



Food and Agriculture  
Organization of the  
United Nations

# AGROVOC and COVID-19

9 September 2020

NKOS Consolidated Workshop 2020  
Terminology Development and KOS Mapping





It is a **controlled vocabulary** covering all areas of interest of FAO. Most used thesaurus in food and agriculture and related sciences in the world.

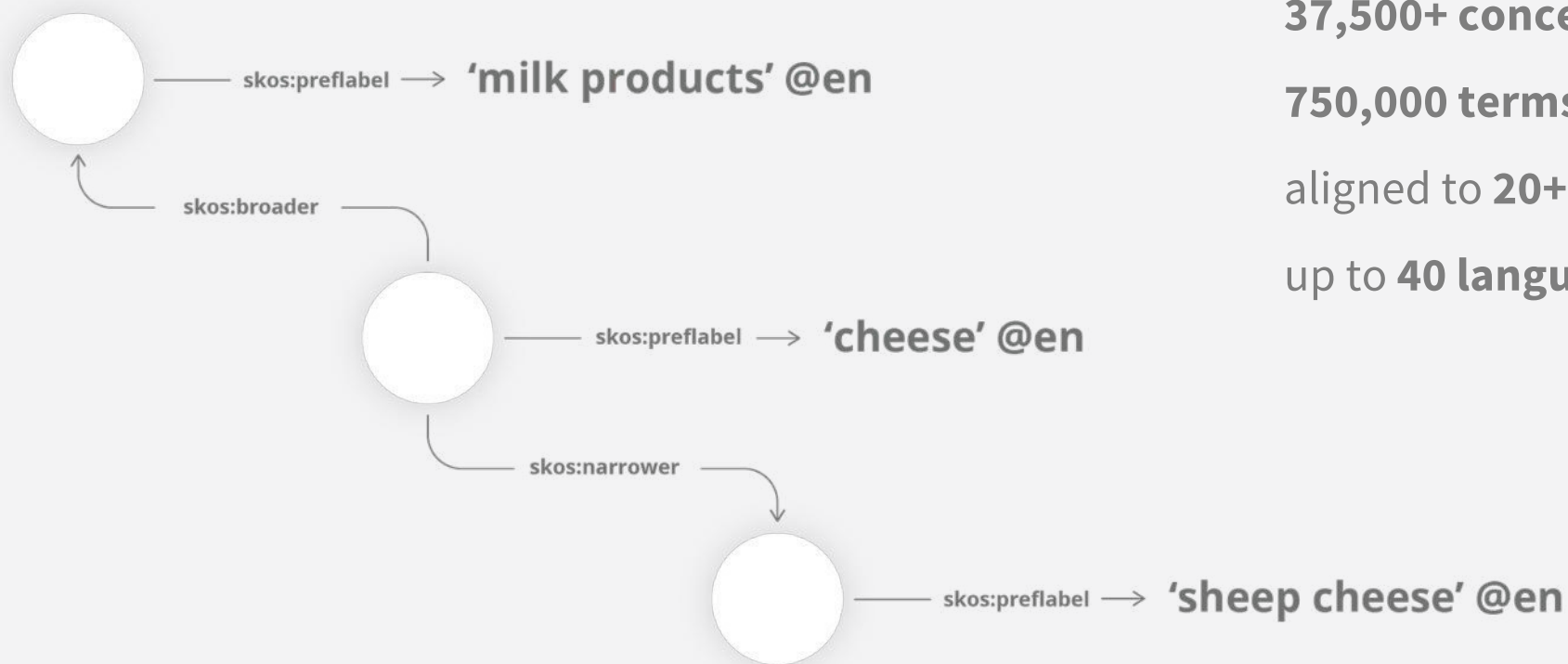
Promotes **consistency** in preferred terms, and the assignment of the same terms to similar content.

Is used to **tag and index** publications, articles and datasets, to make it **easier** for researchers **to find information** and **semantic links**.

The screenshot displays the AGROVOC Multilingual Thesaurus interface. The top navigation bar includes the FAO logo, the text 'Food and Agriculture Organization of the United Nations', and links for 'Vocabularies', 'About', 'Feedback', and 'Help'. Below this, the page title is 'AGROVOC Multilingual Thesaurus' with a 'Content language' dropdown set to 'English' and a search box. The main content area is divided into two columns. The left column shows a hierarchical tree structure under 'phenomena > natural phenomena > resource depletion > overfishing'. The right column provides detailed information for the preferred term 'overfishing', including its broader concept ('resource depletion'), related concepts ('fishing mortality'), influences ('stock assessment'), and terms it is controlled by ('fishery management'). Below this, a table lists the term in various languages: Arabic (صيد جائر), Chinese (过度捕捞), Czech (nadměrný rybolov), French (Surpêche), German (Überfischen), Hindi (अति मत्स्यन), Hungarian (túlhalászás), Italian (Depauperamento riserve ittiche), Japanese (乱獲), Lao (ການປະຕິບັດການຖິ້ມຊີວິດສັດນ້ຳ), Persian (فروزمایه گیری), Polish (Przetowienie), and Portuguese (Sobrepesca).



