Food and Agriculture Organization of the United Nations

SUSTAINABLE DEVELOPMENT GOALS

AFRICAN COMMISSION ON AGRICULTURAL STATISTICS

28TH SESSION

4–8 December 2023

Johannesburg (South Africa)

AFCAS 28

LEVERAGING DATA & STATISTICS FOR AGRIFOOD SYSTEMS TRANSFORMATION IN AFRICA

AGENDA ITEM 9:

IMPROVING FOOD AND AGRICULTURE DATA DISSEMINATION

AFRICAN COMMISSION ON AGRICULTURAL STATISTICS

FAO Food and Agriculture Microdata Catalogue: Unlocking the power of microdata

Presenter:
Clara Aida Khalil
Office of the Chief Statistician
FAO.

Outline

- **Introduction:** disseminating agricultural microdata through FAM
- **FAM main features**
- **How Member countries can use the FAM**
- **A quick tour of the Catalogue**
- **Conclusions and recommendations**

Introduction:

- The **FAO and member states** increasingly **rely on microdata** for monitoring and evaluation, designing programs and interventions and assessing important development outcomes such as the SDGs.
- **Collecting microdata** through surveys and censuses is an **expensive endeavor** that can be justified by enhancing **data dissemination** and **data use**.
- Donors and development partners are often **conditioning resources and assistance on** the **dissemination** of collected microdata
- Disseminating microdata helps enhancing the **transparency** around the statistical production process and promotes **open data values**. In addition, it makes results and research **reproducible** by a larger audience, fostering the **credibility** of producing institutions.

The Food and Agriculture Microdata (FAM) Catalogue

- The **FAM** is the **corporate microdata dissemination platform** of the Food and Agriculture Organization of the United Nations (**FAO**).
- It was launched in **July 2019** with the initial support of the the **Bill and Melinda Gates Foundation**, and the **United States Agency for International Development**.
- As of today, it **documents** and **disseminates** the **microdata and/or metadata** related to **1314 surveys and censuses from 183 countries**

Types of studies in FAM

- **Category 1:** Studies submitted by **FAO's data providers** through a data deposit system. Data are disseminated as **licensed files** in most cases.
- **Category 2:** Studies submitted by **external data providers** (e.g. **NSOs**) via email. Data producers need to sign a **license to redistribute** form, authorizing FAO to disseminate the microdata and metadata. Data are disseminated as **licensed files**.
- **Category 3: Metadata harvested** from external and compatible platforms

FAM's Featured Collections

Agricultural Surveys and Censuses (423 studies)

Agricultural Censuses Metadata (126 studies)

Food Security (696 studies)

Nutrition (5 studies)

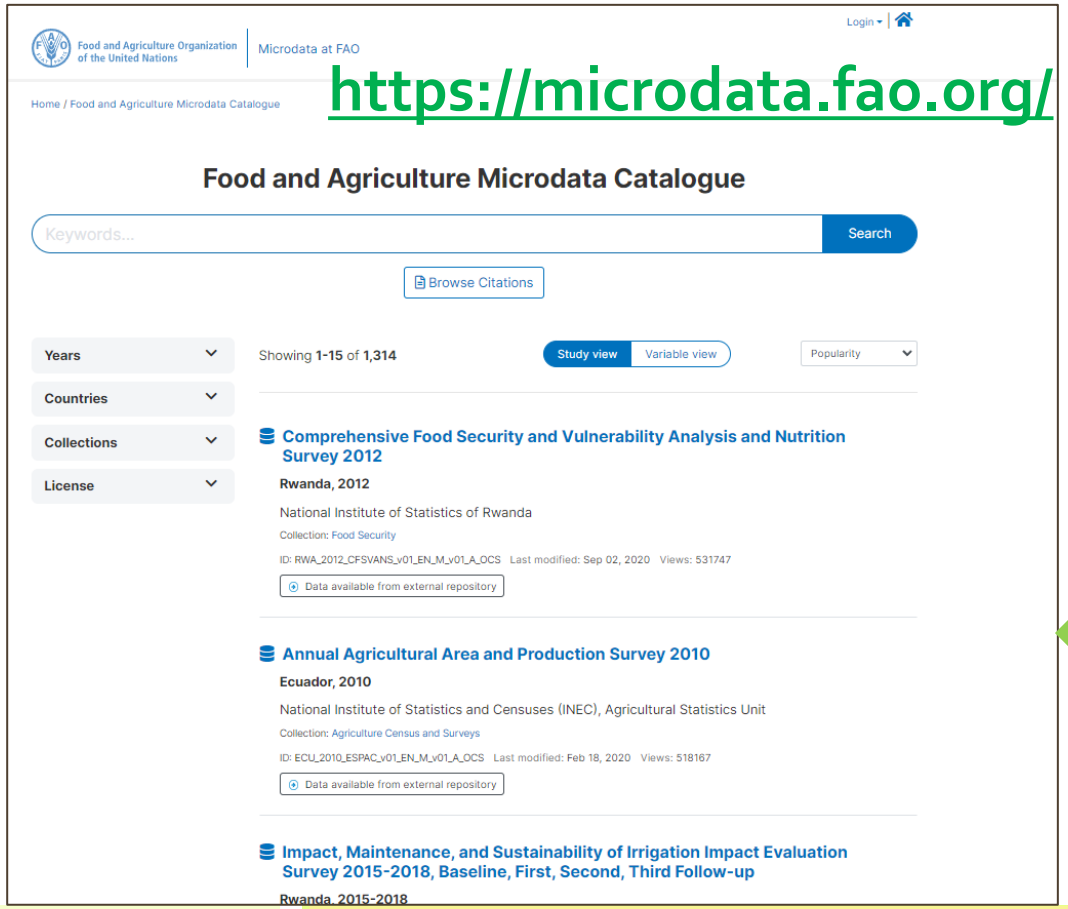
Data in Emergencies Monitoring Surveys (39 studies)

