Facts and figures about Dutch agriculture and horticulture

Accompanying the advisory letter entitled '*Farming in a changing climate. Advisory letter on climate and agriculture*' by the Netherlands Scientific Climate Council

December 2024

This document presents various facts and figures that define the Netherlands' agricultural and horticultural[1] sectors. This includes information on the agricultural land area, livestock numbers, and the number of agricultural holdings in the various agricultural subsectors. Furthermore, key data regarding agriculture's impact on the climate are discussed. The extent and origins of emissions are analysed, together with projected and potential reductions. Lastly, the document specifies economic data for each subsector, covering metrics like added value and employment.

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[1] From this point onward, the term 'agriculture' will be used to denote the agricultural and horticultural sector.

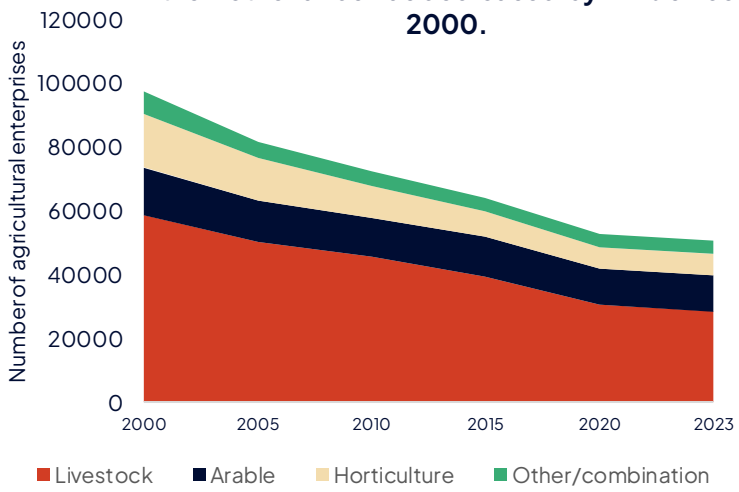
Size of the Dutch agricultural sector: agricultural holdings, areas, and livestock

Agricultural holdings

As of 2023, there were 46,125 agricultural holdings in the Netherlands.[2] The majority, approximately 60%, consisted of livestock farms. Close to one quarter of these businesses specialise in arable farming, 15% in horticulture, and 10% in other sectors such as orchards or food forests (see Figure 1).

For some time now, agricultural holdings have been in steady decline, falling by about 47% since 2000. The most significant decreases occurred in horticulture and livestock farming, in contrast to the relatively stable figures for arable farms (see also Figure 1).[3] This trend has been apparent for many decades; in 1950, the Netherlands still had around 400,000 agricultural holdings.[4]

Figure 1. The number of agricultural holdings in the Netherlands has decreased by 47% since 2000.

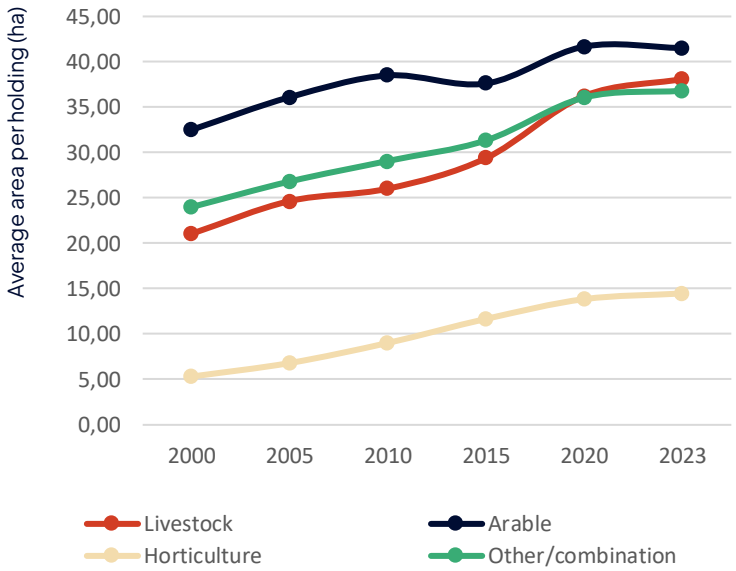


[2] Statistics Netherlands (CBS) (2024d).
[3] Statistics Netherlands (CBS) (2024d).
[4] Environmental Data Compendium (CLO) (2023).

