

**Documentation of statistics for
Accounts Statistics for Aquaculture 2014**

1 Introduction

The purpose of the statistics is to show the economy of Danish Aquaculture. The statistics is delivers data to the Danish National Accounts statistics and EU DG-Mare. The statistics started as a result of an increasing demand of economic data from the organizations in aquaculture, the Ministry of Food, Agriculture and Fisheries and others.

2 Statistical presentation

The aim of the accounts statistics is to be representative of all Aquaculture farms and companies. The statistics presents the production in tons and the corresponding value alongside the costs, net profit, Fixes Assets, Liabilities and investments. The results is shown for the different farm types.

2.1 Data description

From January 2009 the statistics has been transferred from University of Copenhagen, Department of Food and Resource Economics, to Statistics Denmark. The statistics has been made from 2004 to present and can be found in the StatBank Denmark.

2.2 Classification system

The statistics is grouped in farm types which is: Traditional trout farms, Model trout farms type 1 and type 3, Sea farms, Eel farms, Shellfish farms and other farms.

2.3 Sector coverage

Aquaculture.

2.4 Statistical concepts and definitions

Degree of Profitability, pct.: $(\text{Operating profit} - \text{calculated owner remuneration}) / \text{Average aquaculture assets} * 100$

Assets: Fixed assets and Tangible assets.

Fixed Assets: Intangible assets (goodwill) and tangible assets (production facilities, land, buildings and financial material assets).

Calculated Owner Remuneration: In 2011 calculated as 353.846 DKK per enterprise with a production value of 1 mill. DKK and above. For enterprises with a production value less than 1 mill. DKK, the amount is reduced proportionally. It's corrected each year according to the development of wages in the agriculture sector.

Gross Output: The Gross Output in kroner is the value of fish, spawn, shellfish and regulation of fish stock sold from the farm. Also included is other aquaculture activities.

Costs: Costs relevant to the making of Gross Output.

Net Profit: Profit after Interest Expenditures, net, Corporation tax and extraordinary income, net. Net Profit pays the owner remuneration and invested capital.

Investments: Investments, net. investments in and sales of fixed assets.

Interest Expenditure, Net: Interests and dividends received minus paid interests concerning banks debts, mortgages and other short and long term debts

Key Indicators: Calculated owner remuneration, Operating margin, pct., Degree of profitability, pct. and Farm solvency, pct.

Current Assets: Current assets covers stock, outstanding debt, other financial assets and cash balance.

Operating Margin, pct.: $(\text{Operating profit} - \text{calculated owner remuneration}) / \text{gross output} * 100$

Liabilities: Liabilities are: Net capital end of year, Provisions and Debts (Credit institution loans, bank loans and other short- and long term debts).

Production: The production in metric ton is the volume sold from the farm (fish, spawn, shellfish and regulation of fish stock)

Operating Profit: Gross Output minus Costs

2.5 Statistical unit

Unit used in the statistics is the physical production unit.

2.6 Statistical population

The statistics covers the Danish aquaculture sector. In order to be part of the population the aquaculture farms has to be active and commercial, producing fish for consumption, Fry and fingerlings, spawn for consumption and Eyed eggs for breeding.

Non commercial farms are mainly test farms, farms producing crayfish and clubs and associations that with voluntary work force produce fish for release in to streams and lakes.

Inactive farms primarily consists of farms with no production in the year. If a firm with multiple farms submits the firms total production in one farm, and it is not possible to split the report into the relevant farms, the remaining farms are characterized as inactive.

2.7 Reference area

Denmark.

2.8 Time coverage

2004-

2.9 Base period

Not relevant for these statistics.

2.10 Unit of measure

Unit of measurement is kg and DKK.

2.11 Reference period

01-01-2014 - 31-12-2014

2.12 Frequency of dissemination

Yearly.

2.13 Legal acts and other agreements

It is voluntary to participate in the statistics. Collection of accounts from the aquaculture firms accountants is based on accept from the owners of the aquaculture firms. The obligations of Denmark toward EU DG-Mare is defined in the Council regulation (EC) 199/2008 and Commission Regulation (EC) No 655/2008.

2.14 Cost and burden

Not relevant for these statistics.

2.15 Comment

No further documentation.

3 Statistical processing

Accounts from the aquaculture firms are collected from the accountants once a year. It is voluntary to participate therefore all segment have not sufficient coverage to perform a random sample. Accounts for all firms that has accepted to participate is collected.

The accounts are being data validated and merged with the aquaculture register from The Danish AgriFish Agency. Accounts for the part of the population that do not participate are being simulated on the basis of the aquaculture register and the submitted accounts.

3.1 Source data

The statistics is based on accounts from aquaculture firms delivered from the firms accountants, structural data from the Aquaculture register (The Danish AgriFish Agency).

3.2 Frequency of data collection

Yearly.

3.3 Data collection

The accountants submits a balanced account on an Excel spreadsheet.

3.4 Data validation

Every account submitted is tested thoroughly. The accountants can validate the balanced spreadsheet in MS Excel via build in Visual Basic Macros. After submission to Statistics Denmark the accounts undergo a more thorough validation both individually and as groups.

3.5 Data compilation

The part of the population that does not participate in the statistics is being estimated using a simulation model where every item of the account is calculated on the basis of production information from the aquaculture register from The Danish AgriFish Agency and the submitted accounts divided in representative groups. Hereafter all results are aggregated in the relevant segments.

3.6 Adjustment

No corrections are made other that described in data validation and data processing.

