

Documentation of statistics for Economic Accounts for Agriculture 2024



1 Introduction

The Economic accounts for agriculture is a macroeconomic accounting system that illustrates the overall economy of the agricultural sector by providing accounts of production, intermediate consumption, gross investment, and other flows. As a satellite account under the European system of national accounts, this statistic represents the agricultural sector's contribution to the National Accounts. In 2024, the statistic Gross factor income of agriculture was replaced by the Economic accounts for agriculture, which is regulated by an EU regulation. Accounts for Gross factor income of agriculture are available back to 1935, while the Economic accounts for agriculture in its current form are comparable from 1990 onwards.

2 Statistical presentation

The Economic accounts for agriculture is an annual compilation of the agricultural sector's economic activities, including the value of production (output), intermediate consumption, and gross investments. In addition, subsidies, labour input, and the sale of pesticides and mineral fertilizers are presented in separate, dedicated tables. The economic activities are compiled at basic prices and expressed in million DKK, both at current prices and at previous year's prices. The statistics are compiled at both national and regional level. The agricultural labour input is measured in thousand annual work units (AWU). Direct subsidies to the agricultural sector are presented in million DKK. The sale of mineral fertilizers is compiled in tonnes.

2.1 Data description

The basic unit in the Economic accounts for agriculture is the agricultural holding, which also includes horticultural holdings. Together, agricultural holdings (including horticulture) constitute the agricultural sector.

An agricultural holding carries out the following economic agricultural activities:

- cultivation of crops;
- animal husbandry;
- mixed crop and livestock production;
- · agricultural services (contract work);
- hunting, trapping and game propagation, including related service activities.

So-called non-landowning contractors (agricultural service enterprises that do not themselves carry out crop or livestock production but provide services such as contract work) are also considered basic units within the agricultural sector. This differs from the previous statistic Gross factor income of agriculture, which did not include non-landowning contractors.

As an integral part of the European System of National and Regional Accounts (ESA 2010), the Economic accounts for agriculture follows the ESA 2010 definition of the agricultural industry, but with a few deviations: Agricultural sector in the Economic accounts for agriculture = National Accounts agricultural industry (NACE Rev. 2, section 01)

- minus production units providing agricultural services other than contract work (e.g. operation of irrigation systems);
- minus units where agricultural activity constitutes only a non-commercial (hobby) activity that is included in the National Accounts:
- plus secondary agricultural activities in units whose main activity is not agriculture.

Since the holding is the central unit in the Economic accounts for agriculture, secondary non-



agricultural activities carried out within the holding are also included. Non-agricultural secondary activities are activities whose costs cannot be separated from those of agricultural production. Examples include on-farm processing of agricultural products (e.g. dairy or juice production), forestry, and agro-tourism.

The macroeconomic framework of the Economic accounts for agriculture is based on a system of interrelated accounts. Each account consists of a number of items (products) and key aggregates, such as gross value added and entrepreneurial income. All items and aggregates are published in StatBank table JOEK1.

Production account Output – Intermediate consumption = Gross value added (GVA) – Consumption of fixed capital = Net value added (NVA)

Generation of income account Net value added – Other taxes on production Other subsidies on production = Factor income – Compensation of employees = Net operating surplus

Entrepreneurial income account Net operating surplus Property income received (interest received) – Property income paid (interest paid) – Rent paid (land and building leases) = Entrepreneurial income

Capital account Gross fixed capital formation (GFCF) – Consumption of fixed capital = Net fixed capital formation (Net investment) Changes in inventories Capital transfers

Labour input in the agricultural sector:

- · Non-salaried labour
- Salaried labour

Production account in detail: The production account is the first stage in the Economic accounts for agriculture. It shows how the gross value added (GVA) is derived from the total output of the agricultural industry by deducting the value of intermediate consumption (inputs such as feed, fertilizers, energy, maintenance, etc.).

Hence, gross value added represents the value created by the agricultural industry itself, calculated as the value of total output less the value of goods and services consumed during production. Net value added equals gross value added minus consumption of fixed capital (depreciation). The item consumption of fixed capital covers depreciation on machinery, equipment, buildings and other fixed assets. The Economic accounts for agriculture differs from the previous statistic Gross factor income of agriculture by including consumption of fixed capital and thus calculating net value added. The output is valued at basic prices, meaning that product-related taxes and subsidies are included in the value of sales. The Economic accounts for agriculture also differs from Gross factor income of agriculture by including product-related taxes and subsidies in the output value. In practice, this has only a limited impact on the overall results, as product-related subsidies apply only to potatoes and cattle. The product subsidy for potatoes was introduced in 2022.