# Based on a Concept Model



**37,500+ concepts**

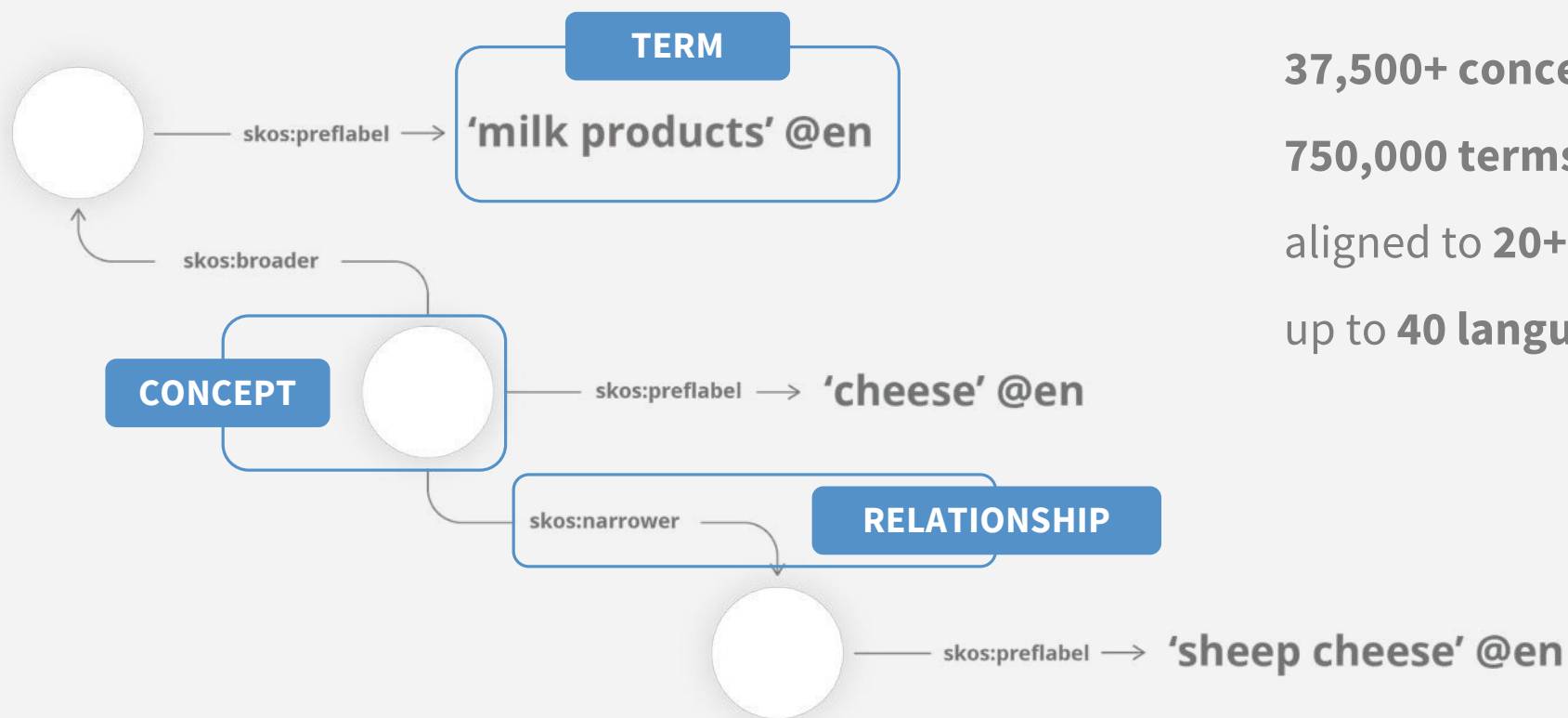
**750,000 terms**

aligned to **20+ datasets**

up to **40 languages**



# Based on a Concept Model



37,500+ concepts

750,000 terms

aligned to 20+ datasets

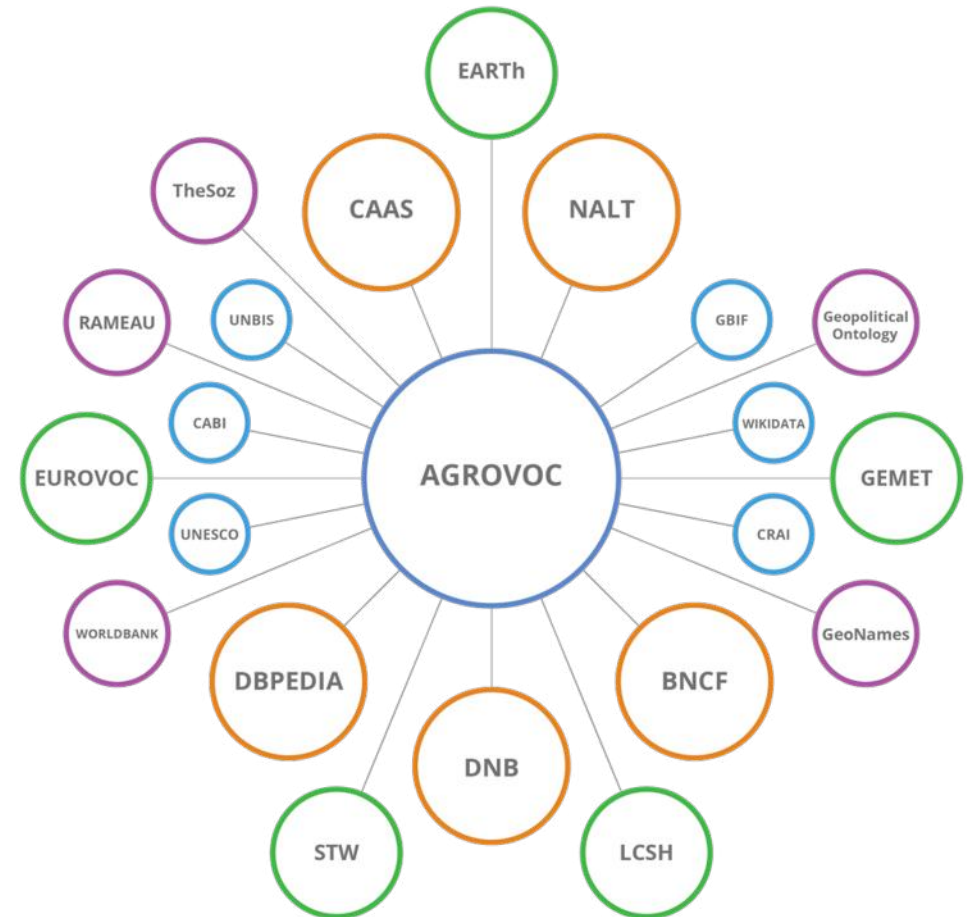
up to 40 languages



