CGIAR

ICARDA
Science for resilient livelihoods in dry areas

MEL
monitoring
evaluation and
learning

ONTOLOGIES
COMMUNITY OF PRACTICE

CGIAR task group experiences

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Elizabeth Arnaud ◦ Alliance Bioversity-CIAT

5th Annual AGROVOC Editorial Community Meeting. 19 July 2022

Content

- What is CGIAR (One CGIAR)?
- Importance of the CGIAR-FAO/AGROVOC collaboration.
- Implementation of CGIAR-FAO/AGROVOC collaboration, achievements, and lessons learned.

One CGIAR

One CGIAR is the integration of CGIAR's capabilities, knowledge, assets, people, and global presence for a new era of interconnected and partnership-driven research toward achieving the Sustainable Development Goals (SDGs).

Mission: To deliver science and innovation that advance the transformation of food, land, and water systems in a climate crisis.

CGIAR

One CGIAR

One CGIAR is targeting multiple SDG benefits across five Impact Areas

Nutrition, health and food security

Poverty reduction, livelihoods and jobs

Gender equality, youth and inclusion

Climate adaptation and mitigation

Environmental health and biodiversity

One CGIAR strives for global and regional impact by organizing its work along three Action Areas

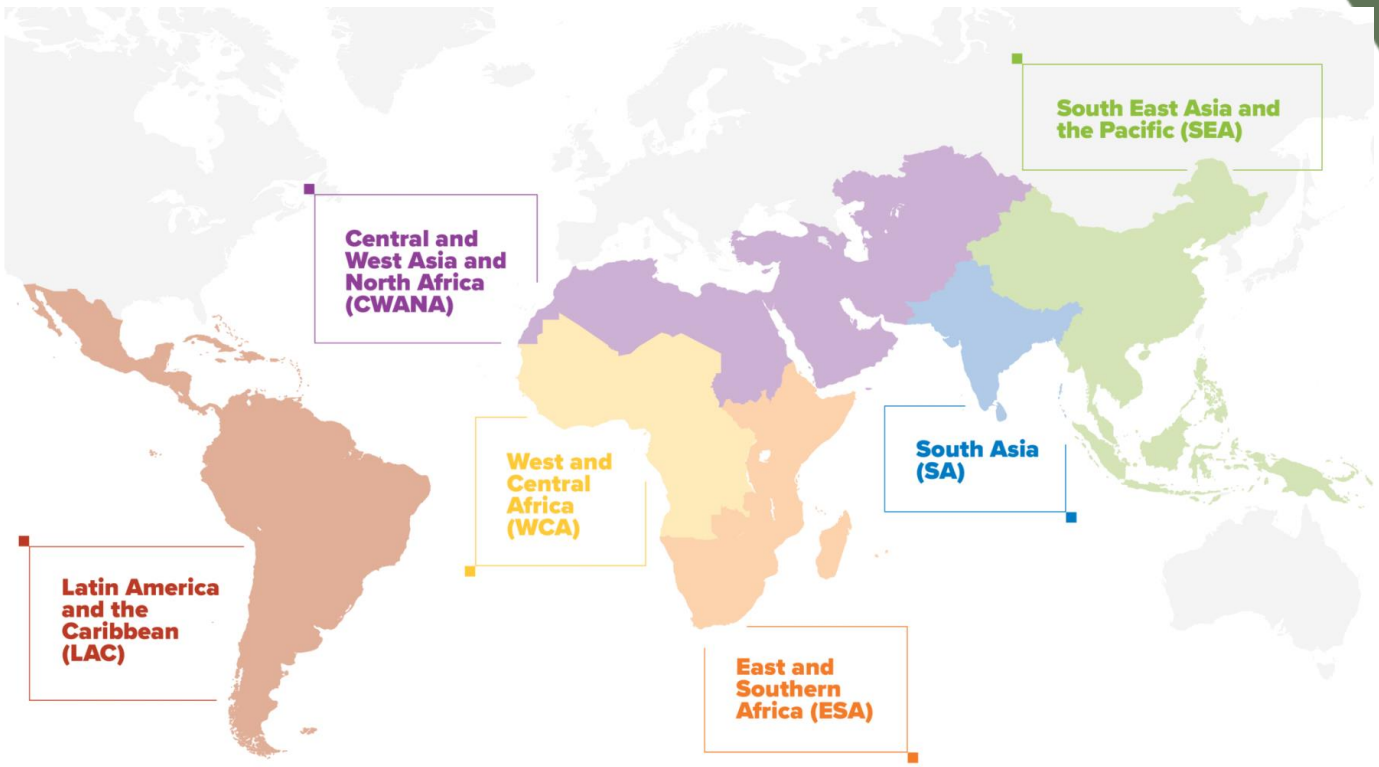
Systems transformation

Resilient agrifood systems

Genetic innovation

One CGIAR

CGIAR works in six regions: Central and West Asia and North Africa, Latin America and the Caribbean, West and Central Africa, East and Southern Africa, South Asia, Southeast Asia, and the Pacific.



CGIAR

Why CGIAR – FAO/AGROVOC Collaboration is important?

"If agriculture is going to take advantage of the digital revolution, it's critical that data resources can talk to each other through ontologies and standards – this is a necessary foundation.

Bringing CGIAR and FAO together ensures two major players in agricultural research and development are promoting common standards and approaches, for ourselves and for our large partner networks"

Andy Jarvis, DDG Research Alliance
Bioversity-CIAT

"FAO acts as a catalyst and a platform for leveling the playing field so that countries can make evidence-based decisions on the most appropriate technologies and innovations to adopt and adapt in sustaining their food security and nutrition.

FAO can only achieve this by collaborating with the global scientific community of experts such as the CGIAR"

Ismahane Elouafi, Chief Scientist at FAO

CGIAR usage of AGROVOC