Agricultural land area

In 2023, the total agricultural land area in the Netherlands covered 1.8 million hectares, representing approximately 43% of the country's total land area.[5] Between 2000 and 2023, the agricultural land area experienced a decline as well, but this decrease, at an average of 8%, was considerably smaller than the decline in the number of agricultural enterprises. This is due to a 76% rise in the average size of farms since 2000, driven predominantly by the purchase of other agricultural holdings. This increase is evident across all agricultural sectors, with the most significant growth observed in horticulture and livestock farming (see Figure 2).[6]

Figure 2 All types of agricultural holdings have increased in size



Livestock farming accounts for the greatest share of the agricultural land area. Grassland accounts for 54% of this area, with an additional 11% dedicated to green fodder crops (animal feed). Thirty per cent of the agricultural land area is dedicated to arable farming, while horticulture accounts for around 6%. From 2000 to 2022, the sectors maintained a reasonably stable share of the total land area.[7]

Agriculture occupies space both in the Netherlands and in other countries. Around 2.9 million hectares abroad are allocated to producing animal feed that is imported for use in Dutch agriculture. This corresponds to about 1.6 times the total agricultural land area of the Netherlands.[8] The Netherlands' agricultural sector occupies relatively more land than the European average: 43% of the agricultural land area, compared to the European average of 38%.[9] Agricultural land in the Netherlands is also managed with a much higher intensity compared to that in other countries.[10]

[5] Statistics Netherlands (CBS) (2024d).
[6] Statistics Netherlands (CBS) (2024d).
[7] Wageningen Economic Research (WEcR) (2023).
[8] The Dutch Urgenda Foundation (2024).
[9] Eurostat (the statistical office of the European Union) (2022).
[10] Kros et al. (2024).

The price of agricultural land in the Netherlands is relatively high and is becoming progressively more expensive. Agricultural land prices rose by over 60% between 2012 and 2022.[11] The price of agricultural land in the Netherlands is over eight times greater than the European average.[12]

Livestock

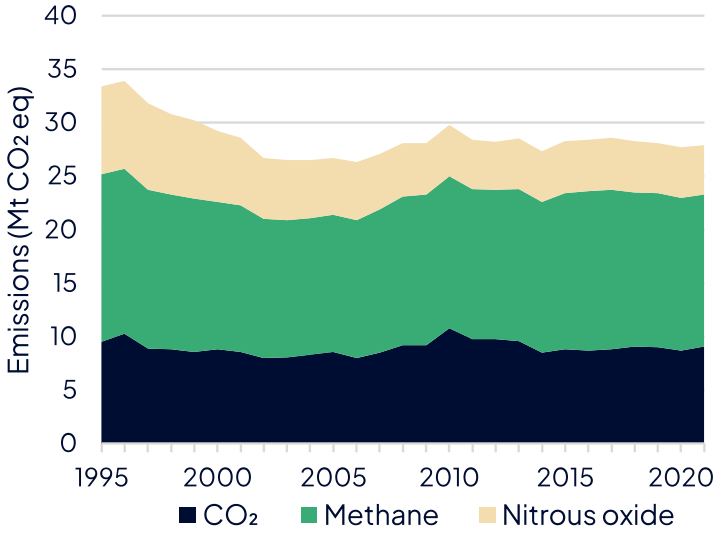
Agricultural land in the Netherlands supports a relatively large number of livestock per hectare. In 2020, the Netherlands recorded a livestock density of 3.4 livestock units (LU) per hectare, the highest in the European Union. During that year, livestock density in the EU averaged 0.7 LU per hectare.[13] The total livestock population in 2023 consisted of 93 million chickens, 11 million pigs, 4 million cattle, 1.5 million sheep and goats, and 1.2 million other poultry (including turkeys and ducks raised for meat).[14]

Climate change and agriculture: emissions, goals, and climate risks

Agricultural emissions

Greenhouse gas emissions from agricultural activities exacerbate climate change. Emissions linked to agricultural practices remained stable from 2010 to 2020 (see Figure 3). Emissions reached 25.0 Mt CO_2 equivalents (CO_2 eq) in 2023, a rise of 0.5 Mt compared to the previous year.[15]

Figure 3. Over the past decade, there has been no reduction in agricultural emissions



[11] Wageningen Economic Research (WEcR) (2022).
[12] Eurostat (the statistical office of the European Union) (2024).
[13] Eurostat (the statistical office of the European Union) (2023).
[14] Statistics Netherlands (CBS) (2024e).
[15] PBL Netherlands Environmental Assessment Agency (2024a).

The extent and origins of emissions vary from one agricultural sector to another. Emissions are generated, for instance, by fermentation in the gastrointestinal tract of cattle, manure spreading and storage, and the consumption of natural gas in greenhouse horticulture. More than half of agricultural emissions stem from fermentation and the consumption of natural gas. Each of these categories contributed 32% of the emissions recorded in 2021 (see Table 2).

