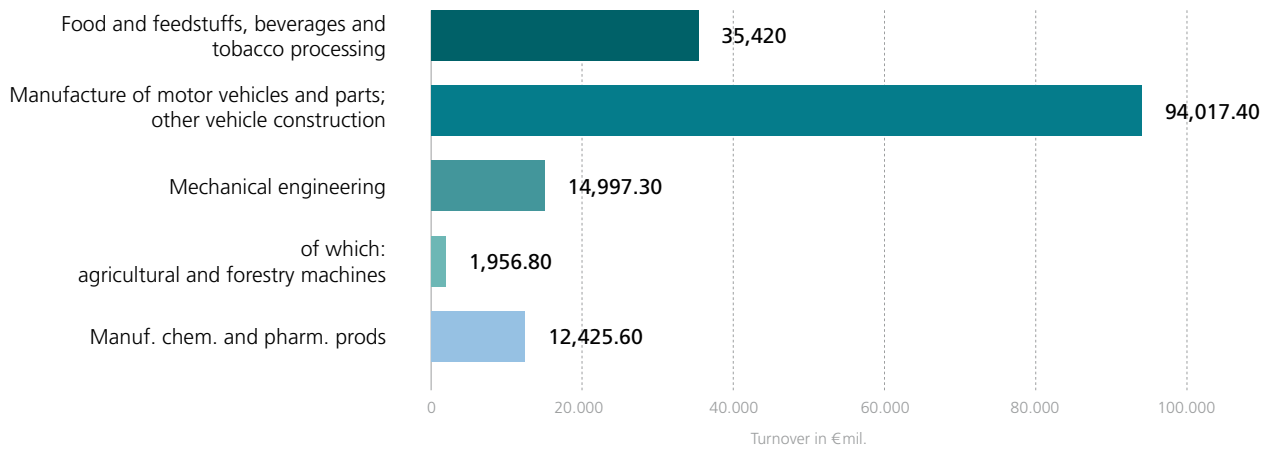


Table 4: The number of agrifood operations compared those in other industries

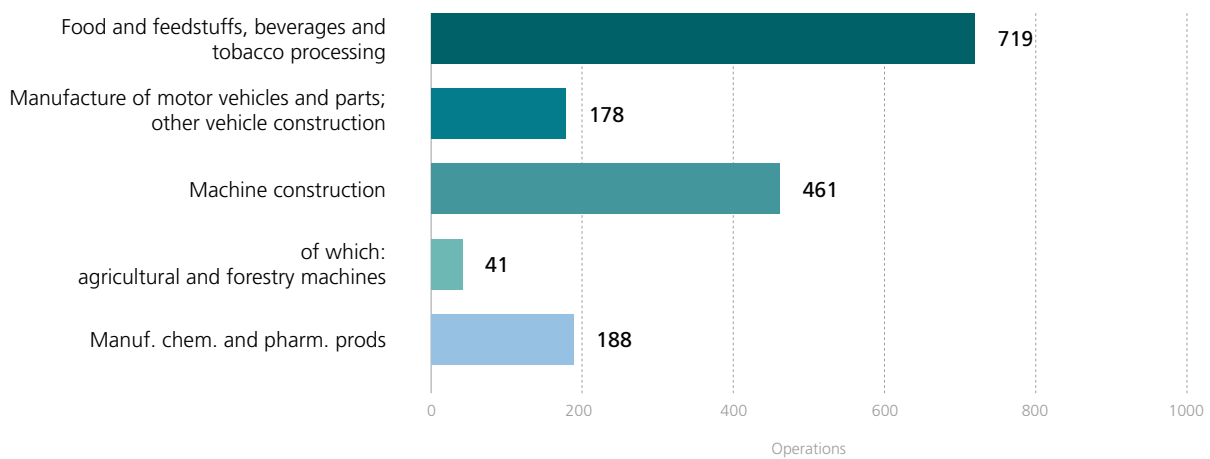
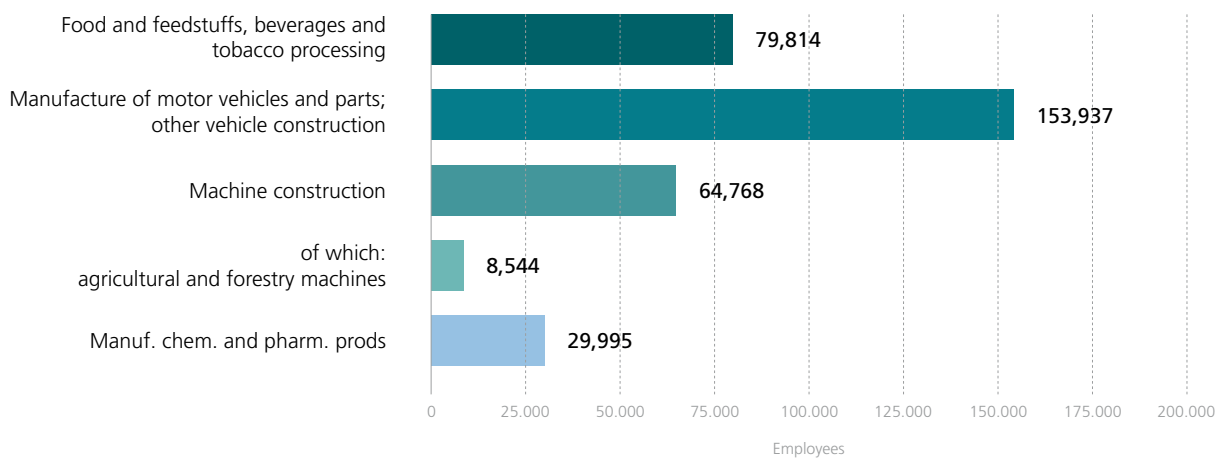