➤ Recommended by the CGIAR Metadata Schema.

➤ Used by all CGIAR repositories and MEL platform as a source of keywords.

➤ Important contribution of some CGIAR centers to AGROVOC.

Increasing Interoperability Between Food and Agricultural Systems: CGIAR & FAO Collaboration: Task Group and Curation Team Report

Example of AGROVOC keywords usage in MELSpace & MELData

MELData

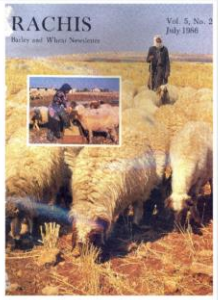
Citation Metadata

Dataset Persistent ID	hdl:20.500.11766.1/FK2/4MM7WC
Publication Date	2022-06-06
Title	Horro sheep landform similarity in Ethiopia
Other ID	MEL: 12614 Other: http://geoagro.icarda.org/en/default/visualization/livestock
Author	Atassi, Layal (International Center for Agricultural Research in the Dry Areas - ICARDA) - ORCID: 0000 Biradar, Chandrashekhar (International Center for Agricultural Research in the Dry Areas - ICARDA) - C Mwacharo, Joram (International Center for Agricultural Research in the Dry Areas - ICARDA) - ORCID: Haile, Aynalem (International Center for Agricultural Research in the Dry Areas - ICARDA) - ORCID: 00
Contact	Use email button above to contact. Atassi, Layal (International Center for Agricultural Research in the Dry Areas - ICARDA)
Description	This map was prepared for Livestock and fish CRP project, for Mapping breeds to appropriate productio of Ethiopian indigenous sheep and goats. Horro sheep landform similarity was assessed by comparing association within the breed distribution areas with the landform composition of each land pixel. The lar breed distribution areas and areas outside was obtained by calculating the relief intensity of SRTM 30.
Subject	Agricultural Sciences
Keyword	sheep (AGROVOC) http://aims.fao.org/aos/agrovoc/c_7030 similarity mapping ethiopia (AGROVOC) http://aims.fao.org/aos/agrovoc/c_2676 geographic information systems (AGROVOC) http://aims.fao.org/aos/agrovoc/c_35131 breeds (AGROVOC) http://aims.fao.org/aos/agrovoc/c_1081 horro sheep (AGROVOC) http://aims.fao.org/aos/agrovoc/c_efd5dbc7 raster pixel landforms (AGROVOC) http://aims.fao.org/aos/agrovoc/c_34247ea4

sheep (AGROVOC) http://aims.fao.org/aos/agrovoc/c_7030
similarity mapping
ethiopia (AGROVOC) http://aims.fao.org/aos/agrovoc/c_2676
geographic information systems (AGROVOC) http://aims.fao.org/aos/agrovoc/c_35131
breeds (AGROVOC) http://aims.fao.org/aos/agrovoc/c_1081
horro sheep (AGROVOC) http://aims.fao.org/aos/agrovoc/c_efd5dbc7
raster
pixel
landforms (AGROVOC) http://aims.fao.org/aos/agrovoc/c_34247ea4