Linked Data is **structured data** which is interlinked with other data becoming more useful through semantic queries.

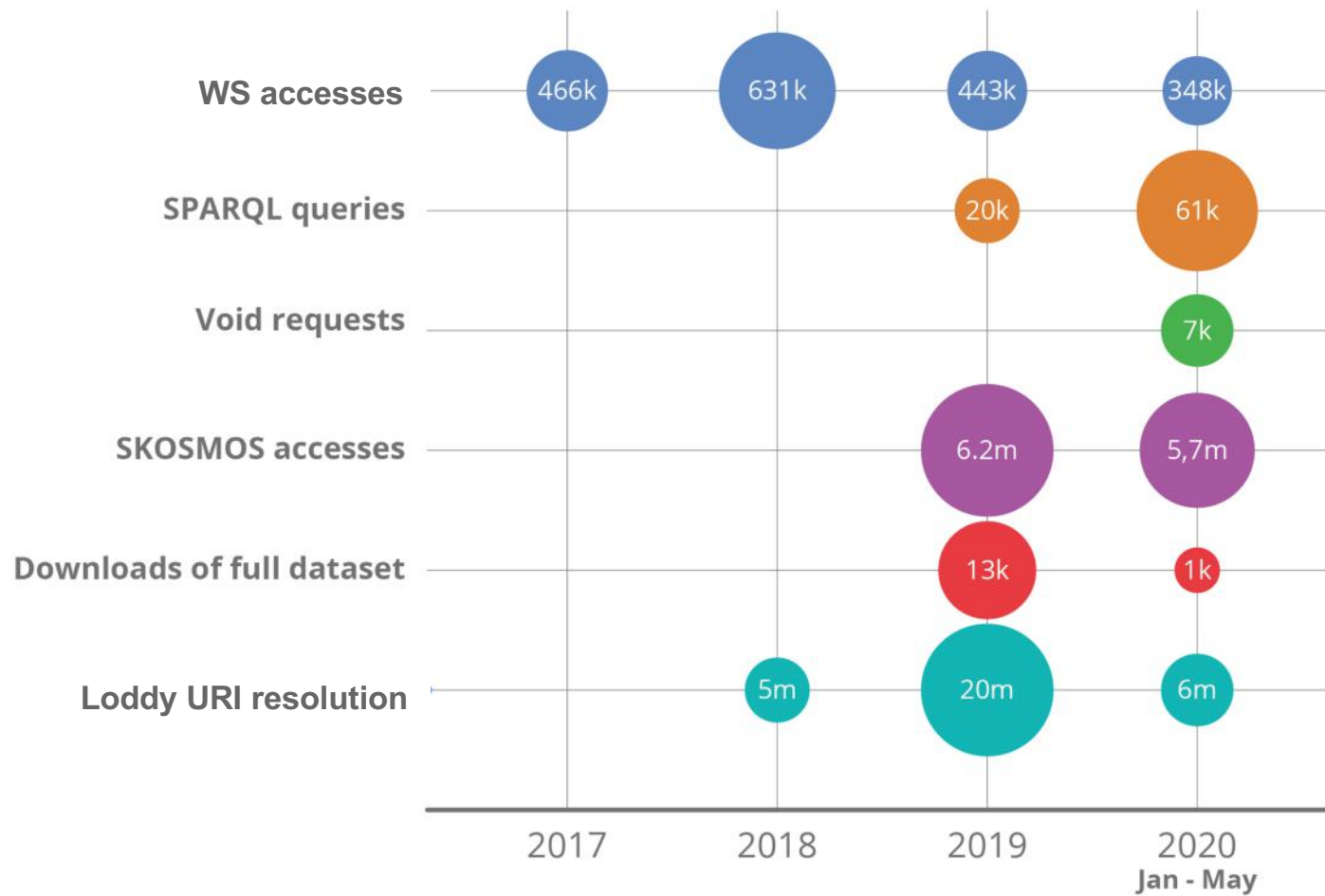
When data can be **freely used** and **distributed** by anyone (subject only to the requirement to attribute and share-alike), it is called Open Data