The emissions generated by these processes originate from diverse sources. Bacterial processes give rise to emissions of methane and nitrous oxide. The breakdown of organic matter in animal digestion or manure generates methane, whereas nitrous oxide arises from the conversion of nitrogen compounds from manure and fertilisers in soil.

Table 2. Emissions from various agricultural processes[1] ***Activity***	**Mt CO_2 eq (2021)**	**Primary gas**
Natural gas consumption (primarily in greenhouse horticulture)	8.9	CO_2
Mobile machinery	1.3	CO_2
Fermentation (mainly cattle)	8.9	CH_4
Manure storage (mainly cattle and pigs)	3.9	CH_4
Manure spreading (arable farming, horticulture and manure from grazing livestock for livestock farming)	2.5	N_2O
Other (manure processing, nitrogen leaching)	2.4	N_2O
Total	**27.9**	

In 2021, natural gas consumption in greenhouse horticulture and fuel use for mobile machinery (such as tractors), accounted for approximately 35% of emissions, primarily from fossil sources. Major natural gas consumers in greenhouse horticulture are regulated under the first Emissions Trading System (ETS).[16] The second Emissions Trading System (ETS2) will cover emissions from mobile machinery, with the trade and auctioning of emission allowances set to start in 2027.[17] As it stands, emissions from the combustion of natural gas in greenhouse horticulture by smaller-scale consumers fall outside the scope of ETS2. In the spring of 2025, the government will decide whether to include these emissions in the Emissions Trading System through an opt-in mechanism.[18]

Carbon removal in the agriculture sector

Agriculture not only emits greenhouse gases through its various practices, it also affects emissions via land use, either adding CO_2 to the atmosphere or, indeed, sequestering it (negative emissions). In Table 2, the land-use sector – also known as Land Use, Land Use Change, and Forestry (LULUCF) – is accounted for separately from the agricultural emissions mentioned

[16] Dutch Federation of Agricultural and Horticultural Organisations (Glastuinbouw Nederland; no date).
[17] EU (2003).
[18] Minister for Climate Policy and Green Growth (2024).

above and accounts for both positive and negative emissions. For instance, forests and soils can sequester carbon from the atmosphere, resulting in negative emissions. On average, 90 tonnes of carbon per hectare are stored in the top layer of mineral soils, compared to 191 tonnes per hectare in peatlands. Variations in land management can cause this amount to rise or fall slightly, resulting in CO_2 emissions.[19] The estimated capacity for increased CO_2 storage in agricultural soils is 0.9 Mt CO_2 per year compared to the situation in 2017.[20] The greatest contribution stems from practices that enhance crop residue supply, including increasing permanent grassland, utilising cover crops/green manure, and adding a higher proportion of fallow crops.[21]

The practice of enhancing soil carbon sequestration through targeted measures is commonly referred to as carbon farming. Carbon credits offer farmers compensation for extra carbon sequestered in the soil, though it should be noted that the net income per hectare is likely to be limited.[22] A dependable certification system for carbon removal is essential in this context. The European Commission is currently developing a framework to standardise this certification, establishing criteria for quantification, additionality, sustainability and the long-term storage of CO_2.[23]

Emissions may also result from land use, with arable and grassland being key contributors. The oxidation of organic matter in peatland soils is the primary source of these emissions, contributing to greenhouse gas emissions and soil subsidence. This oxidation process is driven by reductions in groundwater levels intended to support agriculture, with a primary focus on dairy farming.[24] Emissions from grassland and arable land in 2023 were estimated at around 4.7 Mt CO_2 eq.[25]

Every year, arable farming crops sequester tens of millions of tonnes of CO_2. However, this CO_2 is not classified as negative emissions in the emission figures, as it forms part of what is known as the short carbon cycle. Following the consumption of crops by humans and livestock, the CO_2 is released over a period of a few months to several years, which, on average, equates to the annual uptake by crops and grassland.[26] Thus, over a one-year period, there is no net reduction in atmospheric CO_2.