On the Production Account: In the production account, the Economic Accounts for Agriculture first measure the total output of agricultural production and activities, which includes:

Crop production Animal production Agricultural services Secondary activities

Crop Production: The crop production account consists of the following main products (or categories):

Cereals Industrial crops Forage plants Vegetables and horticultural products Potatoes Fruit Seeds

The output of cereal production consists of wheat, barley, rye, oats, triticale, and maize (at



maturity), including the production of seed and stock changes on farms. Cereal output covers farm sales of cereals to trading companies and similar enterprises, the value of farm stock changes, cereals used for on-farm feed, and sales of cereals between farms. The value of stock changes also appears in the capital account along with herd changes under the item Inventory Changes. The Economic Accounts for Agriculture differs from the previous account, Gross Farm Income, by including the value of stock changes in the output of production.

Industrial crops include rapeseed, legumes, and sugar beets. All three are almost exclusively sold to trading companies and food or energy production enterprises. The account of industrial crops does not include the value of farm stock changes, as this is not relevant.

Forage plants: The output of fodder crops consists of maize and cereals for silage, grass, alfalfa, post-harvest regrowth after cereals and whole-crop cereals, fodder beets, and straw for both feed and fuel. Fodder crops are primarily used on the farm itself and may be traded between farms, except straw for fuel, which is sold externally (e.g., to district heating). The account of fodder crops does not include stock changes, as it is not relevant.

Vegetables, Ornamental Plants, Fruit: In addition to all types of vegetables and fruits/berries, the output account includes Christmas tree producers' sales of Christmas trees and greenery, nursery products, and farm investments in plantations, such as strawberry plantations. Farm investments in plantations appear both in the production account as output and in the capital account as gross fixed capital formation. The Economic Accounts for Agriculture differs from the previous account, Gross Farm Income, by including farm investments in plantations in the output of vegetables and ornamental plants.

Potato output consists of farm sales of table potatoes, industrial potatoes, and seed potatoes to wholesale companies, potato starch producers, etc.

Seeds: Output includes clover and grass seeds, spinach seeds, and other seeds.

Animal production consists of the output of:

Live cattle Live pigs Live horses, asses, mules and hinnies Live sheep and goats Live poultry Other animals Raw milk Eggs Other animal products.

The output of animal production consists of farms' sales of animals for slaughter in Denmark and the export of live animals for both slaughter and breeding abroad. In other words, it includes farms' sales of animals to slaughterhouses or for export, while sales between farms — such as piglets or calves — are not included. The output from livestock consisting of milk, eggs, and other animal products covers farms' sales of milk, eggs, honey, wool, hatching eggs, and pelts to dairies, egg packing stations, hatcheries, and other purchasers of these products.

Agricultural Services: This item reflects farm output from contracting activities, rental of farm buildings, and leasing of equipment. Output from contracting constitutes the largest part of this item. This corresponds to the same item on the consumption side, Agricultural Services (consumption), which shows the sector's expenditure on the same activities. Values do not match exactly, as farms may earn from contracting activities conducted outside the agricultural sector. Agricultural services in the Economic Accounts for Agriculture differs from Gross Farm Income by including output from off-farm machinery contractors when they perform agricultural tasks, e.g., harvesting.

Secondary activities are non-agricultural side activities that cannot be separated from the farm's agricultural activities. Examples include boarding livestock, forestry, and agro-tourism.

Intermediate Consumption: The consumption of goods and services in agricultural production is recorded in the following main categories: Seeds Energy Fertilizers and soil improvers Plant



protection products Veterinary costs Feedingstuffs Maintenance Agricultural services (consumption) Financial intermediation services indirectly measured (FISIM) Other goods and services

Seeds: The total cost of seeds purchased for all crops, including seed potatoes and seeds for Christmas tree production.

Energy: This includes electricity, heating energy, and fuel costs in production, including energy taxes. Energy costs of off-farm machinery contractors are also included, which were not recorded in Gross Farm Income.

