



Food and Agriculture Organization
of the United Nations

>> FAO Statistics Division

Caliper

Statistical Classifications in a Linked Open World

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Community of Practice meeting on Linked Open Data and the FAIR principles

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Today

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2. Caliper
3. Ongoing & Future

Statistical data @FAO

FAOSTAT


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Data

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▶  Food Security and Nutrition  SDG indicators

▶  Food Balances

▶  Trade

▶  Prices

▶  Land, Inputs and Sustainability

▶  Cost and Affordability of a Healthy Diet

▶  Population and Employment

▶  Investment  SDG indicator

Fisheries and Aquaculture

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Statistics

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All statistical collections

Global Statistical Collections

- [Global Production](#)
- [Global Aquaculture Production](#)
- [Global Capture Production](#)
- [Global Fish Trade and Processed Products Statistics](#)
- [Consumption of Fish and Fishery Products](#)
- [Global Tuna Catches by Stock](#)
- [Global Number of Fishers](#)
- [FIRMS Global Tuna Atlas \(GTA\)](#)

Regional Capture Statistical Collections

- [Eastern Central Atlantic \(CECAF\)](#)
- [Mediterranean and Black Sea \(GFCM\)](#)
- [RECOFI](#)
- [Southeast Atlantic](#)

Statistical Classifications @FAO

Different classifications are used for data collection and dissemination in FAO. Some are maintained by FAO, others by different bodies. E.g. Central Product Classifications, by UNSD.

Until very recently, the dissemination of statistical classifications and standards used in FAO was:

- rather fragmented across the FAO website
- ancillary to the data
- scarcely available as consumable data (analogue to the difference between a library catalogue and the books it describes)

Caliper development started off in 2017, and since 2022 is an FAO official service.

<https://www.fao.org/statistics/caliper/>

Caliper

Caliper is website, a suite of tools and a methodology for the management, **dissemination** and use of statistical classifications.

<https://www.fao.org/statistics/caliper/>

- Coverage: classifications maintained either by FAO or by UNSD (within respective institutional namespaces).
- Functionalities: browsing, searching, download, query, online access, collaborative editing. Powered by: ShowVoc, Fuseki, Loddy, VocBench
- Data model: RDF with SKOS, XKOS, DC, OWL. Detailed documentation, with sample queries to guide users in using the SPARQL endpoint.

Inspiring principle: classifications as public goods



Caliper - Statistical Classifications in a Linked Open World

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Caliper

Caliper is the platform for the dissemination of statistical classifications of the Food and Agriculture Organization of the United Nations (FAO).

Caliper is an Open Linked Data platform developed by the Food and Agriculture Organization of the United Nations (FAO) for the dissemination of statistical classifications. Caliper exploits well established web-based, open source technologies to make statistical classifications accessible and understandable by the statistical community and the wider public.

Related - Statistical classifications

- [FAO Methods and Standards](#)
- [UN Statistical Classifications](#)
- [EUROSTAT Statistical Classifications](#)

Caliper - Statistical Classifications in a Linked Open World

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Classifications in Caliper

In this section, users can consult and access the full list of statistical classifications available in Caliper, with pointers to the associated dissemination services. Classifications are grouped according to the Classification of Statistical Activities (CSA).



Agriculture, forestry, fisheries

- Indicative Crop Classification for the Agricultural Census (ICC)
- World Census of Agriculture Crop List (WCA)
- FAO Classification of Forest Products (FPC&D)



Economic statistics

- Classification of Individual Consumption by Purpose (COICOP)
- Central Product Classification (CPC)
- International Standard Industrial Classification of all Economic Activities (ISIC)
- FAOSTAT Commodity List (FCL)

Caliper – a FAIR approach...

fao.org/statistics/caliper/web/

... to publishing both classifications and their metadata.

Then, resources are:

- given URIs for globally unique identifiers (findability)
- accessible by both humans and machines (accessibility)
- available in standard and open formats (interoperability)
- documented (for reusability)

Ongoing #1 - Dissemination

We are setting up a partnership with UNSD for the joint dissemination of the International Family of Classifications through Caliper.

- Caliper infrastructure will be hosted at the UN Global Platform (BC3 thematic node)
- Joint dissemination with dedicated namespaces (<https://stats.fao.org> ; <https://unstats.un.org>)
- Agreed data governance defined for the inclusion and production of new resources

Ongoing #2 – Data processing @FAO

We are setting up an environment for testing the impact of using Caliper for the **internal** management of classifications and code lists, oriented to supporting internal information systems.

- Use a “clone” of the Caliper infrastructure for dissemination
- Classifications and code lists accessed through an internal SPARQL endpoint

Goals:

- Support data aggregation
- Support classifications “expansions” and “integration” for the purpose of internal data processing

Ongoing #3 – Contribute to the international effort on stats modernization

Challenges:

- Identify the technology(ies) that best support data needs
- Support rapid evolution of data sector
- Be inclusive!

Pointers

- FAO statistics

<https://www.fao.org/statistics/en/>

- Caliper

<https://www.fao.org/statistics/caliper/en>

- International Family of Classification

<https://unstats.un.org/unsd/classifications/family/>