IFAD Impact Assessment Surveys (18 studies)

Forest Inventory Data (3 studies)

Fishery surveys (4 studies)

IT Platform and corporate standards

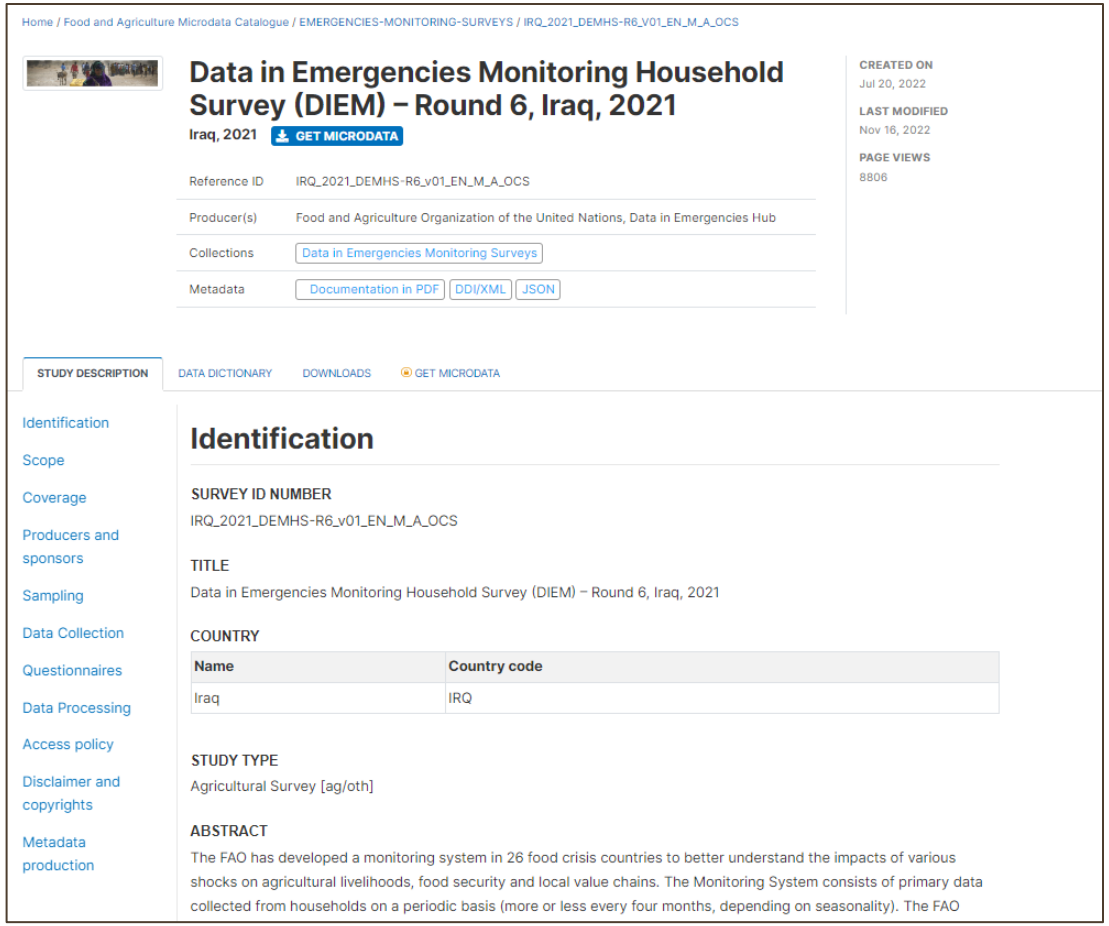


- The **FAM catalogue** follows well-known **international standards and best practices.**
- Internal workflow regulated by a **Corporate Quality Standard on Microdata Dissemination** and a clear legal framework for data dissemination and redistribution.