Fertilizers and Soil Improvers: Covers purchases of fertilizers (both single and compound) and lime/marl, also considered soil improvers.

Plant Protection Products: Covers all costs for pesticides, including those used in Christmas tree production.

Veterinary Costs: Covers all expenses for veterinary services and veterinary medicines.

Feedingstuffs: Costs are recorded separately for: Feed supplied by other farms. Feed purchased externally from trading companies or feed producers. Feed produced and used on the same farm. Unlike Gross Farm Income, feed costs are not split by mixed vs. single feed. Feed supplied by other farms includes cereals and fodder crops. Feed purchased externally includes mixed feed and single feed materials (mainly cereals, legumes, oilcakes, beet pellets, etc.). Internally produced feed includes cereals, potatoes, legumes, and fodder crops.

Maintenance of Materials and Buildings: Records costs for maintaining equipment, materials, buildings, and land improvements.

Agricultural Services (consumption): Records costs of contracting activities, rental of farm buildings, and leasing of equipment. Differs from Gross Farm Income by excluding the estimated value of owner hours at off-farm contractors.

Financial intermediation services indirectly measured (FISIM): Covers financial services from banks and credit institutions paid indirectly. In Economic Accounts for Agriculture, these are treated as production costs affecting gross value added, rather than just financial expenses.

Other goods and services: Includes various costs from other sectors, such as plant and animal production services, packaging, insurance, and direct banking costs, including off-farm contractors. This differs from Gross Farm Income, which excludes off-farm contractors and separates direct banking costs.

Income Generation Account: The income generation account shows the path from gross value added to factor income, illustrating how taxes and subsidies affect the sector's financial resources. Factor income is calculated from net value added by subtracting other production taxes and adding other production subsidies. It represents the income available to remunerate labor. Net farm surplus is derived by subtracting wages from factor income, showing what remains for the farm owner after paying employees but before compensating their own labor.

Compensation of employees: Covers paid labor on farms and wages for contracting work performed by non-farm enterprises in support of agricultural production.

Other taxes on production: Includes property taxes and vehicle weight taxes.

Other subsidies on production: Covers direct financial support (e.g., basic payment scheme, organic area payments). Product-specific subsidies are included in basic prices, while subsidies for



environmental technology and modernization are recorded as investment subsidies. Young farmer support is recorded under other capital transfers. Unlike Gross Farm Income, which includes these subsidies in general subsidies, the Economic Accounts for Agriculture distinguish factor income and net farm surplus and include employee wages.

Operating Income Account: Reflects farm business results "after financial adjustments," showing the owner's capacity to earn from the farm itself. Operating income is calculated from net farm surplus by accounting for financial items and lease/rental expenses. This account does not exist in Gross Farm Income.

Capital Account: Distinguishes between actual investment (net investment) and depreciation of existing capital (consumption of fixed capital). Inventory changes and capital transfers provide a complete view of agricultural assets, not just investments. Gross fixed capital formation covers all investments in production means before depreciation (buildings, equipment, land improvements, permanent crops, livestock). Neither capital account nor gross fixed capital formation exist in Gross Farm Income.

Agricultural labour input: Agricultural labour input is recorded in table JOEK3, showing full-time equivalents (FTEs) used in both unpaid and paid work. Covers all work in agricultural and secondary activities on farms, as well as off-farm contractors performing agricultural tasks. This is a key indicator for measuring and comparing labor use in agriculture across EU countries. Agricultural labour input is not recorded in Gross Farm Income.

2.2 Classification system

The statistics are broken down by product, e.g. wheat, milk, energy, etc., and geographically by region. In the table TILSKUD2, subsidies to the agricultural sector are broken down by type of subsidy, e.g. organic schemes. In the table for mineral fertilizers, GOEDSALG, fertilizers are grouped according to whether they are organic or inorganic, and then further into different fertilizer categories, e.g. NPK fertilizers.

2.3 Sector coverage

Agriculture and horticulture.



2.4 Statistical concepts and definitions

Basic price: The amount receivable by the producer from the purchaser for a unit of a good or service produced as output minus any tax payable, and plus any subsidy receivable, on that unit as a consequence of its production or sale; it excludes any transport charges invoiced separately by the producer.