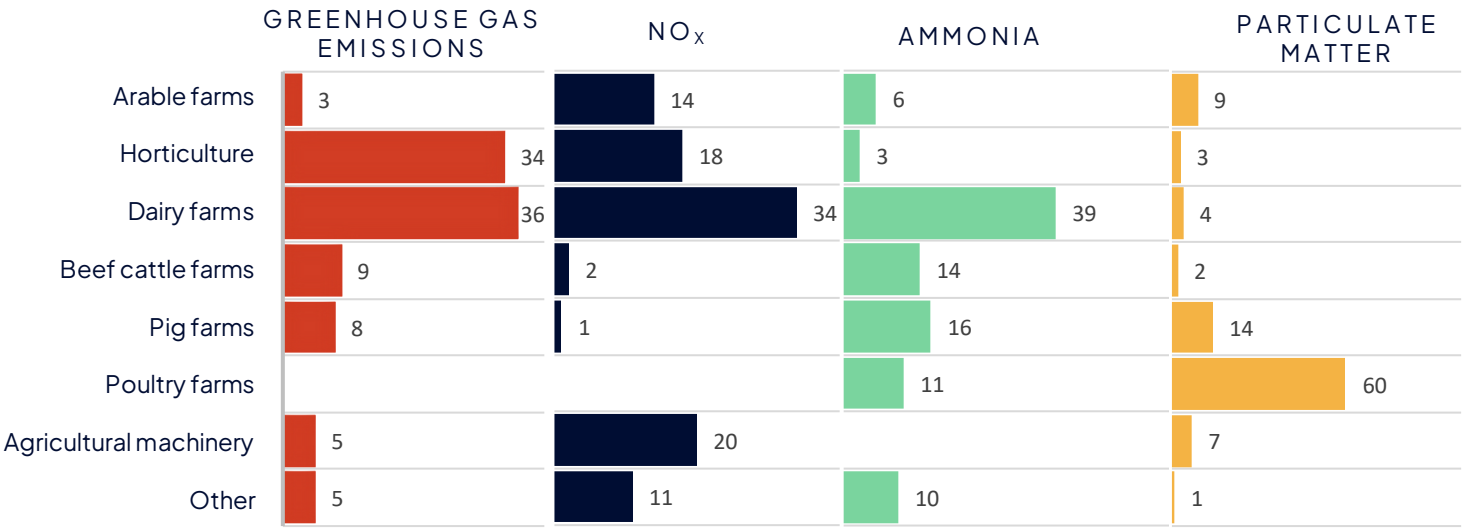
Nitrogen, particulate matter, and ammonia

Aside from its greenhouse gas emissions, agriculture is a significant emitter of nitrogen, ammonia, and fine particulates. Beyond their environmental impact, these emissions could also pose risks to human health. The agricultural sector emitted 28 kilotonnes of nitrogen (NO_x), 105 kilotonnes of ammonia (NH_3), and 5.6 kilotonnes of particulate matter (PM10) in 2020, making up 9%, 84%, and 7% of the Netherlands' total emissions, respectively.[27] These emissions differ widely by type, and from one agricultural sector to another. Figure 4 presents the 2020 emissions, categorised by sector and expressed as a percentage of total agricultural emissions.

[19] PBL Netherlands Environmental Assessment Agency (2024c).
[20] Wageningen Environmental Research (WER) (2022).
[21] Wageningen Environmental Research (WER) (2022).
[22] PBL Netherlands Environmental Assessment Agency (2024c).
[23] The Netherlands Scientific Climate Council (WKR) (2024).
[24] Hendriks et al. (2021).
[25] Wageningen Environmental Research (WER) (2024).
[26] PBL Netherlands Environmental Assessment Agency (2024c).
[27] Statistics Netherlands (CBS) (2023).

Figure 4. Different agricultural sectors vary in the extent to which they emit greenhouse gases, nitrogen, ammonia, and fine particulates.

Emissions as percentages of total agricultural emissions (2020)



Emission efficiency

The Netherlands is often commended for its leadership in efficient agricultural practices.[28] Agricultural output has indeed risen over the past few decades. Between 1995 and 2023, for example, production volume increased by 21%[29], while yield per hectare rose by 210% between 1950 and 2015.[30] Meanwhile, greenhouse gas emissions have declined since 1990, but the pace of reduction has slowed in the past decade (see Figure 3). Thus, emissions decreased not only in absolute terms but also in relation to the amount of product. For example, between 1990 and 2019, the 'carbon footprint' of milk declined by 35%.[31]

Since 1950, however, agricultural intensification has created a rising demand for input, in the form of energy and raw materials, an increasing share of which is imported. The Netherlands' agricultural sector also makes extensive use of land outside the country (see also the section on Agricultural land area). Factoring in the use of land, raw materials, and energy outside the Netherlands reveals that intensification has achieved a much more marginal rise in yield. In that case, the yield per hectare rose by 51% over the period from 1950 to 2015.[32]

Assessing yield by energy value (food product energy, measured in gigajoules per hectare) reveals that Dutch agriculture has shown few efficiency gains. Between 1950 and 2015, yield

[28] WEC (2019).
[29] Wageningen Economic Research (WEcR) (2023).
[30] Smit (2018).
[31] Hospers et al. (2022).
[32] Smit (2018).