4 Relevance

Relevant for the organizations in aquaculture, the aquaculture farmers and the Danish authorities. Scientists at universities especially Department of Food and Resource Economics at University of Copenhagen

4.1 User Needs

The Danish authorities, including particularly the Ministry of Food, Agriculture and Fisheries, researchers and national and international students, organizations in aquaculture and enterprises broadly related to the sectors, e.g. credit grantors.

4.2 User Satisfaction

The statistics is monitored by both a contact comity and a working group. Both are orientated of the statistics and are normally satisfies with the statistics.

4.3 Data completeness rate

Not relevant for these statistics.

5 Accuracy and reliability

The accounts statistics for 2014 are based on a sample of annual accounts obtained from 123 aquaculture farms or 47 firms. The sample covers 56 percent of the total farm population , 78 percent of the total gross output and 76 percent of the total production. For the other half of the population production and Gross output information are collected from The Danish AgriFish Agency Aquaculture Register. Therefore the main variables Production and Gross output are covered 100 percent.

5.1 Overall accuracy

The quality of the statistics is regarded as good. Annual accounts are collected for about half of the population. Production and Gross output for the rest of the population is covered by data form the Danish AgriFish Agency Aquaculture Register. Therefore the main variables Production and Gross output are covered 100 percent. The part of the population that does not participate in the statistics is being estimated on the basis of production information from The Danish AgriFish Agency Aquaculture Register and the submitted accounts divided in representative groups.

Data in The Danish AgriFish Agency Aquaculture Register are yearly collected structure and production data. The submitted accounts data refers to the firms relevant financial year, witch might not correspond to the calendar year. To cover the production in the relevant calendar year, the end of the financial year must be in the period of 1st. June (the relevant year) to 31st. May (the next year). There might be a small uncertainty i this method.

5.2 Sampling error

There is no sampling error for the main variables production and Gross output due to sensus sampling.

5.3 Non-sampling error

The accounts statistics for 2014 is based on a sample of annual accounts obtained from 123 aquaculture farms. The sample covers 56 per cent of the total farm population and 78 per cent of the total gross output in terms of value and 76 per cent of the production in ton. Information for the rest of the population is gathered from The Danish Agrifish Agency, covering 44 per cent of the farm population, 22 per cent of the total gross output in terms of value and 24 per cent of the production in ton.

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 quality of the statistics is regarded as good. Annual accounts are collected for about half of the population. Production and Gross output for the rest of the population is covered by data from the Danish AgriFish Agency Aquaculture Register. Therefore the main variables Production and Gross output are covered 100 percent. The part of the population that does not participate in the statistics is being estimated on the basis of production information from The Danish AgriFish Agency Aquaculture Register and the submitted accounts divided in representative groups.

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

Only final figures are shown.

6 Timeliness and punctuality

The statistics is made public before 1st. December in the following calendar year by a NYT from Statistics Denmark. The statistics is also publicized in a printed publication normally within 1 months after the publication of NYT from Statistics Denmark.

6.1 Timeliness and time lag - final results

The statistics is made public with finite data.

6.2 Punctuality

The Statistics is publicized as planned.

7 Comparability

The statistics is comparable from 2004 to present. All member states submit data to EU. The Danish Agrifish Agency publish a Structure and production statistics for the profession.

7.1 Comparability - geographical

Collected data is aggregated and submitted to EUDirectorat-General for Maritime Affairs and Fisheries, and is used in JRC (Joint Research Center). Data from the other member states are available back to 2008, [European Commission - The data collection](#)

7.2 Comparability over time

The statistics is available from 2004 to present in a continuous time series.

7.3 Coherence - cross domain

The Danish AgriFish Agency shows production volume and production values in Yearbook of Fisheries Statistics, on their homepage and in StatBank Denmark.

The Danish AgriFish Agency data are not comparable with the Account Statistics because they do not show fish that are sold between different farms internally in the firms, the population consists of both commercial and noncommercial farms and they cover the calendar year and not the financial year.

7.4 Coherence - internal

Only final figures are calculated.

8 Accessibility and clarity

Account Statistics for Aquaculture is made public once a year with NYT from Statistics Denmark, StatBank Denmark and a written publication. Data at micro level is available through Statistics Denmark Division of Research Services.

8.1 Release calendar

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

8.2 Release calendar access

The Release Calendar can be accessed on our English website: [Release Calendar](#).

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.

8.4 News release

[Theme page for fishery and aquaculture](#).

8.5 Publications

[Publication](#).

8.6 On-line database

- [Financial results and balance](#)
- [Key indicators](#).

8.7 Micro-data access

Micro-data is available through [Statistics Denmark Division of Research Services](#).

8.8 Other

Nothing to report.

8.9 Confidentiality - policy

Data confidentiality is secured by following the [Data confidentiality policy of Statistics Denmark](#).

8.10 Confidentiality - data treatment

The part of the population that does not participate in the statistics is being estimated using a simulation model where every item of the account is calculated on the basis of production information from the aquaculture register from The Danish AgriFish Agency and the submitted accounts divided in representative groups. Hereafter all results are aggregated in the relevant segments.

8.11 Documentation on methodology

Methodology is briefly mentioned in the [publication](#).

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 this statistic is in the division of Food Industries. The person responsible is Jeppe Strandgaard Herring, tel. +45 3917 3325, e-mail: jhr@dst.dk

9.1 Contact organisation

Statistics Denmark

9.2 Contact organisation unit

Food Industries, Business Statistics

9.3 Contact name

Jeppe Strandgaard Herring

9.4 Contact person function

Responsible for the statistics

9.5 Contact mail address

Sejrøgade 11, 2100 Copenhagen

9.6 Contact email address

jhr@dst.dk

9.7 Contact phone number

+45 3917 3325

9.8 Contact fax number

+45 39 17 39 99