Mineral fertilizer: Fertilizer that is industrially produced and applied to soil to supply specific nutrients in precise quantities, and which includes products covered by the Danish Executive Order on Fertilizers and Soil Improvers etc. (BEK no. 1135 of 09/07/2022). — Superordinate concept: fertilizer — Distinguishing characteristics: industrially manufactured, provides nutrients in standardized form, and falls under national regulation as defined in the referenced executive order

Soil improver: Product applied to soil to enhance its physical or chemical properties, regardless of whether it contains nutrients. — Superordinate concept: soil amendment — Distinguishing characteristics: modifies or improves soil structure or chemical composition to support better growing conditions

Organic fertilizer: Fertilizer derived from biological material (animal and/or plant) that enhances soil fertility by supplying nutrients and increasing the soil's organic content. — Superordinate concept: fertilizer — Distinguishing characteristics: of biological origin and contributes both to nutrient supply and soil improvement

Growing medium: Material in which plants are cultivated, supporting root development by retaining water, air, and nutrients. — Superordinate concept: cultivation substrate — Distinguishing characteristics: provides physical support and regulates the availability of water, air, and nutrients for plants

2.5 Statistical unit

Agricultural holdings, including horticultural holdings, as well as small holdings.

2.6 Statistical population

The population covers the entire agricultural sector, i.e. all holdings, including horticultural and small holdings, and the economic activities within the scope of the agricultural sector. Non-commercial farms are not included.

2.7 Reference area

Denmark.

2.8 Time coverage

The statistics are published for the first time in October 2025, covering the years 2022, 2023, and 2024 in the StatBank. The regional breakdown is published for the years 2022 and 2023. The previous compilation Gross Value Added of Agriculture covers the period from 1990 up to and including 2023. It is also broken down by region for the years 2011 to 2023. The Economic accounts for agriculture at the European level have been published in the <u>EU statistical database</u>.



2.9 Base period

Not relevant for this statistic.

2.10 Unit of measure

The products in the StatBank tables JOEK1 and JOEK2 are measured in million DKK and at basic prices, which include product-related subsidies and taxes/charges. In JOEK1, the values are presented in either current prices or constant prices (previous year). In JOEK3, the products are measured in annual work units. One annual work unit corresponds to one person working full-time for one year.

2.11 Reference period

The statistics refer to the calendar year. The StatBank table GOEDSALG refers to the planning year (e.g. 2023–2024).

2.12 Frequency of dissemination

Annually.

2.13 Legal acts and other agreements

Regulation (EC) No 138/2004 of the European Parliament and of the Council on the economic accounts for agriculture in the Community is the regulation that sets out Denmark's obligations towards the EU.

2.14 Cost and burden

The direct reporting burden is very limited, as the statistics are based on data from other statistics.

2.15 Comment

Additional information can be found on the topic page <u>Økonomi for landbrug og gartneri</u> or obtained by contacting Statistics Denmark.

3 Statistical processing

The Economic accounts for agriculture is a composite statistical product, which means that its calculation basis is built on existing statistics, referred to as primary statistics. The statistics are compiled annually using data from a range of different sources, e.g., the Farm Accountancy Data Network and Feed Production Statistics, as well as from administrative registers, industry organizations, companies, and foundations. Once the data in each primary statistic has been processed, it is transferred to and consolidated in the data processing system for the Economic accounts for agriculture, which calculates the annual values. The value of each product is calculated using the standard "quantity times price" method.



3.1 Source data

The majority of sources for the Economic accounts for agriculture come from statistics produced by Statistics Denmark, particularly from the Food Industry Statistics Office. Data from the Public Finances and National Accounts statistics are used to calculate indirect bank costs, direct bank and credit costs, as well as taxes and duties. In addition, data from the Foreign Trade in Goods and Industrial Sales of Goods statistics are used. For further information on data collection, reference is made to the documentation of the respective statistics. Moreover, data for specific items, such as fruit and vegetables, Christmas trees, seeds, straw, and sugar beets, are obtained directly from industry organizations, individual companies, and foundations within the agricultural sector. Administrative register data from the Danish Agency for Green Conversion and the Environment are used for the calculation of other production subsidies and capital transfers regarding payments of agricultural support, which are also presented in the table TILSKUD2.