increased by a mere 12%, whereas input in terms of energy value increased by 619%. In other words, over the past few decades, a disproportionately large amount of energy input – in the form of raw materials, energy, and land use – has been required to achieve only a modest increase in energy output – in the form of food.[33] This is partly due to the fact that animal products and greenhouse-grown food require more energy than plant-based products to deliver an equivalent energy content when consumed.[34]

Consequences and risks of climate change

The Netherlands' climate is changing. Many farmers and horticulturists are already bearing the brunt of climate change, and these effects are very likely to become increasingly severe over time. The most recent KNMI scenarios predict drier summers and wetter winters, an increase in extreme summer downpours, and a growing risk of waterlogging or flooding.[35] Both farming and horticulture are highly susceptible to the effects of these changes. Extreme weather events, such as sustained dry spells, heavy rain, and flooding, directly damage crops and agricultural land.[36] The agricultural sector requires relatively large amounts of fresh water, but securing its availability will become increasingly challenging as 2050 approaches.[37] The precise impact of climate change on agriculture will be determined by worldwide greenhouse gas emissions and the degree of climate adaptation. It is difficult to predict the precise consequences of climate change. Moreover, the consequences of these changes will have widely varying impacts on agriculture and horticulture, depending on the crop and type of agricultural holding. Furthermore, the impact will depend on the intensity and duration of extreme weather events, which may differ by region.[38]

In 2024, 61% of arable farmers reported a decrease in yields caused by drought and intense precipitation.[39] For example, intense precipitation can cause yield losses ranging from 25-75% for potatoes and 10-75% for maize.[40] Flooding or waterlogging may cause indirect issues, including vehicle access to fields, heightened risk of soil compaction, and greater susceptibility to plant diseases.[41] Prolonged drought causes groundwater levels to fall. Arable farming in the eastern Netherlands is particularly affected, resulting in reduced crop yields.[42] Between 2018 and 2020, drought led to reduced yields in various crops, including starch potatoes (-15%), seed onions (-15%), and maize silage (-10%).[43] Drought can exacerbate soil salinisation in the low-lying regions of the Netherlands, especially in coastal areas. This too can result in reduced crop yields.[44]

The livestock sector can also face challenges as a result of climate change. Livestock may experience heat stress during heatwaves, for instance, which can compromise their health and welfare. Milk yields in dairy cows could fall by as much as 12%, while the milk itself might be of

[33] Smit (2018).
[34] González et al. (2011).
[35] Royal Netherlands Meteorological Institute (KNMI) (2023).
[36] PBL Netherlands Environmental Assessment Agency (2024b); Deltares (2024).
[37] Deltares (2024).
[38] KNMI (2023); PBL (2024b); WEcR (2024).
[39] Nieuwe Oogst (2024).
[40] Wageningen Economic Research (WEcR) (2024).
[41] PBL Netherlands Environmental Assessment Agency (2024b).
[42] Wageningen Economic Research (WEcR) (2024).
[43] PBL Netherlands Environmental Assessment Agency (2024b).
[44] Deltares (2022); Klimaateffectatlas (Climate Impact Atlas) (2024).

poorer quality, with reduced levels of protein and fat.[45] Extreme heat can also result in higher mortality rates among livestock. No exact figures are currently available on this issue. Rendac, a processing company in Belgium, stated that it collected up to 30% more carcasses than normal during the 2019 heatwave, primarily chickens and pigs.[46]

Climate goals

The Dutch Climate Agreement has set indicative residual emission targets for agriculture, requiring emissions to fall to 17.9 Mt CO_2 eq by 2030.[47] The PBL Netherlands Environmental Assessment Agency predicts that emissions will fall to 20.0-24.7 Mt under established and proposed policy measures, reducing the odds of meeting the 2030 target to less than 5%.[48] This fall is primarily due to the discontinuation of manure derogation and to closure schemes tied to nitrogen policy, with a smaller impact from reduced energy use in greenhouse horticulture. Factoring in both current and proposed policies results in higher projected emissions of 20.7-25.5 Mt CO_2 eq. This increase stems from the Schoof administration's push to apply for a renewed derogation under the Nitrates Directive. Thus, under existing policies, Dutch agriculture is not on track to achieve the sectoral climate goals for greenhouse gas emissions. The PBL reports that the projected decrease in emissions owes more to the manure and nitrogen crisis than to agricultural climate policy.