AGROVOC **thesaurus content** in English, Russian, French, Spanish, Arabic and Chinese is now released under the international licence CC BY IGO 3.0





# AGROVOC usage statistics





# AGROVOC: Up to 40\* languages

- |          |           |                      |  |            |
|----------|-----------|----------------------|--|------------|
| Arabic   | Finnish   | Khmer                | Polish                                 | Telugu     |
| Burmese  | French    | Korean               | Portuguese and<br>Brazilian Portuguese | Thai       |
| Catalan  | Georgian  | Lao                  | Romanian                               | Turkish    |
| Chinese  | German    | Latin                | Russian                                | Ukrainian  |
| Czech    | Greek     | Malay                | Serbian                                | Vietnamese |
| Danish   | Hindi     | Norwegian<br>bokmål  | Slovak                                 |            |
| Dutch    | Hungarian | Norwegian<br>nynorsk | Spanish                                |            |
| English  | Italian   | Persian              | Swahili                                |            |
| Estonian | Japanese  |                      | Swedish                                |            |



\*Min 150 terms. Coverage depends on editor network. More languages in system.



Food and Agriculture  
Organization of the  
United Nations

## AGROVOC Editorial Partners



**30** active partners

**25** different countries





Food and Agriculture  
Organization of the  
United Nations

## AGROVOC Editorial Partners

- Chinese Academy of Agricultural Sciences **(China)**
- Czech General Institute of Agricultural Economics and Information **(Czech Republic)**
- Iranian Research Institute for Scientific Information and Documentation **(Iran)**
- CIRAD **(France)**
- TECHINFORMI **(Georgia)**
- Gödöllo Agribusiness Centre **(Hungary)**
- Indian Institute of Technology Kanpur **(India)**
- Biblioteca Storica Nazionale dell'Agricoltura **(Italy)**
- AFFRIT **(Japan)**
- National Agriculture and Forestry Research Institute **(Laos)**
- The Republican Scientific Agricultural Library State Agrarian University **(Republic of Moldova)**
- Central Agricultural Library **(Poland)**
- Central Scientific Agricultural Library **(Russian Federation)**
- Matica Srpska Library **(Serbia)**
- Agroinstitut Nitra **(Slovakia)**
- Embrapa **(Brazil)**
- Kasetsart University, Department of Computer Engineering, Thai National AGRIS Centre, Kasetsart University **(Thailand)**
- Department of Training, Extension and Publications, Ministry of Food Agriculture and Livestock **(Turkey)**
- Ukrainian Institute for Scientific, Technical and Economic Information **(Ukraine)**
- Kuratorium für Technik und Bauwesen in der Landwirtschaft e. V. **(KTBL)** and Leibniz- Informationszentrum Lebenswissenschaften and BonaRes Centre for Soil Research **(Germany)**
- Aquatic Sciences and Fisheries Abstracts **(ASFA)** and FAOLEX **(FAO)**
- Land Portal Foundation **(LPF)**
- International Center for Agricultural Research in the Dry Areas **(ICARDA)**
- Belarus Agricultural Library, National Academy of Sciences **(Belarus)**



Food and Agriculture  
Organization of the  
United Nations

## Content comes from network



The AGROVOC editor network suggests new concepts, terms and definitions.