The Catalogue leverages on the National Data Archiving (NADA) platform, an open-source web-based application developed and maintained by the WB.

NADA is widely used by several NSOs and International Organizations

Metadata Standard



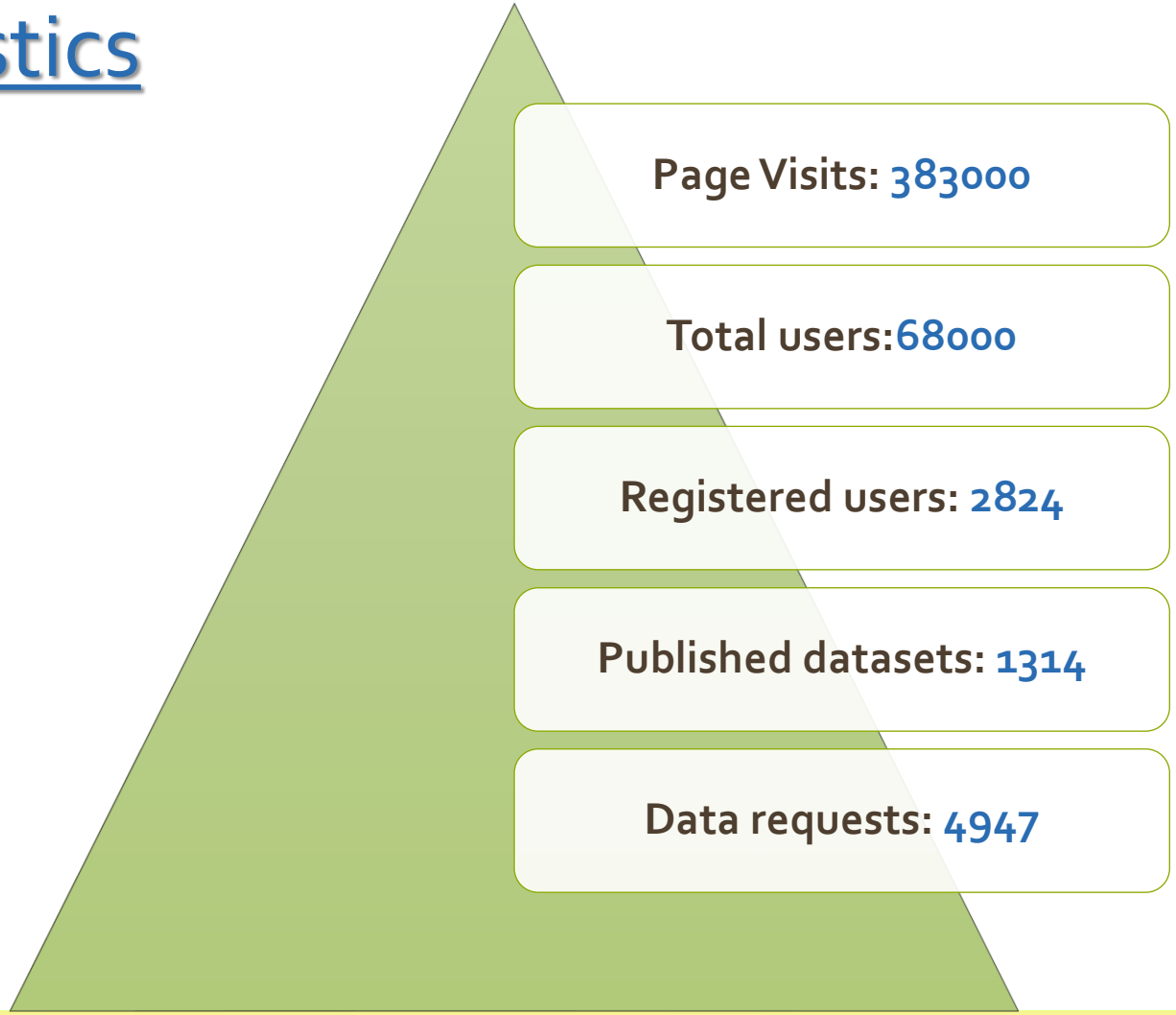
The **NADA platform** supports the use of the **Data Documentation Initiative (DDI)** metadata standard: XML-based international standard for microdata documentation.

