STATISTICS DENMARK

Documentation of statistics for Production of Compound Feed 2023

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1 Introduction

The purpose of the statistics is to shed light on the quantitative production of compound feed for livestock, as well as to calculate the total quantities of grain and feed materials used in compound feed. Feed materials are eg. oats or soybeans. The statistics shows which type of feed mixes are produced the most, and the development of feed mixes over time. The total quantities of compound feed and feed materials are used for calculations of The Economic Accounts for Agriculture (EAA). The statistics has been compiled since 1968, but in its current form is comparable from 1990 onwards.

2 Statistical presentation

The statistics is an annual statement of compound feed production and feed materials used in compound feed calculated in millions. kg. Feed production is calculated for the calendar year and for various feed mixes for cattle, pigs, poultry and other livestock species.

2.1 Data description

The statistics is a census. The statistics consists of two parts: the production of compound feed and the content composition of the compound feed. Production of compound feed shows the total quantities of compound feed produced in Denmark divided by different types of livestock, e.g. cattle feed compounds, while the composition of the feed compounds shows the total quantities of raw materials used in the feed compounds, mainly grains, but also legume seeds, oilcakes, animal products etc. The statistics cover the production of feed mixtures in the Danish coarse goods companies and feed production companies, which means that farmers who mix their own livestock feed and directly import feed are not included. The statistics is therefore not completely accurate for the total consumption of compound feed, but show a large subset of it.

2.2 Classification system

Data is divided into general groupings, which are cattle feed mixtures, pig feed mixtures, poultry feed mixtures, other feed mixtures and mineral feed mixtures. Within each of these main groups, data is further broken down into smaller groups, such as high protein compound feed for cattle except for calves, complete compound feed for fattening pigs, complete compound feed for live chickens or mineral compound feed for pigs. Data in the content compositions of the compound feed is divided into types of grain, leguminous seed, grain products for feed, oilseed products, vegetable residues, fish products for feed, dairy products for feed, feed fat, sugar products for feed and various other feed substances.

2.3 Sector coverage

Agriculture.

2.4 Statistical concepts and definitions

Other compound feed (for horses, furred animals, doves etc.): Other compound feed for other livestock other than cattle, pigs and poultry, e.g. horses and fur animals

Compounds for poultry: It is compounds for poultry divided by the different types of compounds.

Compound feeds: Compound feeds typically consist of several raw materials, both vegetable and animal. It could be barley, palm oil, linseed or fish meal and milk powder. They are often added with one or more additives.

Agribusiness companies: It is companies that among other things buys and delivers cereals and feed compound to the farmers.

Compounds for cattle: It is compounds for cattle and calves divided after the content of protein

Compound mineral substances: It is compound mineral substances for cattle and pigs

Compounds for pigs: It is compounds for pigs for slaughter, sows and piglets divided after if it is additives or complete compound.

2.5 Statistical unit

Data is collected from legal entities.

2.6 Statistical population

The population covers the production of compound feed produced by agribusiness companies.

2.7 Reference area

Denmark.

2.8 Time coverage

The statistics is valid for the time period from 1990 and forth

2.9 Base period

Not relevant for this statistic.

2.10 Unit of measure

Million kg.

2.11 Reference period

From 2023, the statistics has only one reference time, which is the end of the calendar year.

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2.12 Frequency of dissemination

Annual

2.13 Legal acts and other agreements

The Act on Statistics Denmark and the production of compound feed is a contribution to meet the Regulation no. 138/2004 of the European Parliament and of the Council on the Economic Accounts for Agriculture in the Community.

2.14 Cost and burden

The burden for delivering data to the Production of compound feed is last calculated in the 2004 to 9,000 DKK. There is no more recent calculation.

2.15 Comment

Further information can be obtained from Statistics Denmark and the homepage Foder, gødning og pesticider.

3 Statistical processing

Data is first checked by comparing individual reports with reports from previous periods. When the data collection is finished, the data is checked for errors on a macro level, for example by comparing with the development in the cattle and pig populations. In 2022, the data collection and data processing for The content composition of compound feed (FBL) was restructured so that the collection became identical to Production of compound feed (PAF). The rearrangement of FBL leads to a data breach in FODER2 from 2022, as there is no longer direct comparability.