Editors represent an institution. Work done on **volunteer** basis.

Editors may manage a language, and/or a topic, like soil, fisheries, or land governance. Some have an expert network contributing.

Distributed editing, shared online platform (VocBench) at University of Rome Tor Vergata. Discussions often needed. Suggestions also welcome by email.



## New: Specialized schemes



Sub-vocabularies like LandVoc, ASFA and FAOLEX concepts are now part of AGROVOC. These can have different hierarchies, but **shared infrastructure**, so concepts use the same AGROVOC **unique resource identifier (URI)**, **translations and definitions**.

Curation not only of a language but a **subject**: aquatic sciences and fisheries, land governance, law and policies.



Food and Agriculture  
Organization of the  
United Nations

# AGROVOC and COVID-19 Pandemic

The Coronavirus Disease 2020 pandemic is a global health crisis, and FAO is playing a role in assessing and responding to its potential impacts on people's life and livelihoods, global food trade, markets, food supply chains and livestock.

Data-driven decision making is essential to drive further research, support ongoing investigations and share critical knowledge.

Controlled vocabularies like AGROVOC play a small but important part in ensuring that data and research are accessible, also across languages.

New concepts suggested by AGROVOC editors but also others.



Food and Agriculture  
Organization of the  
United Nations

# Request for COVID-19 concepts

**Sent:** 31 March 2020 23:11

**To:** Agrovoc <[Agrovoc@fao.org](mailto:Agrovoc@fao.org)>

**Subject:** COVID-19 related keywords

Will the next update of AgroVoc have any COVID-19 related keywords. I know Coronavirus is one, but as the disease takes up more and more attention, will you be adding the keywords specific to this kind of coronavirus?

Thank you,



Food and Agriculture  
Organization of the  
United Nations

# April: First COVID-19 concepts added

AGROVOC added 25 new concepts related to the current world health crisis in an extra release on 10 April 2020.

These included entries for coronavirus disease (alternative term COVID-19) and severe acute respiratory syndrome coronavirus 2 (alternative SARS-Cov-2).

**FAO AIMS @FAOAIMS · Apr 10**  
#AGROVOC #thesaurus adds new concepts related to #COVID-19

This extra release is helpful for those cataloguing, especially as there is a plethora of research being done at the same time on the same topic

Learn more [aims.fao.org/activity/blog/...](https://aims.fao.org/activity/blog/...)

**AGROVOC Multilingual Thesaurus** Content language: English

... > biological phenomena > diseases > infectious diseases > zoonoses > coronavirus disease

**PREFERRED TERM** coronavirus disease

**DEFINITION**

- COVID-19 is the infectious disease caused by the most recently discovered coronavirus SARS-CoV-2, which had not been previously identified in humans. (en)
- Yeni koronavirüs (COVID-19), ilk olarak Çin'in Wuhan Eyaleti'nde Aralık ayının sonlarında solumun yolu belirtileri (ateş, öksürük, nefes darlığı) gelişen bir grup hastada yapılan araştırmalar sonucunda 13 Ocak 2020'de tanımlanan bir virüsdür. (tr)

**BROADER CONCEPT** zoonoses (en)

**ENTRY TERMS** COVID-19 (en)

**IN OTHER LANGUAGES**

|                            |          |
|----------------------------|----------|
| 2019 新型冠状病毒                | Arabic   |
| 2019-كوفيد-19              | Arabic   |
| 2019 新型冠状病毒                | Chinese  |
| COVID-19                   | Chinese  |
| coronavirus sygdom 2019    | Danish   |
| covid-19                   | Danish   |
| coronaviruslekte 2019      | Dutch    |
| koronaviirushaigus-19      | Estonian |
| maladie à coronavirus 2019 | French   |
| COVID-19                   | French   |
| Coronavirus-Krankheit 2019 | German   |
| COVID-19                   | German   |



Food and Agriculture  
Organization of the  
United Nations

# Adding COVID-19 concepts



[Home](#) / [Emergencies](#) / [Diseases](#) / [Coronavirus disease \(COVID-19\)](#) / [Technical guidance](#) /  
**Naming the coronavirus disease (COVID-19) and the virus that causes it**



Section navigation

## **Naming the coronavirus disease (COVID-19) and the virus that causes it**

Official names have been announced for the virus responsible for COVID-19 (previously known as “2019 novel coronavirus”) and the disease it causes. The official names are:

### **Disease**

coronavirus disease  
(COVID-19)

### **Virus**

severe acute respiratory syndrome coronavirus 2  
(SARS-CoV-2)

WHO announced “COVID-19” as the name of this new disease on 11 Feb 2020, following guidelines developed with OIE and FAO.