Beyond the Climate Act's targets, the Netherlands has also committed to the Global Methane Pledge, an international agreement to achieve a 30% reduction in methane emissions by 2030 compared to 2020.[49] This requires the Netherlands to cut emissions from 19.4 to 13.6 Mt CO_2 eq. Methane emissions in the Netherlands totalled 18.3 Mt CO_2 eq in 2023. The PBL estimates that by 2030, methane emissions will only have decreased to 15.1-16.8 Mt, meaning there is less than a 5% likelihood of hitting the target.[50]

An indicative residual emission of 1.8 Mt CO_2 eq has been set for Land Use, Land-Use Change, and Forestry (LULUCF, often referred to simply as 'land use') by 2030.[51] According to the PBL, emissions for this sector are forecast to reach 4.7-5.3 Mt CO_2 eq by 2030, based on established and proposed policy measures. This shows there is less than a 5% probability of achieving the national target. The same applies if policies on the policy agenda are factored into the estimate.[52]

While the national land-use goal is indicative, the corresponding European Union goals are legally binding. Each EU member state has a total emissions/sequestration budget for 2026-2029, along with a legally binding goal for 2030. By 2030, the Netherlands is required to cut emissions or enhance sequestration by 0.4 Mt CO_2 eq, using the average emission level from 2016 to 2018 as a baseline. This equates to a net emission target of 4.9 Mt CO_2 eq by 2030, as

[45] Wageningen Livestock Research (WLR) (2018).
[46] Landbouwleven (2019).
[47] EZK (Economic Affairs and Climate Policy) (2023).
[48] PBL Netherlands Environmental Assessment Agency (2024a).
[49] Statistics Netherlands (CBS) (2024b).
[50] PBL Netherlands Environmental Assessment Agency (2024a).
[51] Minister of Economic Affairs and Climate Policy (2023).
[52] PBL Netherlands Environmental Assessment Agency (2024a).

long as the Netherlands does not exceed its 2026-2029 budget. The PBL estimates that there is a roughly 60% likelihood of achieving this European Union target.[53]

Emission reduction options

The above climate goals for agriculture and land use can be achieved by reducing greenhouse gas emissions from the agricultural sector. There are several ways to reduce emissions from agriculture. These measures can be divided into technical, management, and structural options, though the categories do overlap to some extent.

Technical options

Technical measures involve the use of innovative technology to capture or reduce emissions. As part of the 'Exploration of pathways towards a clean economy by 2050' PBL estimated the extent to which emissions in agriculture could be reduced using various technological innovations.[54] This includes low-emission livestock housing, the use of nitrification inhibitors when spreading manure, and the selection of cows that are genetically predisposed to emit less methane from rumen and gut fermentation.

The success of these measures hinges on the proportion of agricultural holdings implementing these techniques *and* on their effectiveness in practice. For instance, studies have shown that the emission reductions achieved by new livestock housing technologies fall short of expectations.[55] Some solution pathways result in higher costs or demand substantial investment. Others are challenging to incorporate into farming practices or have unpredictable ecological impacts. It is also important to note that different technical options may compromise each other's effectiveness in reducing emissions. For instance, genetic selection for lower emissions could limit the impact of feed additives. Therefore, it is not simply a matter of adding up the potential emission reductions from different measures. The PBL estimates that applying a combination of technological measures could reduce methane emissions from rumen and intestinal fermentation by one third per head of cattle.[56] While technological solutions[57] can tackle the majority of fossil emissions in greenhouse horticulture, the livestock sector requires further measures for other sources, such as nitrous oxide emissions from manure spreading or storage, in order to achieve the climate goals.

Management options

Management strategies focus on potential changes to farming practices and management (land management) to cut emissions. In arable farming these include using cover crops/green manures, and fallow crops in crop rotation, for example, see also the section entitled *Carbon removal in the agriculture sector*. In the livestock sector, this could involve adjustments to animal feed and more access to pasture, for example. It is unclear exactly how much emission reduction can be achieved through management measures. According to estimates, adjusting feed could cut methane emissions from intestinal and rumen fermentation by 5% to 15%.[58] Participants in the 'Koeien en Kansen' project gained hands-on experience with feed adjustments in intensive

[53] PBL Netherlands Environmental Assessment Agency (2024a).
[54] PBL Netherlands Environmental Assessment Agency (2024d).
[55] Wageningen Livestock Research (WLR) (2023).
[56] PBL Netherlands Environmental Assessment Agency (2024c).
[57] PBL Netherlands Environmental Assessment Agency (2024c).
[58] Schuttelaer & Partners (2021); PBL (2024c).