3.1 Source data

It is a census where all companies producing compound feed stuff in Denmark delivers data to the statistics. At the moment 13 companies delivers data to the statistics. Until 2022, the part of the census that deals with the production of compound feed was a total count, while the composition of the compound feed was a sample and subsequent enumeration.

3.2 Frequency of data collection

Annual

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3.3 Data collection

Data is collected electronically in a questionnaires, which the companies upload to Statistics Denmark. The statistics has an information page in Danish. The companies fill in and upload a spreadsheet, which consists of two sheets. In the first sheet, they indicate the quantities of the company's production of various compound feed, excluding exports, as well as their quantities of purchased supplementary mixtures, in own production, excl. export. In the second sheet, they indicate the quantities of a wide range of raw materials in their own production of compound feed, excluding export.

3.4 Data validation

Data from the individual reporting sheets is collected and partial quantities and total quantities are calculated and compared with previous periods. Data is first debugged and validated on a micro level, for example by comparing individual reports with reports from previous periods. If these comparisons give rise to questions, the company is contacted for an in-depth explanation and a possible re-report. Data is then checked at the macro level. This is done by comparing partial quantities, e.g. Ready-to-use feed mixtures for sows, and by comparing the total quantities, e.g. Cattle feed mixtures in total, with previous total quantities and the development in the cattle and pig populations.

3.5 Data compilation

The data processing is divided between Production of compound feed (PAF) and Content composition of the compound feed (FBL), as they end up in different tables, but the two data processing methods are identical. PAF is used both for the preparation of the Statbank tables FODER3 and FODER2, while FBL is only used for FODER2.

In 2022, the data collection and data processing for FBL was restructured so that the collection became identical to PAF. It also means a new data processing method for FBL, where the individual variables (e.g. wheat or fishmeal) are no longer calculated based on a sample and conversion factors, which were based on the quantities from PAF. For both parts of the count, the validated data is added together, and thereby the total production of compound feed and the total quantity of grain and feed materials used in the compound feed are obtained. The rearrangement of FBL results in a data breach in FODER2 from 2022, as there is no longer direct comparability in the use of the feed materials and hence the amounts of single feed substances, which are calculated on the basis of the amount in the compound feed. The old enumeration method has led to a certain overestimation of the use of some of the feed materials in feed mixtures. However, this cannot necessarily be seen in FODER2 in 2022, as the quantities of the individual feed materials used in feed mixtures fluctuate quite a bit from year to year. Data is not weighted or imputed.

3.6 Adjustment

Data is not corrected.

4 Relevance

It is relevant for the agricultural organizations, ministries and agencies, who uses it to follow the development in the volume growth in the production of compound feed. Moreover, it is an input to the Economic Accounts for Agriculture.

4.1 User Needs

It is of interest to the agricultural organizations, ministries and agencies. The needs are inventories on the production of compound feed in Denmark and how the development has been over time. Moreover it is an input to the Economic Accounts for Agriculture where it is used to calculate the cost of feed stuff. The Economic Accounts for Agriculture are delivered to EU.

4.2 User Satisfaction

User satisfaction surveys have not been carried out on these statistics, but the users with whom Statistics Denmark is in contact have expressed satisfaction with the statistics

4.3 Data completeness rate

The statistics is an input to the Economic Accounts for Agriculture and therefore meet the requirements, guidelines and regulations by EU.

5 Accuracy and reliability

The overall reliability is good. The statistics covers the production of compound feed by the Danish agribusiness companies alone. Directly imported compound feed and feed made by farmers are not included in the statistics. In 2022, the data processing for FBL was restructured, so that the collection became identical to Production of compound feed. The change entails a data breach in FODER2 from 2022. The old enumeration method has led to a certain overestimation of the use of some of the feed materials in compound feed.

5.1 Overall accuracy

The overall accuracy is considered to be high, because it a census. It alone covers the production of compound feed produced by Danish agribusiness companies and not directly imported compound feed or compound feed produced by farmers. The results are therefore not fully true for the overall production of compound feed in Denmark. It will be higher than in this statistics. In 2022, the data collection and data processing for the content composition of feed mixtures was restructured, so that the collection became identical to Production of compound feed. The change entails a data breach in FODER2 from 2022, as there is no longer direct comparability in the use of the feed materials and hence the quantities of single feed substances, which are calculated on the basis of the quantity in the compound feed. The old enumeration method has led to a certain overestimation of the use of some of the feed materials in feed mixtures.