Table 5: The number of agrifood employees compared those in other industries





Outlook

Lower Saxony's farmers and food producers are connected across a wide range of value-added chains; they shape the rural areas and work together to help assure that the increasing space devoted to the economy will be livable for future generations, too. They are aware that there are many challenges to be addressed in this

respect. Food security, climate change, resource conservation, the protection of biological diversity – the agricultural state of Lower Saxony is facing up to these global challenges. In terms of the demands of a changing society and new styles of nutrition, as well as the increasingly sophisticated product-quality require-

ments, Lower Saxony companies are well equipped, and in many cases form part of the global top echelons. This is very much due to the fact that customers continue to be enthusiastic about foods from Lower Saxony. This holds for those customers from Lower Saxony itself, from Germany, and those from all over the world.

Lower Saxony institutions from the agricultural and food sector with a focus on international operations

Deutsche Lehranstalt für Agrartechnik (DEULA) in Hildesheim, Nienburg, Westerstede [German Educational Center for Agricultural Technology]	www.deula.de
DIL – Deutsches Institut für Lebensmitteltechnik e.V./German Institute of Food Technologies	www.dil-ev.de
Eine Welt in Niedersachsen [Association dealing with issues of developmental policy, including environment and fair trade]	www.niedersachsen-einewelt.de
Enterprise Europe Network EEN	www.een-niedersachsen.de
Food – Made in Germany e.V.	www.fmig-online.de/startseite.html
IHK-N (Chamber of Industry and Commerce of Lower Saxony)	www.ihk-n.de/themen/International_IHKN/3602996
Invest in Niedersachsen	www.invest-in-niedersachsen.com/en
JKI Braunschweig	www.julius-kuehn.de/en/crop-and-soil-science/
Kompetenzzentrum ökologischer Landbau Niedersachsen (KÖN) [Competence Centre for Organic Farming in Lower Saxony]	www.oeko-komp.de
Federal State of Lower Saxony, represented by the Lower Saxon State Chancellery	www.stk.niedersachsen.de
Lower Saxony Agrifood Competence Center	www.li-food.de/en/about-us/
Lower Saxony Agrifood Competence Center, company database	www.li-food.de/en/the-industry/unternehmensdatenbank
Landwirtschaftskammer Niedersachsen/Chamber of Agriculture in Lower Saxony	www.lwk-niedersachsen.de
LUFA	www.lufa-nord-west.com
Marketinggesellschaft der niedersächsischen Land- und Ernährungswirtschaft e.V. [Marketing company of the Lower Saxony agriculture and food industry]	www.mg-niedersachsen.de
NBank	www.nbank.de
Lower Saxony State Office for Consumer Protection and Food Safety (LAVES)	www.state-office-for-consumer-protection-and-food-safety.niedersachsen.de
Lower Saxony Ministry of Food, Agriculture and Consumer Protection	www.ml.niedersachsen.de
Niedersächsisches Ministerium für Wirtschaft, Arbeit, Verkehr und Digitalisierung [Lower Saxon Ministry for Economy, Labour, Transport and Digitisation]	www.mw.niedersachsen.de
Verband Entwicklungspolitik Niedersachsen e.V. (VEN) [Development policy association, Lower Saxony]	www.ven-nds.de

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