*CFS POLICY RECOMMENDATIONS on STRENGTHENING FSN DATA COLLECTION and ANALYSIS TOOLS for FOOD SECURITY and NUTRITION*

**Zero Draft – 14 March 2023**

## RATIONALE

1. High-quality, timely and relevant Food Security and Nutrition (FSN) data are key to inform local, national and global actions that promote food security and better nutrition. Capacities to produce, interpret and use FSN data, and institutional arrangements that promote the use of data to guide FSN policy, are also essential. In line with the approved CFS Multi-Year Programme of Work (MYPoW) 2020-2023, the purpose of this document is to provide specific and actionable voluntary **policy recommendations for strengthening the capacities of actors involved in the collection, analysis, dissemination and the use of quality FSN data**. The overall goal is to contribute to the CFS vision of the progressive realization of the right to adequate food. The recommendations are informed by the CFS High-Level Panel of Experts on Food Security and Nutrition (HLPE-FSN) Report 17 "Data Collection and Analysis Tools for Food Security and Nutrition: towards enhancing effective, inclusive, evidence-informed decision making" (2022).

2. Data refers to any set of codified symbols representing units of information regarding specific aspects of the world that can be captured or generated, recorded, stored, and transmitted in analogue or digital form. For the purpose of these policy recommendations, **Food Security and Nutrition data** is defined as data that describes and/or measures individual food security and nutrition outcomes and/or provides evidence and promotes understanding of micro-, meso- or macro-level determinants influencing these outcomes across the dimensions of FSN: availability, access, utilization, stability, with consideration of evolving discussions regarding agency and sustainability.

3. This definition recognizes the importance of different types of data, qualitative as well as quantitative, and of adopting a **systemic view for FSN data**, which highlights the fundamental roles of actors spanning the food system, from producers to consumers, in the production and assessment of relevant FSN data.

4. It is important to note that extensive **FSN data already exists,** at least for some dimensions of food (in)security, albeit with varying degrees of quality and granularity. However, they are often not accessible nor properly utilized by policymakers, who are often unaware of the existence and relevance of such data. Data relevant to inform FSN policies are often housed across diverse sectors and organizations and may not be intuitively linked to FSN. As a result, decision-makers face challenges at each step of the data cycle.[1]

5. **Fundamental data gaps still exist** to effectively guide action and inform policymaking, especially timely and sufficiently granular data on people's ability to locally produce and access food, on their actual food and nutrient consumption, and on their nutritional status. More data and information from actors across the food system that shed light on the structural determinants of FSN, and on the FSN

[1] The data cycle comprises the following steps: defining priorities and data needs; reviewing, consolidating, collecting and curating data; analyzing the data using appropriate tools; translating data into relevant insights to be disseminated and discussed; and, finally, using data for decision-making.

of specific vulnerable population groups and geographic regions, are also needed. Each country will have different data priorities, depending on their particular FSN context.

6. Several other constraints limit the effectiveness of data-informed policy action on FSN, especially in developing countries. Key among them is the **low level of data literacy and analysis skills** (for both qualitative and quantitative data) on the part of data and information producers and users at all levels – from data collectors and analysts, to decision-makers, and to the people, as rights holders and the ultimate beneficiaries of food security and nutrition policies. Developing countries need financial and technical support to strengthen their capacities to generate high-quality data, analyze it and use it to guide decision-making related to FSN.

7. FSN data are often fragmented across different international agencies, government sectors, public and private institutions, and they may be collected or managed using different protocols, making them difficult to use. Therefore, it is a priority to strengthen national and international coordination efforts to define, promote and enforce the adoption of **global FSN data (and associated metadata) standards**, including a concerted effort to harmonize indicators, which will be essential for comparison and to obtain the full potential of data. Better coordination and harmonization can improve the quality and utility of FSN data and statistics, while creating synergies and avoiding duplication of efforts and confusion when communicating information. Harmonization is particularly relevant for FSN data and statistics that are used for global or regional analyses and monitoring.