dairy farming. As a result, CO_2 eq emissions per kilogram of milk were reduced by up to 4%, or even more, relative to the Dutch average. The reductions, however, varied significantly between farms and from year to year, as weather conditions impact the effectiveness of management measures.[59] Access to pasture can also help reduce greenhouse gas emissions, but its effectiveness is inconsistent.[60] The measures can also influence each other's effectiveness – with increased access to pasture, there is less opportunity to check feed. Because they are relatively easy to implement, management measures play a critical role in reducing agricultural emissions. One common challenge is the difficulty in enforcing and verifying management measures. Even though research and experimentation are still underway, the data presented above suggest that the potential for management options to reduce greenhouse gas emissions remains both uncertain and limited.[61]

Structural options

Structural measures are designed to curtail farming activities that contribute to emissions. This includes measures such as the establishment of buffer strips, the extensification of agriculture, or the rewetting of peatlands. Many structural measures have beneficial effects on a range of agricultural challenges, such as nitrogen reduction, manure surplus, or ecological restoration.[62] These measures frequently result in reduced levels of production. The effectiveness of these measures is, therefore, closely tied to the economic scope of the agricultural holding. While the challenges may differ by region, structural interventions, combined with the implementation of various technological and management measures, will be required to meet climate and nature conservation goals.[63] This suggests that a reduction in livestock numbers needs to be considered.[64]

Economic figures on Dutch agriculture

Added value

Both agriculture and the food system are key contributors to the economy of the Netherlands. Alongside the primary production of food in agriculture, a substantial supply chain is required. This includes animal feed, fertilisers, energy, machinery, livestock housing, and greenhouses, as well as veterinary and commercial services. Many agricultural products are subsequently processed by the food industry and then distributed both across the Netherlands and to export markets. This entire system is known as the agricultural complex. In 2022, the agricultural complex contributed an added value of approximately 66 billion euros to the economy.[65] This represents 6.9% of the gross domestic product (GDP). The added value of the agricultural complex rose from 45 billion euros in 2010 to 66 billion euros in 2021, however, its contribution to GDP decreased marginally from 7.4% to 6.9% during this period.[66] Over the past decade, the

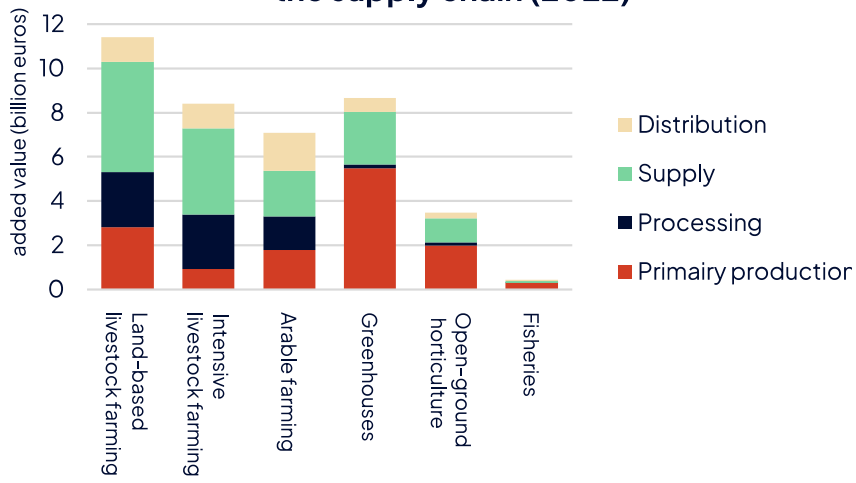
[59] Wageningen Livestock Research (WLR) (2024).
[60] Wageningen Livestock Research (WLR) (2021).
[61] PBL Netherlands Environmental Assessment Agency (2024c).
[62] Wageningen Environmental Research (WER) (2023b).
[63] Wageningen Environmental Research (WER) (2023a).
[64] PBL Netherlands Environmental Assessment Agency (2024c); Council for the Environment and Infrastructure, Rli (2018).
[65] Agrimatie (2024).
[66] Wageningen Economic Research (WEcR) (2023).

growth of the Dutch economy as a whole has, on average, outpaced the revenue generated by the agricultural complex.

Table 3. Added value of agricultural complex in 2021[1]			
Origin	Links in the supply chain	Added value (billion euros)	Added value compared to GDP (%)
Raw materials sourced from abroad		24.5	2.55%
Raw materials sourced domestically	Supply	12.8	1.33%
	Primary production	10.9	1.14%
	Processing	5.3	0.55%
	Distribution	4.2	0.48%
Total		**57.7**	**6.01%**

There is a considerable variation in added value between the individual links of the food chain. In 2021, the turnover from primary production (agriculture) accounted for 1.35% of GDP, as shown in Table 3.[67] In this table, a distinction is drawn between the added value of imported agricultural goods (foreign raw materials) and those sourced from within the Netherlands (domestic raw materials). Domestic raw materials are subdivided into four distinct links in the chain: supply, primary production, processing, and distribution. Figure 5 illustrates the added value across different subsectors, categorised by the individual links in the chain.[68]

