

Global aquatic processed production - Metadata

Author: FAO-NFISI

01) Title

Global aquatic processed production - Metadata

02) Data source information

Compiling Organization

Food and Agriculture Organization of the United Nations (FAO)

Data source

https://www.fao.org/fishery/en/collection/global_pp

03) Contact

Contact organization

Food and Agriculture Organization of the United Nations (FAO)

Contact organization unit

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04) Update date

Metadata last posted

20-07-26

Metadata last update

20-07-26

05) Statistical presentation

Data description

This dataset covers annual production of processed and preserved fishery and aquaculture products in volume from 1976 by country or area and product.

This dataset focuses exclusively on products that have been processed. Examples include filleted, canned, smoked, salted, dried, frozen, reduced to fishmeal and fish oil, or other forms of processing. Products such as live fish, crustacean, and mollusc or unprocessed whole fresh fish (i.e. entire fish in their original state) are excluded, as they are not considered processed.

Data cover all products derived from aquatic animals (fish, crustaceans, molluscs, etc. . .) excluding products derived from aquatic mammals, frogs, crocodiles, aquatic plants, corals, sponges, pearls and fish leather.

Coverage

This dataset provides the annual production volume of processed and preserved aquatic animal products from 1976, for 153 countries or areas, and over 800 products according to the International Standard Statistical Classification of Fishery Commodities (ISSCFC).

Sector coverage

Fisheries and aquaculture.

Statistical concepts and definitions

The data cover each country's national production of processed fishery and aquaculture products, regardless of the intended use - whether for human consumption, industrial processing or other purposes - and regardless of their destination, whether for domestic use or export.

Processed production includes outputs derived from the following sources: - nominal catches of all aquatic animals (except the catches of all aquatic mammals) caught for commercial, industrial and subsistence purposes, by all types of fishing units operating in freshwater and marine areas; - aquaculture production; - imported raw materials used for domestic processing.

Data include processed products produced on board domestic fish factory vessels and fishing craft flagged to the reporting country or area, even if the products are landed directly in foreign ports. However, the dataset excludes products processed on board foreign vessels landed directly in domestic ports, as they are considered as imported processed products and not part of national production.

Reference area

The list of countries and the geographical classification are primarily based on the UN "Standard Country or Area Codes for Statistical use" (<https://unstats.un.org/unsd/methodology/m49/>). The term "country" or "country or area" as used in the dataset also covers territories, cities and land areas, as well as provinces, districts, enclaves and other parts of territories or combinations of countries or areas such as economic or customs unions.

Country or area names and designations are subject to nationally announced changes. Name changes announced recently may not have been incorporated in this dataset release but will be reflected in future ones.

The designations employed and the presentation of material in this dataset do not imply the expression of any opinion whatsoever on the part of FAO concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Time coverage

From 1976 to 2024.

Base period

Not applicable

06) Unit of measure

The volume of processed production of aquatic animal products is expressed in metric tonnes (1000 kilograms) and refer to the net weight of the products, not the weight of the raw materials used for their production. For example, when a fillet is produced from a whole fish, only the weight of the fillet is recorded, not the weight of the entire unprocessed fish. This distinction ensures that the data reflect the actual quantity of processed products rather than the original weight of the input materials.

07) Reference period

The annual period used is the calendar year (1 January - 31 December).

08) Institutional mandate

Legal acts and other agreements

Article I of the FAO Constitution requires the Organization to collect, analyze, interpret and disseminate information relating to nutrition, food and agriculture (FAO, 1945).

Data acquisition and data transmission

These statistics are drawn primarily from official data from countries and territories, who have primary responsibility for data collection. FAO collects data from countries annually through questionnaires specific to each dataset and each country. Data are complemented or replaced, when necessary, by data from other sources (including from the World Sturgeon Conservation Society (WSCS) for data on caviar and the Marine Ingredients Organization (IFFO) for data on fishmeal and fish oil).

09) Confidentiality

Confidentiality - policy

FAO data and statistics are produced in accordance with FAO Policy on Data Protection and the implementation modalities of FAO SDQAF Principle 4 on Data protection and Statistical Confidentiality.

Confidentiality - data treatment

If any, confidential data are not disseminated by FAO as such. Suppressed confidential data are marked in the database with SDMX flag “Q - Missing value; suppress”.

Privacy

Not applicable

10) Release policy

Release calendar

FAO FishStat data releases follow a release calendar available publicly at the main FAO FishStat page at <https://www.fao.org/fishery/en/fishstat>. Global aquatic processed production data for the most recent available year are disseminated annually in July.

Release calendar access

<https://www.fao.org/fishery/services/storage/fs/fishery/documents/fishstat/FishStatReleaseCalendar.pdf>

User access

This data domain is disseminated according to FAO's Open Data Licensing for Statistical Databases Policy, under the [Creative Commons Attribution 4.0 International license \(CC-BY 4.0\)](#) and are subject to [FAO Statistical Database Terms of Use](#).