For the agricultural sector's expenditures on fertilizers, the annual sold quantities of mineral fertilizers from the Danish Agency for Green Conversion and the Environment are used, which are also presented in the table GOEDSALG. The Agency collects the annual sold quantities of mineral fertilizers registered under the Executive Order on Fertilizers and Soil Improvers etc. (BEK no. 1135 of 09/07/2022). Data are obtained through an annual collection of sales figures, where companies with registered products are asked about the quantities sold. This includes all types of sales: to agriculture, hobby customers, horticulture, roads and parks, etc.

3.2 Frequency of data collection

Annually

3.3 Data collection

Data for this statistic are primarily obtained from already published statistics. Reference is therefore made to the documentation of the individual statistics for information on data collection methods. The few quantities, prices, or values that need to be collected specifically for use in the statistic and that come from external data providers are obtained through direct contact and through websites. Data on subsidies and mineral fertilizers are received from the Danish Agency for Green Conversion and Water Environment.

3.4 Data validation

Data validation takes place in several stages, first at the micro level and then at the macro level, where the data sources are linked and the results calculated. Data from the primary statistics have already been checked and validated within the individual primary statistics when delivered to the Economic accounts for agriculture. In the production system for the Economic accounts for agriculture, data from the primary statistics are organized according to the structure of the accounts. Here, the data are compared with previous years. For example, quantities of cereals sold from farms, obtained from the Use of Cereals statistics, are compared with quantities from previous years from the same source. Similarly, prices of cereals sold from farms are compared with previous years' prices from the Agricultural Prices statistics. For unusual developments, the responsible statisticians of the primary statistics are consulted. Data obtained from industry organizations and companies for the preparation of the Economic accounts for agriculture are validated by checking and comparing with previous years. The reporters are contacted if necessary.

3.5 Data compilation



Data integration: The first step in the data processing workflow is the integration of data from all primary statistics and other individual data sources (e.g., industry organizations). This is done on an annual basis, as the statistics are compiled yearly. Data integration follows the product classification of the statistics (or breakdown by items), as shown in StatBank table JOEK1, which corresponds to the final dataset submitted to the EU. Integration is carried out individually; the processing system consists of separate modules for, for example, cereals, industrial crops, etc. Consequently, the next step in processing (error checking, etc.) also occurs at the product level. On the cost side, several products are combined if they use the same data source and identical processing methods. If data are collected at a more detailed level than published, they are integrated at this lower level. For example, the product Seed for sowing is processed at the level of individual crop types (e.g., red clover, ryegrass, and spinach seed). Quantities and prices for each crop type are collected from relevant sources. The module calculates the sales value for each crop type, which is then summed to obtain the total sales value for Seed for sowing.

Data coding: The coding in the Economic accounts for agriculture follows the EU codes for Economic Accounts for Agriculture. Coding is performed in the data processing system, assigning each product the same code as in the dataset submitted to the EU. The coding is hierarchical: all sales products start with "1" and all cost items start with "2", etc.

Microdata error checking: After integration, microdata are checked to ensure correct linking to relevant fields from the primary statistics. This mainly involves comparing developments with previous years. Since data have already been quality-checked in the primary statistics, no further error checking is performed at this stage.

Data correction and imputation: Corrections are made only if errors are detected in the primary statistics, which is very rare. Data are continuously updated from preliminary to final values with each October publication, with the two most recent years always considered preliminary. For example, prices for Seed for sowing are not available in October, so either previous-year prices or estimates are used. Estimates are applied if significant price changes are known.

Weighting/upscaling of data: Data from the Farm Accountancy Data Network are weighted to cover the full population of agricultural holdings, including small holdings. This ensures activities in small holdings are included for items where FADN is the source. The adjustment was 3% until 2020 and is now 1.5% due to a new SO threshold and structural changes.

Calculation of values in current prices: Values in current prices are calculated using the "quantity × price" method. If only value data are available from FADN, values per holding are converted to million DKK for the full population and adjusted by 1.5%.

Calculation of values in constant prices: Values in current prices are converted to constant prices (last year's prices) to separate price and volume effects. Constant price calculations are limited to goods and services, and elements contributing to their valuation (output, intermediate consumption, consumption of fixed capital, gross/net value added, gross investment). When both quantities and prices are available: Q(t)*P(t-1). By multiplying the quantity in 2024 by the price in 2023, you obtain the 2024 quantity valued at 2023 prices, i.e., the value in constant prices.