8. The number of state and non-state actors that play a role in FSN data collection and use is growing exponentially. FSN data systems must be underpinned by clear principles, governing frameworks, and effective processes to ensure that FSN data is collected, used and shared in ways that are effective, inclusive, transparent, ethical, and equitable. The HLPE-FSN report 17 underscored our collective responsibility to ensure that **people are at the heart of decisions about data.** This means that people have a say in data design and collection that affect their lives and are included in decisions related to data use and re-use.

9. The complex array of public and private actors and institutions involved in FSN data, coupled with the rapidly changing data ecosystem due to the proliferation of the internet and mobile telephony, and the emergence of big data and advanced methods of data capture, storage, and analytics (including machine learning and Artificial Intelligence - AI), as well as the fast pace of technological innovations, brings to centre stage the need for **global coordination to improve data governance**. It is important to recognize the nature of FSN data and information as a public good *that is widely accessible, broadly circulated and used in the public interest*, while at the same time preserving the rights of the people to whom the data ultimately belong and taking steps to address imbalances in power among actors with respect to generating, accessing and using data. These urgent data governance issues are not unique to FSN data, and efforts are already well underway towards building the foundations for a global framework for data governance that strikes the right balance between data access and sharing, on the one hand, and data protections and control, on the other. Such efforts can serve as guidance for developing national data governance frameworks, adapted to local contexts.

10. These policy recommendations are addressed to Governments (relevant ministries, national, regional and local authorities and institutions), international organizations[2], international financial and FSN research institutions, private sector associations, philanthropies, and civil society organizations. They are voluntary and non-binding and aim to complement voluntary guidance from other CFS policy agreements.

## RECOMMENDATIONS

### 1. CREATE GREATER AWARENESS AND DEMAND FOR BETTER USE OF FSN DATA IN DECISION-MAKING

#### Governments are urged to:

a) establish – or strengthen where it already exists - effective national **multi-sectoral and multistakeholder FSN governing bodies** responsible for guiding FSN policy and programme planning linked to national development planning, and for **setting national priorities for FSN data production** to inform these policies. Such bodies should have mechanisms to ensure that civil society and vulnerable population groups have an active and well-defined role in determining priorities.

b) promote and facilitate **dialogues and cooperation** among a broad range of relevant stakeholders at the national and sub-national levels, facilitated by the aforementioned multi-sectoral FSN governing bodies, in order to **1) discuss FSN data priorities,** identifying what is already available and what are the most urgent needs; **2) stimulate analysis of existing data** to produce information that is relevant for FSN policies and programmes.

c) conduct cost-benefit analyses - with the support of donors, international organizations and academia - to assist policymakers to **estimate the trade-offs of making decisions using FSN data from varying sources**.

d) whenever data is used to inform FSN-related legislation and policy proposals, include **detailed data annexes**, presenting **available data sources** and the **analytic tools** to be used for their treatment.

e) promote the regular production and dissemination, by government units that collect FSN data, of succinct knowledge products that summarize the main findings resulting from government data collection initiatives in formats that facilitate the use and uptake of information by decision-makers.

#### International organizations are called upon to:

f) lay out **good practices for FSN data priority setting** guided by **frameworks for data decision-making**;

g) develop practical guidelines on **data-informed ex-ante and ex-post policy evaluation** in the FSN domain for national-level policymakers and administrators.

h) develop and promote, in collaboration with national and international training institutions, and based on needs assessments, **e-learning and continuing education courses about FSN data utilization**

[2] Throughout the document, *international organizations* refer primarily to the UN Rome-based Agencies and other inter-governmental organizations with a mandate related to food security and nutrition.

**and governance for policymakers** to inform FSN policy and programme planning, including how to use the data for producing diagnostics and analysis to identify policy bottlenecks and priorities.