FAO declines all responsibility for errors or deficiencies in the database or software or in the documentation accompanying it, for program maintenance and upgrading as well as for any damage that may arise from them. FAO also declines any responsibility for updating the data and assumes no responsibility for errors and omissions in the data provided. Users are, however, kindly asked to report any errors or deficiencies in this product to FAO.

Open data license

<https://creativecommons.org/licenses/by/4.0/>

11) Frequency of dissemination

Yearly

12) Accessibility and clarity

News release

Not applicable

Publications

[FAO Fishery and Aquaculture Statistical Yearbook](#)

Online database

https://www.fao.org/fishery/en/collection/global_commodity_prod

Micro-data access

Not applicable

Other formats

This dataset can be consulted through different tools and formats accessible at https://www.fao.org/fishery/en/collection/global_pp

Documentation on methodology

Information on the methodology followed is available in the Annex 2 “Methodological notes and glossary” of the [FAO Yearbook Fishery and Aquaculture Statistics](#).

13) Relevance

User needs

The main users are FAO analysts, other international organizations, ministries and government agencies, agro-industry, trade and professional associations, research institutes and universities, journalists and the general public.

According to the 2023 FishStat database user consultation, researchers are the largest user group, accounting for almost 32 percent of the total respondents, followed by students and educators, which accounted for

around 25 percent of the overall respondents, while users from private companies represent a share of 15 percent.

The objectives of these users vary, but aquatic processed production statistics are especially useful for market management/monitoring, production forecasts, policy-making in the sector, and in the context of the Supply-Utilization Accounts and Food Balance Sheet exercise. FAO is not aware of unmet needs. Users are encouraged to contact the dataset owner for resolving more specific queries that are not addressed elsewhere in these metadata.

User satisfaction

The latest quality review is the FishStat database user consultation which took place during July-December 2023. About 93 percent of returning users agreed that the FishStat database was adequate for their purpose. As for compliance of the data with the FAO SDQAF quality dimensions, the overall percentage of satisfied responses was about 81 percent, while the percentage of fully satisfied users simultaneously across all the 5 quality dimensions was 53 percent. The percentage of fully satisfied users is defined as the share of respondents who selected “agree” or “strongly agree” simultaneously across all the different 5 SDQAF dimensions.

Completeness

The availability of official data reported by countries varies widely. Whenever national offices failed to report their annual aquatic processed production statistics in time for the dissemination of the dataset, FAO estimated the quantities on the basis of other available information using approved methodologies in order to create a comprehensive global dataset.

14) Accuracy and reliability

Overall accuracy

The share of imputed data was about 67 percent of the total volume of processed production of aquatic products in 2024. Quality of the data varies according to the country, in particular in reference to the granularity of the detail by processed product.

Model assumption error

Not applicable

Imputation indicators

Imputation rate: 67 percent in 2024.

Data revision - policy

Prefilled questionnaires are sent out with reported data for the previous seven years, which countries are asked to revise, if needed, when they report data for the new year.

Data revision - practice

Countries revise their official statistics regularly for past periods. FAO imputation may also be revised on the basis of more accurate information. When such revisions occur, historical data are revised accordingly. Therefore, users are advised to refrain from comparing data published in previous releases with the latest release.

15) Timeliness and punctuality

Timeliness

The deadline for submitting aquatic processed production data to FAO is usually between 8 to 9 months after the end of the reference year. Data are then normally processed and disseminated within 10 months.

Punctuality

The release is according to the schedule of the calendar.

16) Coherence and comparability

Comparability - geographical

Data are mostly comparable between geographical areas, countries or regions. However it should be taken into account that the degree of comparability might be affected by the differences between countries in methods and coverage of data collections, except for regions where countries are bound by regulations mandating harmonized methods, such as European Union countries.

Comparability - over time

Given the length of the time series, starting from 1976, full comparability across all years cannot be guaranteed. However, for shorter time periods, reasonably good comparability over time can be expected. Detailed information on data variations and methodological changes is provided in the country notes, available in the Global aquatic processed production workspace in FishStatJ.

Coherence

Cross-domain coherence: aquatic processed production data have a high cross-domain coherence, as they are used alongside capture fisheries and aquaculture production and aquatic trade in the compilation of food balance sheets. This integration within a single supply and utilization framework provides an additional validation of the data.

Internal coherence: It is expected that the internal coherence is checked by countries before dissemination.