MELSpace

Wheat Barley and Triticale Newsletter -RACHIS -No. 5 (2)



Citation
J. P. Srivastava, Habib Ketata, Surendra Varma, Jo… 31/7/1986). Wheat Barley and Triticale Newsletter -RACHIS -No. 7… International Center for Agricultural Research in the Dry Areas (ICARDA).

Abstract
The RACHIS information service has been initiated by ICARDA to meet the information needs of barley, wheat and triticale research workers in the Near East and North Africa region. RACHIS seeks to report research results in a rapid manner, to highlight achievements and new ideas, and to stimulate an open discussion of problems. In this way RACHIS seeks to contribute to the improvement of barley, breadwheat, durum wheat and triticale production in the Near East and North Africa region.

URI
https://hdl.handle.net/20.500.11766/13570

Collections
Agricultural Research Knowledge [11141]

View/Open

Author(s)
Srivastava, J. P.

Subject(s)
yield performance; rainfed; triticale; morphological data; Barley; Triticale; Durum Wheat

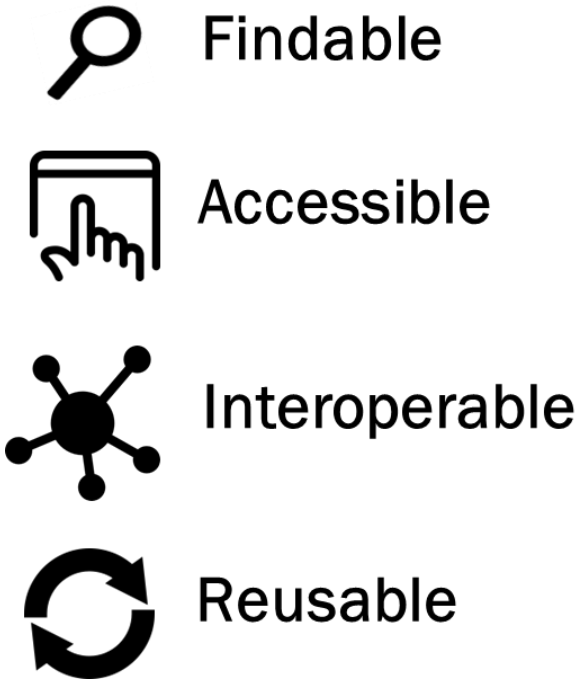
AGROVOC Keywords
barley; germplasm; wheat; insect pests; plant diseases

ICARDA
Science for resilient livelihoods in dry areas

Open access

AGROVOC Keywords
barley; germplasm; wheat; insect pests; plant diseases

CGIAR usage of AGROVOC



FAIR principles recommend to use controlled vocabularies (thesaurus, ontologies) that are widely accepted and applied by the community of the science domain to label data and tag information products

Increasing interoperability between food and agricultural systems: CGIAR and FAO collaboration

CGIAR Open and FAIR Data Assets Policy

AGROVOC & the MEL platform: Standardizing metadata and following FAIR principles

Objectives of a collaboration framework with One CGIAR perspective

- ➤ Get more streamlined submission from CGIAR.
- ➤ Improve AGROVOC content cover with CGIAR terms.
- ➤ Support the quality indexation.
- ➤ Improve the keyword-based search.
- ➤ Provide global visibility of CGIAR contribution to AGROVOC.
- ➤ Remain a key player in the international community effort to develop semantics.

Increasing Interoperability Between Food and Agricultural Systems: CGIAR & FAO Collaboration: Task Group and Curation Team Report

Objectives of a collaboration framework

➤ Enhance the stewardship role in the development of semantics for agrifoods.

➤ Develop capacity building for partners.