In addition, the NADA uses the **Resource Description Framework (RDF) standard** for cataloguing and documenting related resources (datasets, questionnaires, reports, methodological documents)

Data Protection

- Most data collected by NSOs and International Organizations cannot be disseminated directly due to **confidentiality** and **privacy concerns**.
- Need to implement **Statistical Disclosure Control (SDC)** techniques: set of procedures to treat microdata files so that these can be published without disclosing the confidential information it contains, while limiting the information loss due to the anonymization process
- The FAO has developed a well-structured **SDC Protocol** regulating the anonymization of all microdata files disseminated through FAM. In addition, a Corporate Data Protection Policy is in place at FAO.

FAM Usage Statistics



How can FAM be useful to countries?

1) Disseminate or redistribute microdata

- FAM can disseminate countries' microdata **when no microdata dissemination platform is available** at country level.
- As a result of FAO's international profile and high visibility, the FAM is likely to **receive more traffic** than any single national platform. Accordingly, this makes microdata/metadata shared through FAM more visible.
- All of **FAM metadata are translated and presented in English** which makes it easier for users to find and use the data.

How can FAM be useful to countries?

2) Access studies from other countries/organizations

- Microdata and metadata produced by other countries can help **improving or designing national data collections**
- They provide an opportunity to **strengthen collaborations** and **south-south cooperation**
- Microdata from other countries with similar characteristics can be used to inform policy design through **comparative analysis of microdata from similar contexts**.

How can countries contribute to the FAM?

1) Disseminate metadata only

Step 1: A collaboration or communication is established between FAO and the data owner. No legal agreement is required.

Step 2: The FAM team in OCS harvests the DDI metadata from the national platform. In cases where the original metadata is not in English, the FAO translates the metadata document.

Step 3: The metadata is reviewed and published on FAM, along with the data dictionary and relevant documents.

Step 4: A link to the microdata on the national platform is provided, for users to access the data.

How can countries contribute to the FAM?

2) Disseminate microdata and metadata

Step 1: A legal agreement is established between the FAO and the external provider/national institution, using a license to redistribute form.

Step 2: OCS supports the country in preparing the dataset to meet well established quality standards and perform suitable SDC procedures.