Viruses are named by the International Committee on Taxonomy of Viruses (ICTV). Diseases are officially named by WHO in the International Classification of Diseases (ICD).



Food and Agriculture  
Organization of the  
United Nations

# International Classification of Diseases

**CORONAVIRUS DISEASE**

**#COVID19**

**#Coronavirus**



Volume 3 with Addition of suspected COVID-19 – April 2020  
ICD-11 – ALL INDEX TERMS

- COVID-19
- 2019-new Coronavirus acute respiratory disease
- 2019-nCoV acute respiratory disease [temporary name]
- Coronavirus disease 2019
- Suspected COVID-19

Look for trusted authorities: for concepts and translations.

WHO's International Classification of Diseases April 2020: **Coronavirus disease 2019**. AGROVOC updated accordingly.





# Adding COVID-19 concepts

Concepts need to be within scope of AGROVOC: agriculture, fisheries, forestry, food safety, food security, policies.

Yes: MERS, SARS, movement restrictions, agent-based models, non-pharmaceutical interventions, viral shedding, supply chain disruptions.

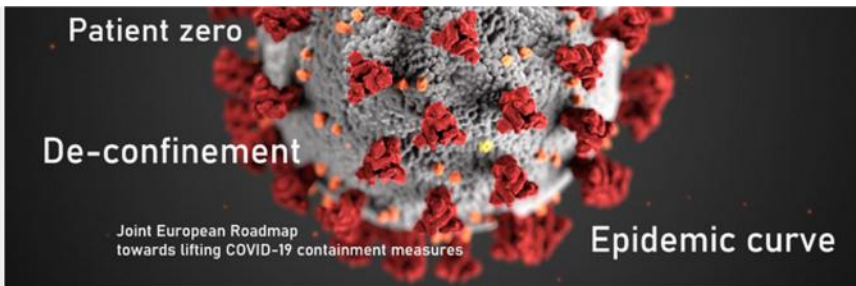
No: intensive care, ventilators, mortgage holiday

|   |   |
|---|---|
| non-pharmaceutical interventions                | Non-pharmaceutical interventions (NPIs, also known as non-pharmacological interventions) include all measures or actions, other than the use of vaccines or medicines, that can be implemented to slow the spread of influenza [and other illnesses] in a population.                     |
| physical distancing (altterm social distancing) | Social distancing, or physical distancing is a set of non-pharmaceutical interventions or measures taken to prevent the spread of a contagious disease by maintaining a physical distance between people and reducing the number of times people come into close contact with each other. |
| hand washing (altterm hand hygiene)             | Hand washing (or handwashing), also known as hand hygiene, is the act of cleaning one's hands for the purpose of removing soil, grease, microorganisms, or other unwanted substances.   |
| movement restrictions                           | Limitation on the movements of a person or animal who has or is suspected of having an infection. Used as a public health and veterinary health measure.  |



# Adding COVID-19 translations

Sources used for concepts, definitions and translations included World Health Organization (WHO) websites, FAO website and FAOTERM, the UNBIS Thesaurus, EuroVoc and Inter-Active Terminology for Europe (IATE). Trusted sources key.



## COVID-19 multilingual terminology available in IATE

270 multilingual entries related to the current pandemic are now available in IATE, the European Union terminology database. With 8 million terms in the 24 official languages, IATE is the terminology reference not only for language professionals, but also for national experts, policy advisers, public administration academics and private sector companies.

The screenshot shows the FAO website interface. At the top, there is the FAO logo and the text 'Food and Agriculture Organization of the United Nations'. A search bar on the right indicates 'ENHANCED BY Google'. Below the header, there are language options: العربية, 中文, English, Français, Русский, Español. The main content area shows an entry for '175056 - Collection: FAOTERM'. The entry is displayed in Arabic, with the term 'مرض فيروس كورونا' (COVID-19) and its source: 'WHO, 2020 (https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/naming-the-coronavirus-disease-(covid-2019)-and-the-virus-that-causes-it)'. Below this, the English version of the entry is shown, with the term 'coronavirus disease 2019' and its source: 'Coronavirus disease (COVID-19) outbreak, WHO, 2020 (https://www.who.int/emergencies/diseases/novel-coronavirus-2019)'. Other sources listed include 'Coronavirus disease 2019 (COVID-19) - Situation Report No. 59, OMS, 2020' and 'Coronavirus disease (COVID-19) outbreak, FAO, 2020'.