Figure 5. Added value per sector per link in the supply chain (2022)



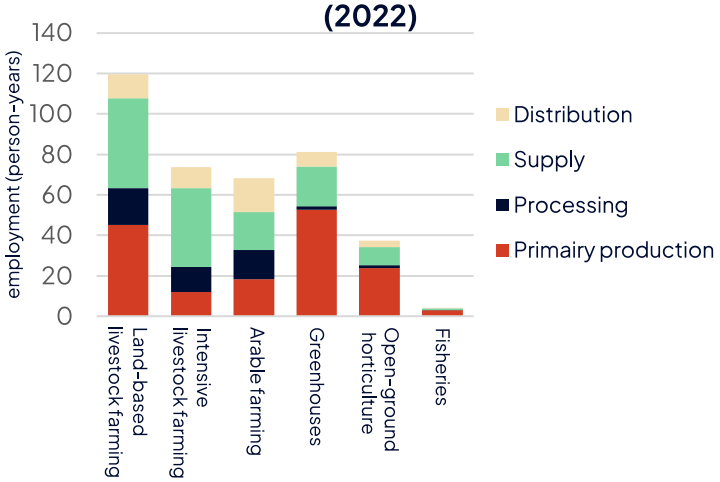
[67] Wageningen Economic Research (WEcR) (2023).
[68] Agrimatie (2024).

Agriculture also costs money. Emissions of greenhouse gases, nitrogen, fine particulates, and ammonia into the soil, water, and air can produce adverse effects, such as harm to human health and biodiversity loss. The PBL's estimate of the annual monetary damage caused by the agricultural sector ranges from 6.5 to 7.5 billion euros. This is predominantly due to the livestock sector.[69] According to the United Nations Food and Agriculture Organization (FAO), the monetary damage caused by the agricultural sector in 2020 amounted to 12 billion euros due to environmental and climate damage, and 39 billion euros in public health costs.[70]

Employment and income

The agricultural complex accounted for 7.5% of national employment in 2021, representing roughly 600,000 person-years.[71] This share has remained relatively unchanged since 2010, with the number of person-years ranging from 7.5% to 8.1% of national employment. The largest contributions come from primary production and supply, representing 40% and 34%, respectively. These figures vary substantially from one primary agricultural sector to another. Figure 6 illustrates employment in the agricultural complex, categorised by subsector and the links in that sector's chain.[72]

Figure 6. Employment in the agricultural complex categorised by subsector (2022)



In 2021, farmers and horticulturists had an average disposable household income of 81,800 euros. However, there are significant disparities in household incomes. Income varies from year to year, across sectors, and depending on the size of the holding. Nonetheless, agricultural and horticultural households face a lower long-term risk of poverty than the average Dutch household.[73] Those farmers and horticulturists who adopt more sustainable practices also tend

[69] PBL Netherlands Environmental Assessment Agency (2018).
[70] Food and Agriculture Organization (FAO) (2023).
[71] Wageningen Economic Research (WEcR) (2023).
[72] Agrimatie (2024).
[73] Statistics Netherlands (CBS) (2024a).

to achieve better economic outcomes.[74] In 2021, for instance, organic farmers and horticulturists earned almost 10% more than their mainstream peers.[75]

Imports and exports

In terms of absolute value, the Netherlands ranks as the second-largest exporter of agricultural products in the world, after the United States.[76] In 2023, export value rose by 1.6%, totalling 124 billion euros, with Dutch-made products contributing 82.1 billion euros and re-exports accounting for 41.7 billion euros.[77] The leading Dutch export products are dairy (11.3 billion euros), floriculture (11.5 billion euros), and meat (11.2 billion euros). The bulk of products are exported to neighbouring countries, including almost a quarter (24%) to Germany, 12% to Belgium, 9% to France and 8% to the United Kingdom. In 2023, the import of agricultural products fell by 3.3%, to 83.9 billion euros. In 2022, 72% of imported goods were re-exported, either directly, after further processing, or as newly created products.[78] The majority of imports originate from neighbouring countries, with Germany accounting for 19%, Belgium 14%, and France 6%. When it comes to imports from outside Europe, Brazil (2.9%), the United States (2.7%), and China (1.4%) are the top exporters of agricultural goods to the Netherlands.[79]

[74] Agrimatie (2023).
[75] Statistics Netherlands (CBS) (2024c).
[76] Wageningen Economic Research (WEcR) (2023).
[77] Wageningen Economic Research (WEcR) and Statistics Netherlands (CBS) (2024).
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