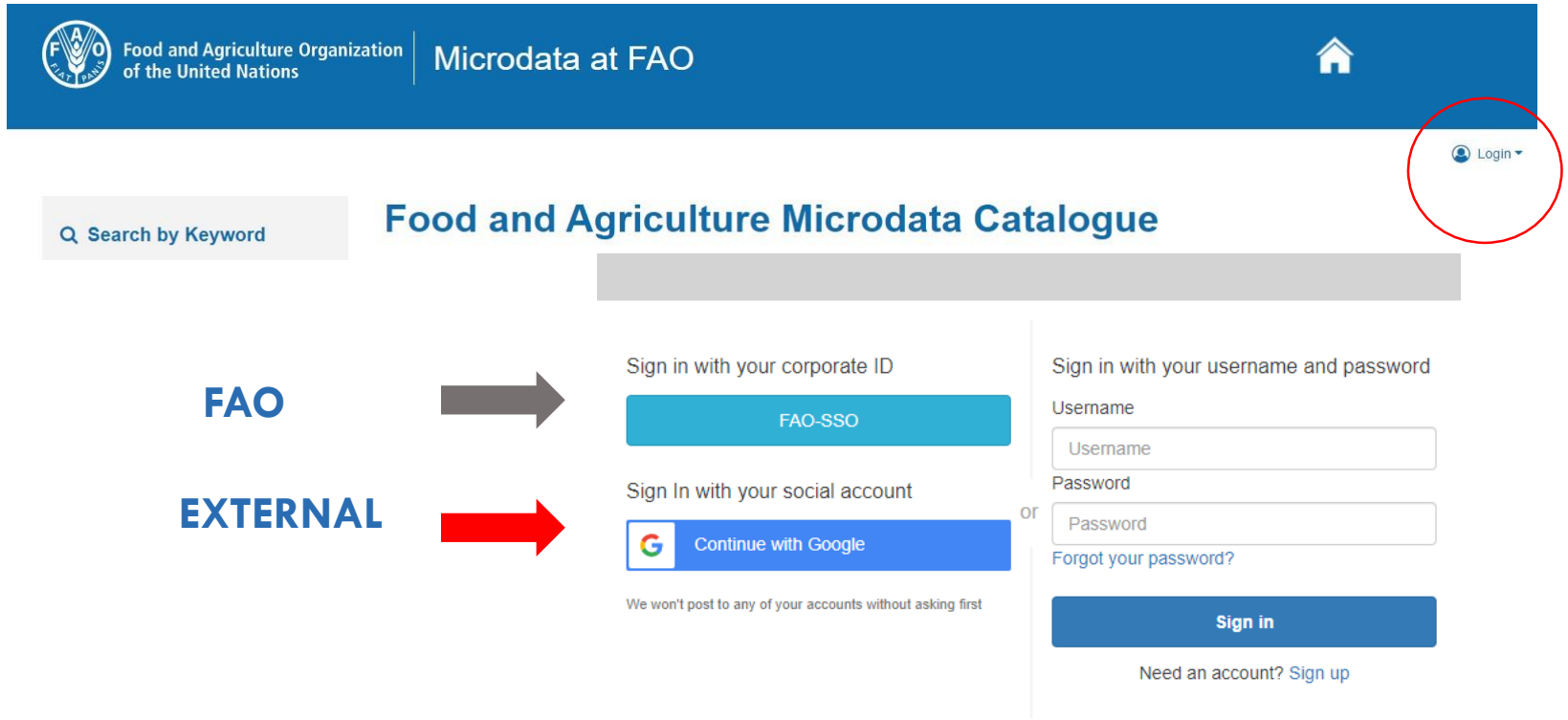
Step 3: OCS reviews the relevant documentation (e.g. methodological notes, reports, questionnaires, etc.) in order to develop a DDI metadata document.

Step 4: The DDI metadata document and anonymized microdata files are shared with the national institution for final review and validation.

Step 5: The study is published on FAM as licensed file, along with the relevant documentation.

How can countries contribute to the FAM?

3) Access microdata/metadata from other countries



Quick Tour of FAM Catalogue

https://microdata.fao.org

To show:

- Accessing FAM
- FAM filters and functionalities
- Exploring DDI metadata elements
- Downloading relevant documentation
- Requesting access to microdata on FAM
- Downloading microdata

Next steps

- Since its launch in 2019, the FAM catalogue has become a reference point for the dissemination of microdata related to food and agriculture.
- The Office of Chief Statistician has put in place different standards and protocols to guide the curation, anonymization and dissemination of microdata on the FAM Catalogue to make sure that microdata and metadata are disseminated in line with international standards and best practices.
- AFCAS Members are encouraged to take advantage and benefit from this activity, by disseminating or re-distributing their data in FAM, as well as exploring the data catalogue. Organizations that would like to contribute to FAM, can send an email to FAM-Catalogue@fao.org.
- OCS will also be in touch with countries that are currently disseminating microdata and in which a collaboration has not yet been established.

Questions and invitations to AFCAS Members

AFCAS Members are requested to express their views and recommendations to FAO on the following:

- The primary legal, political, and technical (e.g., IT infrastructure, anonymization, documentation) constraints for microdata dissemination, and the role that the FAO can play in helping to address them.

- Their perceived utility and relevance of the FAM catalogue, and their willingness to disseminate or redistribute their microdata and metadata through the platform with the support of FAO.

Thank you for your attention!

For further information, kindly visit: https://50x2030.org

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