Classification system

For aquatic processed products: [FAO International Standard Statistical Classification of Fishery Commodities \(ISSCFC\)](#). Data can also be expressed in a number of other classifications, including:

- [HS \(Version 2022\)](#)
- [CPC \(Version 2.1\)](#)
- [SITC \(Revision 4\)](#)
- [ISSCAAP](#)

For geographical areas:

- [UN Standard Country or Area Codes for Statistical Use](#)
- [Least Developed Countries \(LDC\) \(version 2024\)](#)
- [Low-Income Food-Deficit Countries \(LIFDCs\) \(2026 revision\)](#)
- [Landlocked Developing Countries \(LLDCs\)](#)
- [Small Island Developing States \(SIDS\)](#)
- [Net Food-Importing Developing Countries \(NFIDC\) \(2024 revision\)](#)
- [The classification of the World Bank by income \(2026 revision\).](#)

For observation status codes (flag): [FAO Statistical Standard Series Observation Status Code List](#). The flags used are aligned with the SDMX standard and are listed below along with their descriptions:

- " A " = Official value (previously displayed without any symbol associated);
- " B " = Time series break;

- " E " = Estimated value;
- " F " = Forecast value;
- " G " = Experimental value;
- " I " = Value imputed by a receiving agency (FAO) (previously displayed as " E ");
- " P " = Provisional value;
- " S " = Strike and other special events;
- " U " = Low reliability;
- " V " = Unvalidated value;
- " X " = Value from international/mandated organization;

Flags associated to value " 0 ":

- " L " = Missing value; data exist but were not collected;
- " M " = Missing value; data cannot exist;
- " N " = Not significant (more than zero but less than half the unit used);
- " O " = Missing value; cannot be determined;
- " Q " = Missing value; suppressed.

17) Statistical process

Source data

The main data source is official statistics from FAO member countries. The source data can originate from surveys, administrative data and estimates based on expert observations. Which type of source is used by countries can significantly affect reliability and comparability of data. In nearly all cases where countries provide their official processed production data, data are recorded as reported by countries. In the case of issues with the data received, FAO works with countries to revise their data when appropriate to ensure consistency in the dissemination of official data. Data are complemented or replaced, when necessary, by data from other sources. In instances where no official data is available, data from unofficial sources may be used. If no data from either official or unofficial sources is available, data are imputed. In all cases, data are flagged accordingly.

Frequency of data collection and acquisition

Yearly

Data collection method

FAO data collection is carried out through collaboration with country correspondents in Member States. The data collection process relies on annual processed production questionnaires (FishStatFC1) sent to countries, as well as data from national publications and official country websites.

Data validation

Countries are responsible for transmitting data which have already been checked. Validation at FAO concerns any transmission errors and data consistency checks, as well as outlier detection in line with the [FAO Standards on Data Editing and Validation](#). Other validations concerns assessing how far the current value is from the earlier data, consistency of totals and partial components and correspondence between variables from different datasets (particularly capture fisheries and aquaculture production and trade data). In case of issues with the data received, FAO works with countries to revise their data when appropriate to ensure consistency in the dissemination of official data.

Data compilation

FAO is responsible for compiling the data and generating aggregates.

Regional aggregation

FAO produces global, regional and sub-regional aggregates, in line with the [FAO Statistical Standard Series on Data aggregation](#).

Adjustment

Countries are responsible for the quality of the data they report. FAO reviews and validates the data and, when necessary, applies corrections.

Imputation

Imputations are made according to the [FAO Statistical Standard Series - Imputation \(2019\)](#).

18) Quality management

Quality assurance

FAO is responsible for the quality of the internal statistical processes used to compile the published datasets. The [FAO Statistics and Data Quality Assurance Framework \(SDQAF\)](#) provides the necessary principles, guidelines and tools to carry out quality assessments. FAO is performing an internal bi-annual survey (FAO Quality Assessment and Planning Survey) designed to gather information on all of FAO's statistical activities, notably to assess the extent to which quality standards are being implemented with a view to increasing compliance with the quality dimensions of SDQAF, documenting best practices and prepare quality improvement plans, where necessary. Domain-specific quality assurance activities are carried out systematically (e.g. quality reviews, self-assessments, compliance monitoring).

Quality assessment

The quality of the FAO statistics is highly dependent upon the accuracy and reliability of the data collected and provided by countries. FAO strives to validate and ensure the quality of the official data received by validating and cross checking them. FAO also works with countries to revise their data when appropriate to ensure consistency in the dissemination of official data. According to the 2025 Quality Assessment and Planning Survey (QAPS) of FAO, this data domain reported a quality score of 0.91. According to the QAPS a statistical output is considered of good quality when it reaches a quality score of 0.6 or above.

19) Recommended uses and limitations

Not applicable

20) Comment

Data for countries that belonged to the former Union of Soviet Socialist Republics (former USSR) are available as a single aggregate until 1991.

For statistical purposes, the data for the People's Republic of China do not include China, Hong Kong SAR, China, Macao SAR and Taiwan Province of China, which are presented separately. Therefore, "China" refers to China's mainland only.

Detailed country or area notes are available inside the global aquatic processed production workspace in FishStatJ.