When only current price values and price indices are available: V(t)/Ip(t)*Ip(t-1). This method deflates current values to last year's prices.

Data aggregation: Once data are integrated, checked, weighted, and calculated at the micro level, they are transferred to the aggregation module for EU reporting and publication. This module produces the overall picture and calculates aggregated items and key figures.

Top-level aggregated items: TOTAL PRODUCTION OF GOODS AND SERVICES (2+7) TOTAL AGRICULTURAL PRODUCTION (3+6) TOTAL SALES PRODUCTS (4+5) VEGETABLE PRODUCTION ANIMAL PRODUCTION TOTAL INTERMEDIATE CONSUMPTION GROSS FIXED



CAPITAL FORMATION

Key figures: 9 GROSS VALUE ADDED (1–8) 11 NET INVESTMENT (10–12) 13 NET VALUE ADDED (9–12) 17 FACTOR INCOME (13–15 +16) 18 NET FARM INCOME (13–14–15+16) 22 BUSINESS INCOME (18–19–20+21)

Aggregate-level error checking: After all data are compiled, an overall check at the aggregate level compares this year's results with previous years, using other relevant sources (reports, analyses) as reference. FADN is also used as a benchmark.

Regional distribution of the Economic accounts for agriculture: The regional breakdown is published in StatBank table JOEK2 and reported to the EU. It is produced in current prices only, as one of the final steps after national results are completed. The regional statistics are one year behind; e.g., in 2024 the 2023 regional results are published.

Methodology: The regional allocation uses a top-down approach: national values are distributed regionally using primary statistics with regional coverage (quantities, areas, values).

Sources for regional distribution: Harvest of cereals, rapeseed, and legumes Agricultural and Horticultural Census Farm Accountancy Data Network.

3.6 Adjustment

No corrections are made to the data beyond what is described in sections Data validation and Data compilation.

In Data validation, the data have already been validated within the primary statistics. In cases of unusual developments, the responsible statisticians for the primary statistics are consulted. Data collected from industry organizations and companies are continuously validated by comparison with previous years, and respondents are contacted when clarification is needed.

In Data processing, data from the primary statistics are integrated into the production system for Economic accounts for agriculture, coded, and checked for errors first at the micro level and then at the aggregated level. Corrections are only made if errors are identified in the primary statistics. Data are continuously updated from preliminary to final with each publication in October, where the two most recent years are always considered preliminary.

4 Relevance

The Economic accounts for agriculture are relevant for Danish authorities, the EU, research institutions, and agricultural organizations, as they allow monitoring of developments in the economic activities of the agricultural sector. The statistics also serve as input for the compilation of the National Accounts.



4.1 User Needs

The main user of the Economic accounts for agriculture is the EU, which uses the statistics to monitor and evaluate the Common Agricultural Policy. This requires comparable data on the economic situation of the agricultural sector and changes in sector income, and the Economic accounts for agriculture meet the EU's needs for this purpose. Additionally, the statistics are of interest to Danish authorities, the Ministry of Food, Agriculture and Fisheries of Denmark, universities, and agricultural organizations, which wish to follow developments in the economic performance of the agricultural sector. The statistics also serve as input for the compilation of the National Accounts.

4.2 User Satisfaction

No knowledge.

4.3 Data completeness rate

The Economic accounts for agriculture comply with Regulation (EC) No 138/2004 of the European Parliament and of the Council on the economic accounts for agriculture in the Community.

5 Accuracy and reliability

The uncertainty in the Economic accounts for agriculture is linked to the uncertainty in the primary statistics used for its compilation. For example, issues such as timing can introduce uncertainty, while other information, such as data from dairies and slaughterhouses, is exact. For preliminary calculations, some estimates are based partly on expert judgment and assumptions until the final data are processed in the primary statistics; therefore, the statistics are considered final only after two years. The sold quantities of mineral fertilizers from the Danish Agency for Green Conversion and the Environment are associated with a certain degree of uncertainty. The data come from the annual collection of sales figures, in which companies with registered products are asked to report the quantities sold of those products. Companies have the option to indicate tax-exempt quantities, but this is voluntary, and not all companies use this option. The data collection does not include self-imports, and some products may be double-counted if a company has not used the option to report a sold quantity as tax-exempt. The data quality is therefore directly dependent on the information provided by the companies to the Agency.