➤ Leverage a team of domain experts.

➤ Strengthen the AGROVOC coverage.

➤ Reduce the duplicated efforts/costs.

➤ Improve efficient use of knowledge for users.

Increasing Interoperability Between Food and Agricultural Systems: CGIAR & FAO Collaboration: Task Group and Curation Team Report

How is the CGIAR-FAO/AGROVOC collaboration implemented & what are the achievements and lessons learned?

CGIAR - AGROVOC Task Group Members

Co-chairs:

Nigeria - IITA: Olatunbosun Obileye

Italy - Alliance Bioversity-CIAT: Elizabeth Arnaud

Members:

Italy - Alliance Bioversity-CIAT: Marie-Angélique Laporte

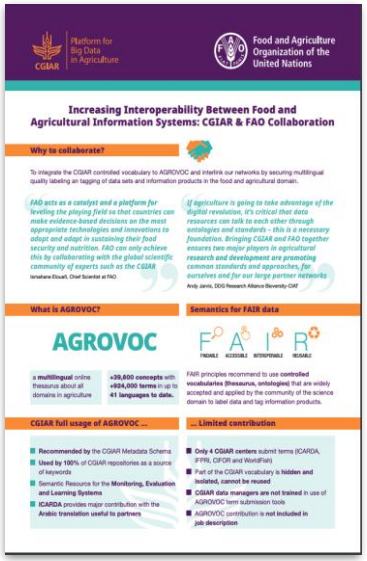
Egypt - ICARDA: Enrico Bonaiuti & Sara Jani

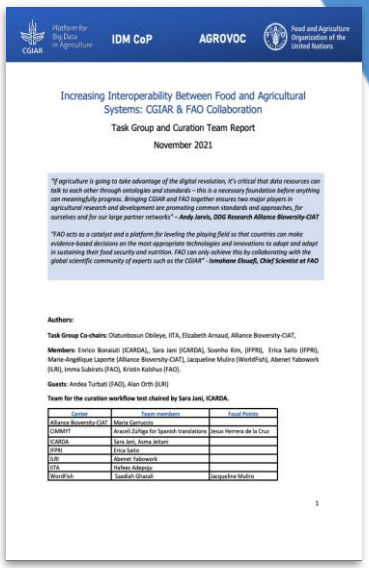
USA - IFPRI: Soonho Kim & Erica Saito

Kenya - ILRI: Abenet Yabowork

Malaysia - WorldFish: Jacqueline Muliro

Italy - FAO: Kristin Kolshus & Imma Subirats





Report: https://cgspace.cgiar.org/handle/10568/116236

Factsheet: https://cgspace.cgiar.org/handle/10568/116448

CGIAR - AGROVOC Curation Team

Chair:

Egypt- ICARDA-MEL: Sara Jani

Members:

Italy - Alliance Bioversity-CIAT: Maria Garruccio

Mexico - CIMMYT: Jesus Herrera (Focal Point) & Araceli Zuniga (curation)

Peru - CIP: Vilma Hualla

Egypt - ICARDA-MEL: Sara Jani & Asma Jeitani

Nigeria - IITA: Hafeez Adepoju

Kenya - ILRI: Abenet Yabowork

Kenya - ILRI-CGSpace: Alan Orth

Philippine - IRRI: Lea Delos Reyes

Sri Lanka - IWMI: Rasika Thushantha & Yamuna Udumalagala

Malaysia - WorldFish: Saadiah Ghazali

Phase 1 - Work Process

Step 1. Centers submit keywords indexed in their repositories (CGSpace, CIMMYT, CKAN-IITA, IFPRI, MEL, WFDSpace-WF)

↓

Step 2. Identification of keywords unmatched with AGROVOC

↓

Step 3. Selection of most used 50 keywords.

↓

Some centers proposed adding their keywords (IFPRI, IWMI, WorldFish)

Step 4. Keywords assigned to centers by alphabetical order. Centers that submitted their own keywords worked on those.