## 2. INCREASE AND SUSTAIN INVESTMENT IN THE COLLECTION AND QUALITY ENHANCEMENT OF PRIORITY DATA FOR FSN, WHILE OPTIMIZING AND/OR REPURPOSING CURRENT DATA-RELATED INVESTMENTS

### Governments are urged to:

a) **increase and sustain investment in the production of timely, high quality, sufficiently disaggregated, reliable and consistent FSN data,** with the support of international organizations and donors as needed, on people's ability to produce and access food, on their actual food consumption and diet, and on their nutritional status, particularly of the most vulnerable groups (e.g. children, youth, women, elders, family farmers and small-scale food producers, indigenous peoples, displaced people), and other national priority data. Investments in FSN data should reflect a good balance between data for development and data for emergencies, according to national needs.

b) **elaborate national plans to define priorities for FSN data collection and analysis** and to improve and optimize existing national data systems for FSN, guided by the aforementioned multi-stakeholder FSN governance bodies, dialogue processes and cost-benefit analyses. Governments that require assistance in implementing these plans should be supported both technically and financially by international organizations and donors, and their plans should be aligned with international standards, while preserving country ownership.

c) regularly **review existing national data-collection systems relevant for FSN** with the aim of identifying opportunities to streamline and modernize them, and enhance their efficiency and relevance, according to international standards.

### International organizations are called upon to:

d) form an inclusive **task team of UN agencies and other stakeholders**, under FAO and WHO leadership, responsible for producing **guidelines outlining a minimum set of core FSN data** that countries should strive to collect, with respective recommended methodologies and indicators to be produced.

### International organizations and academic research institutions are urged to:

e) continue and accelerate **innovation in the areas of statistics, data science and survey-based research** to address FSN questions;

### International organizations, donors, governments and philanthropies are urged to:

f) **increase and sustain** the amount of **resources** that are allocated to improve FSN data collection, quality enhancement, analysis, dissemination and use to improve the effectiveness of FSN-relevant policies, leveraging existing financing mechanisms and assessing and re-purposing existing funding as needed. In line with a recent pledge for increased investments in data financing[3], donors should aim at allocating a minimum of 0.8% of their development investment to data, with a dedicated share

[3] One recent pledges is the Data for Purpose campaign: https://datawithpurpose.org. See: https://static1.squarespace.com/static/62669c6628ceed259712c4dd/t/632bc074fbb93c5c571ba8e3/1663811700575/Investment+case_Multiplying+progress+through+data+ecosystems_vFINAL.pdf

allocated to FSN data. Investments in FSN data must reflect a good balance between data for development as well as data for emergencies, according to national needs.

g) **improve coordination of investments** aimed at supporting FSN data in order to avoid duplication of efforts, improve efficiency, and maximize synergies.

h) consider establishing a **Global FSN Data Trust Fund**, to which governments of eligible countries and other stakeholders (including, for example, communities and organizations of Indigenous Peoples) can apply to obtain financial support to generate and benefit from FSN data.[4] At the same time, continue to support existing FSN data collection funding initiatives, with a vision that such initiatives might be integrated into the Global FSN Data Trust Fund.

**International organizations, governments, civil society, academia, and the private sector are urged to:**

i) increase the collection, quality enhancement, analysis, and use of **multiple forms of FSN data**, beyond quantitative and machine-readable data, such as qualitative data. This implies valuing and applying **multiple approaches** to information collection, including participatory, qualitative methodologies that are already used by communities, including indigenous communities.