# Adding COVID-19 translations

National editors also encouraged to use trusted sources, like ministries of health.

Definitions are essential for shared understanding and reducing ambiguity (here, from WHO).

The vocabulary used must be understood by everyone, and it is important that consistent terminology is used.

activité > Gestion > disease management (en) > mesures non pharmaceutiques

**PREFERRED TERM** ⓘ **mesures non pharmaceutiques**

---

**DEFINITION**

ⓘ Non-pharmaceutical interventions (NPIs, also known as non-pharmacological interventions) include all measures or actions, other than the use of vaccines or medicines, that can be implemented to slow the spread of influenza [and other illnesses] in a population.  
(en)

---

**BROADER CONCEPT** [disease management \(en\)](#)

**NARROWER CONCEPTS** [distanciation physique \(fr\)](#)

---

**INCLUDES**

[distanciation physique \(fr\)](#)  
[isolement \(fr\)](#)  
[lavage des mains \(fr\)](#)  
[movement restrictions \(en\)](#)  
[quarantaine \(fr\)](#)

---

**IN OTHER LANGUAGES**

|                                    |          |
|------------------------------------|----------|
| ⓘ non-pharmaceutical interventions | English  |
| ⓘ არაფარმაცოლოგიური ჩარევა         | Georgian |
| ⓘ არაფარმაცოლოგიური ინტერვენცია    |          |
| ⓘ nicht-pharmazeutische Maßnahme   | German   |
| ⓘ nicht-pharmakologische           |          |



## Relevant concepts

Lessons learned during the Ebola and Zika outbreaks have helped some countries confront the COVID-19 pandemic, so **Ebola virus disease** and **Zika virus disease** have been added to AGROVOC.

More concepts are also suggested by AGROVOC editors, such as **Hamsterkauf** (German for panic buying), relevant to value chains and **market disruptions**.

Goal: include concepts relevant to the **complex socio-economic impacts of COVID-19**, as decision makers and governments need to balance economic and health concerns of reopening economies.



## Nutrition and COVID-19



This document captures the information on basic nutrition available to consume fish, vegetables, and other nutritious food. It demonstrates that how less intake of nutrition leads to the malnutrition. Furthermore, the importance of WASH, hygiene, and hand washing practice was discussed in the document.

|                       |   |
|-----------------------|---|
| Collections           | <a href="#">Value chains and nutrition [173]</a>  |
| Download              | <a href="#">Pamphlete_Nutrition_and_COVID_19_ENG_.pdf (577.6Kb)</a>   |
| Date                  | 2020  |
| Author                | Rizaldo, Q.<br>Karim, M.  |
| Author(s)<br>ORCID(s) | Manjurul Karim <a href="https://orcid.org/0000-0003-4280-3568">https://orcid.org/0000-0003-4280-3568</a>                  |
| Subject(s)            | <a href="#">food fish</a> ; <a href="#">wash</a> ; <a href="#">fish consumption</a> ; <a href="#">coronavirus disease</a> |
| AGROVOC<br>Keywords   | <a href="#">food security</a> ; <a href="#">nutrition</a> ; <a href="#">covid-19</a> ; <a href="#">hand hygiene</a>       |
| Type                  | Brochure  |
| Publisher             | WorldFish   |
| Metadata              | <a href="#">Show full item record</a>   |



# Efecto de la pandemia del COVID-19 en el sector arrocero de América Latina y El Caribe: Un diagnóstico participativo



Share



## Citation

Urioste, Daza S.A.; Graterol, Matute E.; Álvarez, M.F.; Tohme, J.; Escobar, M.X.; González, C. (2020) Efecto de la pandemia del COVID-19 en el sector arrocero de América Latina y El Caribe: Un diagnóstico participativo. Alianza de Bioversity International y el Centro Internacional de Agricultura Tropical (CIAT); Fondo Latinoamericano para Arroz de Riego (FLAR); HarvestPlus. Cali, Colombia 28 p.

Permanent link to cite or share this item: <https://hdl.handle.net/10568/108967>

## Abstract/Description

El reporte consiste en un diagnóstico de los efectos que han tenido las acciones implementadas para frenar la propagación de la COVID-19 en los países de América Latina y El Caribe, relacionada sobre los impactos económicos, sociales y ambientales, y en el flujo de información y en el análisis de las políticas y general. La iniciativa hace parte de la iniciativa de HarvestPlus. Los resultados presentados, a cargo de HarvestPlus.