5.1 Overall accuracy

The Economic accounts for agriculture are subject to uncertainty. They are based on a large number of sources from primary statistics, each with varying levels of uncertainty. For example, timing issues can introduce uncertainty, while other information, such as data from dairies and slaughterhouses, is assumed to be very accurate. Preliminary calculations partly rely on expert judgment and assumptions until the final data are processed in the primary statistics; therefore, the statistics are considered final only after three years. Not all primary statistics used for the Economic accounts for agriculture cover all Danish farms and horticultural holdings, so weighting factors are applied to ensure full coverage of the agricultural sector, including small holdings. For the regional breakdown of the Economic accounts for agriculture, there is additional uncertainty.



5.2 Sampling error

Not relevant for this statistic.

5.3 Non-sampling error

The Economic accounts for agriculture are subject to uncertainty, as the statistics are based on a large number of primary sources with varying degrees of reliability. Some factors, such as timing of transactions and inventory changes, can introduce uncertainty, while other data — for example, information from dairies and slaughterhouses — are exact.

For the preliminary estimates, part of the data is based on assumptions and estimates pending the final primary statistics, which are not complete until two years later. Not all primary statistics used in the Economic accounts for agriculture cover the entire country, and therefore weighting factors are applied to ensure full national coverage.

For the regional breakdown of the Economic accounts for agriculture, there is additional uncertainty.

The sold quantities of mineral fertilizers from the Danish Agency for Green Conversion and the Environment are associated with a certain degree of uncertainty. The data come from the annual collection of sales figures, in which companies with registered products are asked to report the quantities sold of those products. Companies have the option to indicate tax-exempt quantities, but this is voluntary, and not all companies use this option. The data collection does not include self-imports, and some products may be double-counted if a company has not used the option to report a sold quantity as tax-exempt. The data quality is therefore directly dependent on the information provided by the companies to the Agency.

5.4 Quality management

Statistics Denmark follows the recommendations on organisation and management of quality given in the Code of Practice for European Statistics (CoP) and the implementation guidelines given in the Quality Assurance Framework of the European Statistical System (QAF). A Working Group on Quality and a central quality assurance function have been established to continuously carry through control of products and processes.

5.5 Quality assurance

Statistics Denmark follows the principles in the Code of Practice for European Statistics (CoP) and uses the Quality Assurance Framework of the European Statistical System (QAF) for the implementation of the principles. This involves continuous decentralized and central control of products and processes based on documentation following international standards. The central quality assurance function reports to the Working Group on Quality. Reports include suggestions for improvement that are assessed, decided and subsequently implemented.



5.6 Quality assessment

The Economic accounts for agriculture are based on information from a wide range of sources, which can affect the level of uncertainty. Uncertainty is considered greatest in areas of least significance for the overall results, for example where quantities and areas are small, and lowest for animal products. Preliminary figures are published, with differences to the final figures of around 3%. The uncertainty is considered to be higher for the regional data.

5.7 Data revision - policy

Statistics Denmark revises published figures in accordance with the <u>Revision Policy for Statistics</u> <u>Denmark</u>. The common procedures and principles of the Revision Policy are for some statistics supplemented by a specific revision practice.

5.8 Data revision practice

The Economic accounts for agriculture are published annually and are considered preliminary for the first two years, becoming final after three years. Between the initial and final publications, fluctuations of up to $\pm 3\%$ may occur for main items such as Agricultural Production and Total Intermediate Consumption, as well as for key figures like Gross Value Added.

6 Timeliness and punctuality

Preliminary figures for the Economic accounts for agriculture are published no later than 10 months after the end of the reference year. Revised, yet still preliminary, figures are published 22 months after the end of the reference year. Final figures are published no later than 2 years and 10 months after the end of the reference year.

6.1 Timeliness and time lag - final results

Preliminary figures for the Economic accounts for agriculture are published annually no later than 10 months after the end of the calendar year, typically at the end of October.

Final figures for the Economic accounts for agriculture are published no later than 2 years and 10 months after the end of the reference period. For example, for 2024, the preliminary 2024 figures are published for the first time in October 2025 and for the second time in October 2026. The final 2024 figures are published in October 2027.

The regional breakdown of the Economic accounts for agriculture always refers to a year earlier than the national figures and is published on the same date. Thus, the preliminary regional figures for 2024 are published in October 2026, and the final regional figures for 2024 are published in October 2027.