## 3. INVEST IN HUMAN CAPITAL AND IN THE NEEDED INFRASTRUCTURES AND TECHNOLOGIES TO ENSURE THE SUSTAINABILITY OF DATA PRODUCTION CYCLE AND ANALYTIC CAPACITY

**Governments are encouraged to:**

a) **modernize national statistics system infrastructures** in order to establish comprehensive, coordinated FSN data systems and to sustain the collection and quality of disaggregated and detailed data over time, with **technical and financial assistance from international organizations and donors as needed.**

b) **hire and invest in building the capacities** of statisticians, data scientists and experts in the analysis and interpretation of quantitative and qualitative FSN data to work in relevant ministries and national statistic offices; and incubate analytical units within relevant ministries.

c) **expand training opportunities for staff in national statistics offices and other government units engaged in FSN data analysis**, with support from international organizations as needed, to enhance their analytic competencies, including use of open-source software;

d) create targeted **scholarship programmes** to allow young people, especially women, to study in scientific programmes related to FSN that have a strong data focus (quantitative and qualitative), as well as data science and statistics.

**Governments, international organizations, donors, private sector; civil society; and academic research institutions are urged to:**

[4] Financial support from the Global Trust Fund could be used, for example, to establish FSN data plans, conduct FSN assessment surveys for specific communities, create and own data dissemination platforms, among other non-profit-oriented activities.

e) **invest in further refinement, validation and application of cost-saving data collection approaches**, such as integrated survey programmes, remote sensing, natural resource scanning by drones and digital data collection tools. Tools and technology that streamline and simplify data collection while improving data quality (computer-assisted data collection tools) should be used and promoted at all levels, within the context of adequate data governance and proper regulation of the use of the data collected.

**Governments, international organizations and academic research institutions are urged to:**

f) **improve existing analytic models** and develop new ones to be employed in various areas of relevance for FSN decision-making. Especially relevant are **validated model-based approaches** to forecast future values of FSN determinants and outcomes. Such models should be **transparent**, with good quality training data, and flexibly implemented so that they can generate predictions under clear, alternative scenarios.

g) develop, in collaboration with national and international training institutions, **e-learning materials** that focus on FSN data collection, quality control, analysis, interpretation and communication of results for specific types of FSN data and methodologies; materials should promote an integrated understanding of the relationship between the different types of data and resulting indicators – i.e. a systems perspective.

h) **eliminate language barriers** by expanding the set of languages in which FSN e-learning courses and relevant FSN data platforms and analysis tools are offered.

i) establish **criteria for assessing the quality of e-learning materials for FSN statistics and data science** and create a framework providing objective quality assessment and ranking of existing, open-access, on-line learning opportunities, to identify the best, up-to-date courses and draw attention where quality improvement is needed.

**International organizations are urged to:**

j) **support the often relatively scarce local capacities** by making all efforts to work closely with professionals from national public institutions whenever the need exists to collect and analyse FSN data at national and subnational levels.

## 4. INCREASE COLLABORATION AMONG ALL PARTIES TO HARMONIZE METHODS, IMPROVE FSN DATA QUALITY, AND PROMOTE THE SHARING OF FSN DATA FOR THE PUBLIC GOOD

**Governments and international organizations are called upon to:**

a) form **a joint commission**, with the inclusive collaboration of relevant sectors and stakeholders, **to promote the standardization, coherence, and interoperability of FSN data and data platforms**, aimed at harmonizing methods and indicators, and facilitating the sharing of FSN data while always respecting data privacy and Free Prior and Informed Consent.

b) advocate for the inclusion of FSN data as a statistical domain inside the UN Statistical Commision, in which the standarization of methods and concepts can be discussed in an intergovernmental setting.

c) **publicly disseminate** macro, micro and metadata that is relevant to FSN, in order to increase access for policy and research purposes, respecting confidentiality and data privacy, based on the Fundamental Principles of Official Statistics[5] and the Principles Governing International Statistical Activities[6], and in conformity with national laws and regulations.

d) promote the **use and integration of FSN data from multiple sources** (including private sector and data produced by communities and civil society organizations) and **multiple sectors** (e.g. food, agriculture, health, nutrition, social development, environment, budget and planning, etc.) related to FSN.

e) increase collaboration on sharing of **data on international trade of food and agricultural products, and on trade policies**, including through strengthening of instruments such as the Agricultural Marker Information System (AMIS).