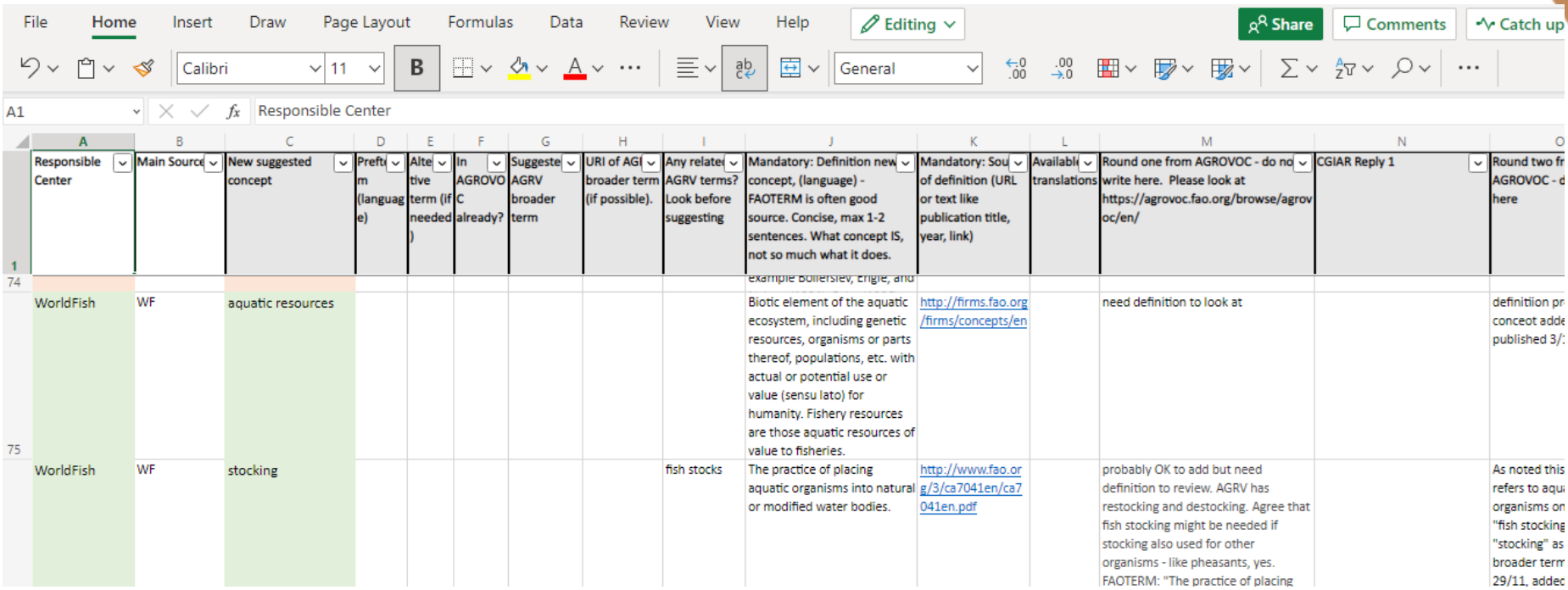
↓

Step 5. Work done through a "shared template" allowing curators to contribute and AGROVOC's team to review.

↓

Repetition of **Steps 3, 4, and 5**.

The used “shared template”



File Home Insert Draw Page Layout Formulas Data Review View Help Editing Share Comments Catch up

Calibri 11 B General

A1 Responsible Center

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Responsible Center	Main Source	New suggested concept	Prefe m (languag e)	Alte tive term (if needed)	In AGROVO C already?	Suggeste AGRV broader term	URI of AG broader term (if possible).	Any relate AGRV terms? Look before suggesting	Mandatory: Definition new concept, (language) - FAOTERM is often good source. Concise, max 1-2 sentences. What concept IS, not so much what it does.	Mandatory: Sou of definition (URL or text like publication title, year, link)	Available translations	Round one from AGROVOC - do no write here. Please look at https://agrovoc.fao.org/browse/agrov oc/en/	CGIAR Reply 1	Round two fr AGROVOC - d here
74										example Bollerslev, Engle, and					
75	WorldFish	WF	aquatic resources							Biotic element of the aquatic ecosystem, including genetic resources, organisms or parts thereof, populations, etc. with actual or potential use or value (sensu lato) for humanity. Fishery resources are those aquatic resources of value to fisheries.	http://firms.fao.org /firms/concepts/en		need definition to look at		definitiion pr conceot adde published 3/
	WorldFish	WF	stocking						fish stocks	The practice of placing aquatic organisms into natural or modified water bodies.	http://www.fao.or g/3/ca7041en/ca7 041en.pdf		probably OK to add but need definition to review. AGRV has restocking and destocking. Agree that fish stocking might be needed if stocking also used for other organisms - like pheasants, yes. FAOTERM: "The practice of placing		As noted this refers to aqua organisms on "fish stocking "stocking" as broader term 29/11, addec