6.2 Punctuality

The Economic accounts for agriculture rely on many primary statistics. Therefore, the publication date may vary by up to one month, although delays are rare.



7 Comparability

The Economic accounts for agriculture replace the Gross Value Added of Agriculture and are published for the first time in 2025 for the years 2022, 2023, and 2024. They are directly comparable with the Gross Value Added of Agriculture, which can be traced back to 1990, while older compilations exist back to 1935. Unlike the Gross Value Added of Agriculture, the Economic accounts for agriculture include changes in farm stocks and livestock in sales values and present sales values at basic prices. In addition, the compilation contains a number of financial accounts that are not included in the Gross Value Added of Agriculture. As a satellite account, the Economic accounts for agriculture are comparable with the National Accounts' compilations for the agricultural sector.

7.1 Comparability - geographical

The Economic accounts for agriculture are directly comparable with the European version of the statistics, the Economic Accounts for Agriculture (EAA), which forms the legal basis for the statistics. Documentation for the EU statistical guidelines can be found in Eurostat's manual Economic accounts for agriculture manual, 2024 edition and in Regulation (EC) No 138/2004 of the European Parliament and of the Council of 5 December 2003 on the economic accounts for agriculture in the Community.

7.2 Comparability over time

The Economic accounts for agriculture, in its current form, is comparable back to 1990 through the Gross Value Added of Agriculture. The Economic accounts for agriculture can also be accessed in Eurostat's database back to 1990.

7.3 Coherence - cross domain

The Economic accounts for agriculture present the overall economic results for the Danish agricultural sector as defined in Regulation (EC) No 138/2004 of the European Parliament and of the Council of 5 December 2003 on the economic accounts for agriculture in the Community, whereas the Farm Accountancy Data Network shows results at the individual farm level. The publication Farm Accountancy Data Network is released annually and presents the economic results of agriculture and horticulture at the farm level. Like the Economic accounts for agriculture, the FADN statistics are compiled on a calendar-year basis, making the development in the two statistics comparable.

As a satellite account under the National Accounts, the Economic accounts for agriculture are comparable with the National Accounts' compilations for the agricultural sector. However, due to certain conceptual differences between the two accounting systems, data from the Economic accounts for agriculture cannot be transferred directly on a 1:1 basis to the National Accounts.

7.4 Coherence - internal

Internal consistency in the Economic accounts for agriculture is ensured by using the same inputs for all calculations in the statistics. If changes occur in the primary statistics, their impact on the Economic accounts for agriculture is examined. Efforts are made to avoid alterations to the compilation to maintain internal consistency. Any changes that are made are described along with their consequences.



8 Accessibility and clarity

The statistics are published in <u>Nyt fra Danmarks Statistik</u>. In StatBank, the Economic accounts for agriculture are available under the subject <u>Agricultural and horticultural economy</u>.

8.1 Release calendar

The publication date appears in the release calendar. The date is confirmed in the weeks before.

8.3 User access

Statistics are always published at 8:00 a.m. at the day announced in the release calendar. No one outside of Statistics Denmark can access the statistics before they are published.

8.2 Release calendar access

The Release Calender can be accessed on our English website: Release Calender.

8.4 News release

The statistics are published in Nyt fra Danmarks Statistik.

8.5 Publications

The Economic accounts for agriculture are not published in printed publications.

8.6 On-line database

The statistics are published in StatBank under the following tables:

JOEK1, JOEK2, JOEK3, TILSKUD2, KVAEL2.

8.7 Micro-data access

Not relevant for this statistic.

8.8 Other

Not relevant for this statistic.

8.9 Confidentiality - policy

Data Confidentiality Policy for Statistics Denmark is applied.

8.10 Confidentiality - data treatment

Not relevant for this statistic.

8.11 Documentation on methodology

The methodology described in Eurostat's manual Economic accounts for agriculture manual, 2024 edition is followed.

8.12 Quality documentation

Results from the quality evaluation of products and selected processes are available in detail for each statistics and in summary reports for the Working Group on Quality.

9 Contact

The administrative placement of these statistics is in the division of Food Industries, Business Statistics. The contact person is Simone Thun, tel.: $+45\,5136\,9251$, and e-mail: SIT@dst.dk.