**International organizations responsible for producing key FSN data are called upon to:**

f) **coordinate the release of datasets and knowledge products**, avoiding the publication of competing datasets and reports on important FSN domains (such as food commodity balances, food prices and market prospects, and food security assessments).

## 5. ESTABLISH OR STRENGTHEN FSN DATA GOVERNANCE AT GLOBAL, REGIONAL, NATIONAL AND SUB-NATIONAL LEVELS

**Governments are urged to:**

a) establish, in collaboration with all stakeholders involved, a national **FSN data governance system** with a regulatory framework, that: 1) is anchored in the Universal Declaration of Human Rights and consistent with UNDROP[7] and UNDRIP[8]; 2) respects the rights/principles of: ethics in the production and use of data; transparency and accountability; privacy; protection of personal data; quality and integrity; participation; freedom of expression; and informational self-determination; 3) promotes open data while at the same time protecting data privacy and promoting fairness, inclusion and equitable distribution of benefits when it comes to the collection, processing, dissemination, use and management of FSN data; and 4) is informed by emerging international data governance frameworks.

b) treat **agriculture and FSN data as a public good and "open by default",** as recently endorsed by the UN Statistical Commission,[9] to increase the availability of FSN data, address data gaps in national and international systems, and to support efforts to monitor achievement of the Sustainable Development Goals.

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[5] https://unstats.un.org/unsd/dnss/gp/FP-Rev2013-E.pdf General Assembly resolution (A/RES/68/261), adopted on 29 January 2014

[6] https://unstats.un.org/unsd/accsub/2013docs-22nd/SA-2013-8-FP-UNSD.pdf

[7] United Nations Declaration on the Rights of Peasants and Other People Working in Rural Areas

[8] United Nations Declaration on the Rights of Indigenous Peoples

[9] https://unstats.un.org/unsd/statcom/53rd-session/documents/2022-41-FinalReport-E.pdf (Decision 53/126)

**Governments, international organizations, research institutions, civil society and the private sector are called upon to:**

c) ensure that **FSN data comply with existing open-access principles for data and analysis tools** (such as FAIR principles - findable, accessible, interoperable and reusable[10]), ensuring access to and reproducibility of relevant research results, while at the same time protecting data privacy and promoting fairness, inclusion and equitable distribution of benefits when it comes to the collection, processing, dissemination, use and management of FSN data; continually adapt to enhance data access, as open-access principles and guidance evolve.

d) explore the adoption of the **principles of inclusivity, equity, non-discrimination and participation**, freedom of expression, and self-determination of data (such as the CARE principles – collective benefit, authority to control, responsibility, ethics[11]) and how to apply them to FSN data.

e) explore ways to **improve legal frameworks that protect sensitive FSN data and privacy**, developing accountability systems for their implementation.

**International organizations are called upon to:**

f) ensure that governance of their own FSN data complies with emerging international data governance frameworks.

**The private sector is urged to:**

g) **share FSN data and analytics with the public sector for policy and research purposes,** exploring mechanisms such as data trusts to make their FSN data more promptly and widely available**.**

## PROMOTION, IMPLEMENTATION, MONITORING and EVALUATION

In accordance with the voluntary nature of these policy recommendations, Member States have the primary responsibility for their promotion, implementation, monitoring and evaluation. Development partners, specialized agencies and programmes of the United Nations, international financial institutions, academic research institutes, private sector, philanthropies and civil society organizations are encouraged to support efforts by Member States to implement these policy recommendations, including through South-South and Triangular cooperation.

[10] Wilkinson, M.D., Dumontier, M., Aalbersberg, I.J., Appleton, G., Axton, M., Baak, A., Blomberg, N. et al. 2016. The FAIR Guiding Principles for scientific data management and stewardship. Scientific Data, 3(1): 160018. https://doi.org/10.1038/sdata.2016.18

[11] https://www.gida-global.org/care