### Language

es

### Type

Report

### Accessibility

Open Access

### Usage rights

CC-BY-4.0

### Metadata

[Show full item record](#)

## CGIAR Author ORCID IDs

Joe Tohme <https://orcid.org/0000-0003-2765-7101>Carolina Gonzalez <https://orcid.org/0000-0003-3613-1769>

## AGROVOC Keywords

RICE; ARROZ; PRODUCTION; PRODUCCIÓN; COVID-19; ENFERMEDAD POR CORONAVIRUS 2019

## Subjects

AGRICULTURE; ECONOMICS; RICE;

## Regions

CARIBBEAN; LATIN AMERICA

## View/Open

[Reporte \(13.37Mb\)](#)

## Authors

Urioste Daza, Sergio  
Graterol Matute, Eduardo  
Álvarez, María Fernanda  
Tohme, Joe  
Escobar, María Ximena  
González, Carolina

## Date

2020-07



## Lessons learned

Lessons learned after this whole action, from the vocabulary control point of view:

- Not static: Even trusted authorities change names of concepts.
- What is most used? AGROVOC editorial guidelines: *“The abbreviated form should be selected (as preferred term) when it has become so well established that the full form is rarely used, mostly the case for acronyms.”* → August 2020: COVID-19 made preferred term @en.
- Initially a challenge to find other online thesauri to link to, and good translations: now much more available
- Ongoing discussions: what to include? Think about how concepts are used.

contact tracing Tröpfcheninfektion border closures lockdown comorbilità gendered impact



# Next steps

The screenshot shows the AGROVOC Multilingual Thesaurus interface. The top navigation bar includes 'Vocabularies', 'About', 'Feedback', and 'Help'. The main content area is titled 'AGROVOC Multilingual Thesaurus' and shows the entry for 'COVID-19'. The left sidebar contains a hierarchical tree of terms, with 'infectious diseases' and 'zoonoses' expanded. The main entry for 'COVID-19' includes a preferred term, a definition in multiple languages, broader concepts, entry terms, and translations in various languages.

... > biological phenomena > diseases > infectious diseases > zoonoses > COVID-19

PREFERRED TERM ① COVID-19

DEFINITION

- ① COVID-19 este o boală infecțioasă cauzată de coronavirusul sindromului respirator acut sever 2 (SARS-CoV-2), care nu a fost identificat anterior la om.
- (ro)
- ① COVID-19 is the infectious disease caused by the most recently discovered coronavirus SARS-CoV-2, which had not been previously identified in humans.
- (en)
- ① Yeni koronavirüs hastalığı (COVID 19), daha önce insanlarda tanımlanmamış olan, en son keşfedilen koronavirüs SARS-CoV-2'nin neden olduğu bulaşıcı hastalıktır.
- (tr)

BROADER CONCEPT zoonoses (en)

ENTRY TERMS

- ① coronavirus disease (en)
- ① coronavirus disease 2019 (en)

IS CAUSED BY severe acute respiratory syndrome coronavirus 2 (en)

CHANGE NOTE Acronym COVID-19 made preferred label as more prevalent in use (Aug 2020). (en)

IN OTHER LANGUAGES

|                              |          |
|------------------------------|----------|
| ① 2019-كوفيد-19              | Arabic   |
| ① 2019 مرض الكورونا          | Burmese  |
| ① 2019-ကورونا-ဘေဂျစ်         | Chinese  |
| ① 2019冠状病毒病                  | Chinese  |
| ① COVID-19                   | Danish   |
| ① covid-19                   | Danish   |
| ① coronavirussygdom 2019     | Dutch    |
| ① covid-19                   | Dutch    |
| ① coronavirusziekte 2019     | Estonian |
| ① koroona viirushaigus-19    | French   |
| ① COVID-19                   | French   |
| ① maladie à coronavirus 2019 | Georgian |
| ① COVID-19                   | Georgian |
| ① კორონავირუსული დაავადება   | German   |
| ① COVID-19                   | German   |
| ① Coronavirus-Krankheit-2019 | German   |
| ① Covid-19                   | German   |

The full socio-economic impact of the virus on food security and agricultural food systems is not yet known, so the number of COVID-19 related concepts are expanding.

The AGROVOC monthly releases facilitate responsiveness on emerging topics.

Agreed terminology with definitions is needed, especially to enable correct translations.





Food and Agriculture  
Organization of the  
United Nations

## The AGROVOC team



**IMMA  
SUBIRATS**

Information  
management officer,  
AGROVOC manager



**KRISTIN  
KOLSHUS**

Information  
management officer,  
AGROVOC curator



**ANDREA  
TURBATI**

Information  
management specialist,  
AGROVOC technical  
lead



**ALEJANDRA  
MANCO VEGA**

Information  
management  
specialist, technical  
support



**CHELSEY  
SCALESE**

Information management  
specialist,  
communications support

Contact us! [AGROVOC@fao.org](mailto:AGROVOC@fao.org)  
Follow along on Twitter [@FAOAIMS](https://twitter.com/FAOAIMS)