Phase 1 - Lessons Learned

➤ Not encouraged to submit concepts not commonly used for indexing.
Example:
"animal care" and "animal husbandry"

➤ Not encouraged to submit complex compound concepts.
Example:
"maize productivity" = "maize" + "productivity"

➤ Definitions should be clear, short and explain what is the concept.

Phase 1 - Achievements

309 keywords suggested

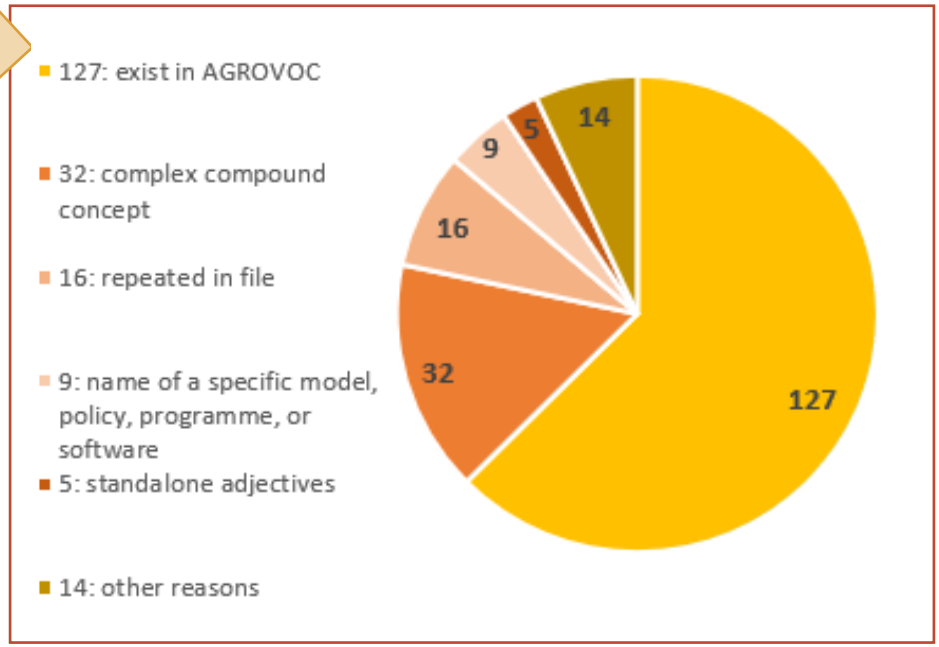
41 concepts & terms added to AGROVOC

65 keywords open-discussion

203 keywords not considered

6 centers participated

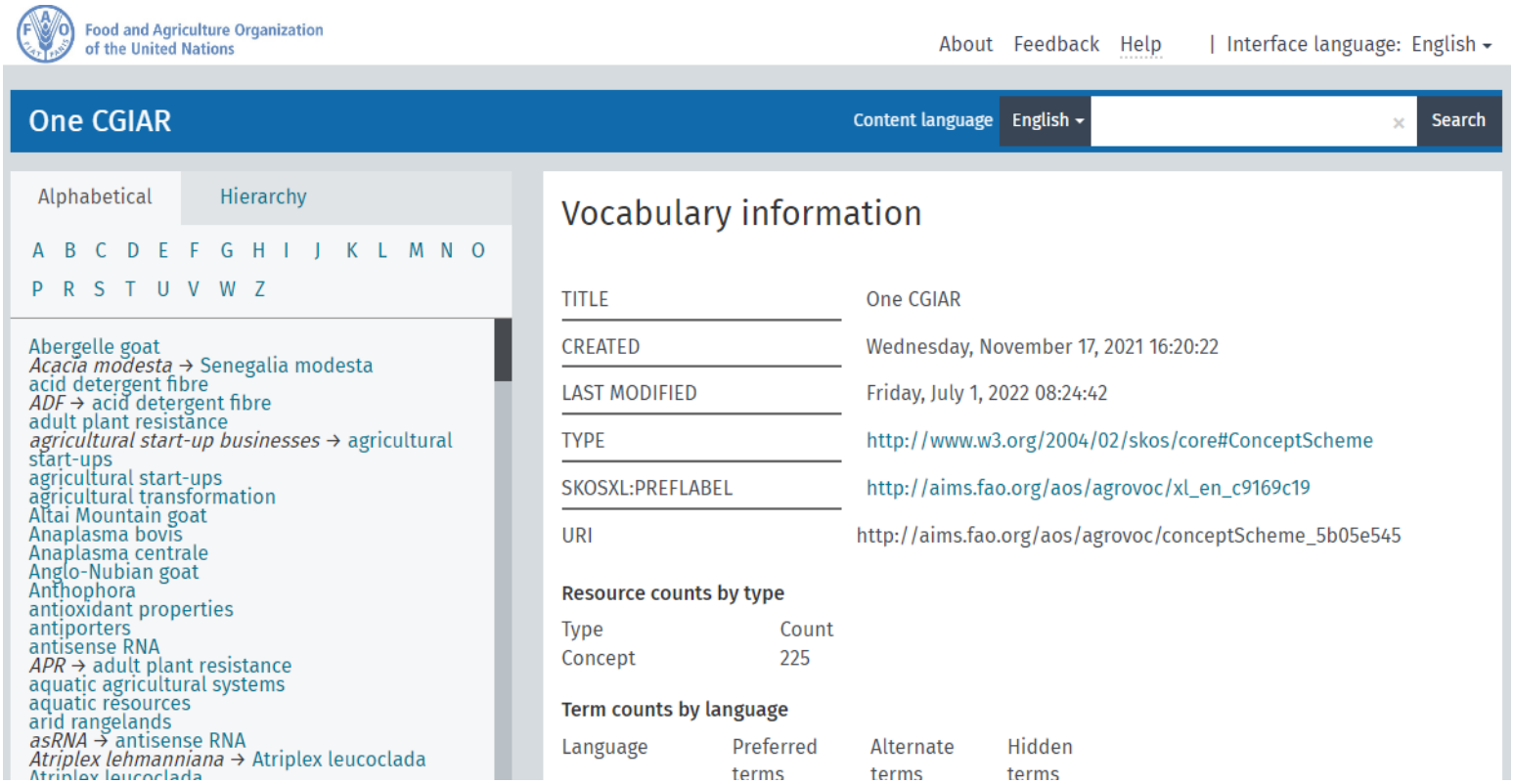
4 training sessions delivered



- Introduction and submission workflow
- Training on definitions
- 2 Individual training on submission workflow

Creation of the One CGIAR concept sub-schema

https://agrovoc.fao.org/skosmosOneCGIAR/cgiar/en/



Contributions made separately from other CGIAR centers (ICARDA [~165], IFPRI, WorldFish) are also included in the sub-schema.

Phase 2: Work Process

Each center submits its own 10 keywords unmatched with AGROVOC whether through their repositories or other means and includes them in the “shared template” file.

⬇

ICARDA’s curators review the file to remove any duplicates.

⬇

AGROVOC team at FAO reviews and comments on the file.

⬇

Curators work on the file.

65 pending keywords from Phase 1 work process

Target: submit 35 concepts in 3 months.

Next deadline: end of September 2022.

Thank you


CGIAR


Africa Rice Center
Centre du riz pour l'Afrique
AfricaRice


Alliance
Bioversity
International
CIAT


CIMMYT
International Maize and Wheat Improvement Center


CIP
INTERNATIONAL
POTATO CENTER
A CGIAR RESEARCH CENTER


ICARDA
Science for resilient livelihoods in dry areas


INTERNATIONAL
FOOD POLICY
RESEARCH
INSTITUTE
IFPRI


IITA
Transforming African Agriculture


ILRI
INTERNATIONAL
LIVESTOCK RESEARCH
INSTITUTE


IRRI


IWMI
International Water
Management Institute


WorldFish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