5.2 Sampling error

Not applicable. Prior to 2022, there was some sampling uncertainty in the section of the statistics The content composition of compound feed as that section was not part of the total count.

5.3 Non-sampling error

The statistics covers the production of compound feed at the agribusiness companies, but not directly imported compound feed or compound feed produced by farmers at their farms. The results are therefore not fully true for the overall production of compound feed in Denmark. The production of compound feed produced by agribusiness companies are covered very well. In 2022, the data collection and data processing for The content composition of compound feed was restructured, so that the collection became identical to Production of compound feed. The change entails a data breach in FODER2 from 2022, as there is no longer direct comparability in the use of the feed materials and hence the quantities of single feed substances, which are calculated on the basis of the quantity in the compound. The old enumeration method has led to a certain overestimation of the use of some of the feed materials in feed mixtures.

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 overall accuracy is described as good, as in the case of a census. The statistics only covers the production of compound feed by agribusiness companies and do not cover directly imported compound feed or compound feed produced by farmers. The results are therefore not fully true for the overall Danish production of compound feed.

5.7 Data revision - policy

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

5.8 Data revision practice

There are no revisions for the Statbank table FODER3, only final figures are published. For FODER2, revisions are made for up to 1 1/2 years from the reference period. The two most recently published years are therefore provisional.

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6 Timeliness and punctuality

From 2023, the statistics will only be published once a year in the month of May in connection with the publication of the national Economic Accounts for Agriculture (EAA), almost 6 months after the reference time.

6.1 Timeliness and time lag - final results

From 2023, the calendar year statistics will be published in the month of May in connection with the publication of the national Economic Accounts for Agriculture (EAA), almost 6 months after the reference time. Only final figures are published for the component Production of compound feed in the statbank table FODER3, while the content composition of the compound feed is two years away from being final in the table FODER2.

6.2 Punctuality

The statistics is published without delay in relation to the previously announced release calendar.

7 Comparability

There is full comparability in data back to 1990 in the table FODER3. The overall main groups are comparable back to the start of the statistics in the operating year 1968/69. As regards to The content composition of the compound feed (FBL), which is published in FODER2, there is full comparability from 1992 to 2021. In 2022, the data collection and data processing for FBL was realigned. The change entails a data breach in FODER2 from 2022, as there is no longer complete comparability in the use of the feed materials and hence the quantities of single feed substances.

7.1 Comparability - geographical

It is produced in accordance with the current EU Regulation for the Economic Accounts for Agriculture. The production of compound feed is an input to the Economic Accounts for Agriculture which is also delivered to Eurostat. The Economic Accounts for Agriculture are an input to the National Accounts.

7.2 Comparability over time

There is full comparability in data back to 1990 in the table FODER3, Production of compound feed. The overall main groups are comparable back to the start of the statistics in the operating year 1968/69. As regards the content composition of the compound feed (FBL), which is published in the table FODER2, there is full comparability from 1992 to 2021. In 2022, the data collection and data processing for FBL was realigned. The change entails a data breach in FODER2 from 2022, as there is no longer complete comparability in the use of the feed materials and hence the quantities of single feed substances, which are calculated on the basis of the quantity in the feed mixtures and the total quantities.

7.3 Coherence - cross domain

The statistics is an input to the Economic Accounts for Agriculture.

7.4 Coherence - internal

No inconsistencies.

8 Accessibility and clarity

These statistics is published in the StatBank under Foder, gødning og pesticider.

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

Not relevant for this statistic.

8.5 Publications

It is not published in a publication.

8.6 On-line database

These statistics are published in the StatBank under Intermediate Goods in the table:

- FODER3: Production of compound feed by compound feed and period
- FODER2: Fodder use in Agriculture by type of fodder and use

8.7 Micro-data access

There are no access to micro-data on this subject.

8.8 Other

Not applicable.

8.9 Confidentiality - policy

Discretion in Statistics Denmark.

8.10 Confidentiality - data treatment

Data is joined so that no companies can be identified.

8.11 Documentation on methodology

There are no separate documents on methodologies available to this statistics.

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. The contact person is Simone Thun, tel.: + 45 5136 9251, and e-mail: SIT@dst.dk.