

**DInA**

Micronutrient Data Innovation Alliance



**Data  
DENT**

Data for Decisions in Nutrition

# Micronutrient Data in a Changing Landscape: Impacts, Opportunities, and a Collective Way Forward

## Meeting Summary

Date: June 13, 2025 | Time: 10:30–16:30 CEST | Location: Ispra, Italy & online

## Suggested citation

Micronutrient Data Innovation Alliance (DInA) and Data for Decisions in Nutrition (DataDENT). *Micronutrient Data in a Changing Landscape: Impacts, Opportunities, and a Collective Way Forward. Meeting Summary*. Washington, D.C.: Micronutrient Forum; 2025.

Micronutrient Forum

Micronutrient Data Innovation Alliance (DInA)

1201 Eye St. NW, 10th Floor

Washington, DC 20005-3915 USA

Email: [DInA@micronutrientforum.org](mailto:DInA@micronutrientforum.org)

Web: [www.micronutrientforum.org/micronutrient-data-innovation-alliance/](http://www.micronutrientforum.org/micronutrient-data-innovation-alliance/)

Data for Decisions in Nutrition (DataDENT)

Email: [info@datadent.org](mailto:info@datadent.org)

Web: [Data for Decisions in Nutrition \(DataDENT\)](http://Data for Decisions in Nutrition (DataDENT))

# Table of Contents

- Introduction..... 1
- Meeting objectives..... 2
- Session summaries ..... 2
  - Overview of the micronutrient data value chain ..... 2
  - Identifying micronutrient data priorities across the data value chain ..... 4
  - Impacts of funding cuts across the data value chain..... 5
  - Global stakeholder actions to support micronutrient data..... 7
  - Advances and innovations in data initiatives and partnerships..... 10
  - Designing a collective action plan ..... 14
  - Next steps ..... 16
- Conclusion ..... 17
- References..... 18
- Annexes..... 19

## Introduction

Micronutrient malnutrition is a major contributor to increased child morbidity and mortality, impaired growth and mental development, infectious and chronic disease, and a loss of human potential.<sup>1</sup>

Micronutrient interventions are among the most cost-effective and impactful solutions to reduce the global burden of malnutrition.<sup>2,3</sup> Timely, accurate, and actionable data are critical for designing, implementing, and monitoring these interventions.

In recent years, donor investments in primary data collection and modeling have improved the availability of data on micronutrient status, intakes, and intervention coverage in multiple countries. However, these investments have not been sufficient to meet the needs of the many countries that still lack recent national and subnational population-level data related to micronutrients. Surveys that collect gold standard data on micronutrient biomarkers are expensive and complex to implement, leading some countries to rely on alternative data sources, such as clinical or consumer data. Recent cuts in foreign aid, including loss of the Demographic and Health Survey (DHS) program, which served as a primary source of nutrition data across most low- and middle-income countries (LMIC), threaten gains in micronutrient data availability and use. Now more than ever, there is a need for effective stakeholder coordination, communication, and action to ensure the right data reaches the right end users at the right time and with the right frequency to make policy and program decisions and ultimately, to improve health outcomes for groups vulnerable to malnutrition, like women and children. We can revisit and refine established methods and consider new approaches to generating essential data on micronutrient status,



### Key messages

- ✓ Despite foreign aid cuts, participants' activities in and commitment to improving the micronutrient data value chain (DVC) remain strong.
- ✓ Innovative solutions to fill micronutrient data gaps show promise, like WFP's MIMI project, Uganda's use of existing biological specimens for biomarker analysis, and Ethiopia's use of various multisectoral data sources. However, more effort is needed to fill gaps, especially in primary data collection, given the loss of The DHS Program.
- ✓ Competition for scarce resources, lack of country capacity along elements of the DVC, and the nutrition community's inability to communicate nutrition data's relevance to multiple sectors are obstacles to strengthening the DVC.
- ✓ Agreed priorities around advocacy, capacity, coordination, research, human resources and funding, coupled with short- and long-term actions and opportunities for collaboration, provide a firm foundation upon which to overcome challenges and build the collective action plan for strengthening the micronutrient DVC.

nutrient intake, intervention coverage and regulatory monitoring and supply chain data from population-based surveys, surveillance systems, routine information systems and modeling.

To take stock of how donor funding cuts have and may continue to impact micronutrient data and its use, and to leverage and build upon the June 10-12 workshop "Breaking Down Silos: Unifying Humanitarian and Development Efforts through Nutrition Information Systems" sponsored by the European Commission (EC) Joint Research Center (JRC) and partners, the Micronutrient Forum's Micronutrient Data Innovation Alliance (DInA) and the Data for Decisions in Nutrition (DataDENT) project led by Johns Hopkins Bloomberg School of Public Health convened a hybrid stakeholder meeting in Ispra, Italy on Friday, June 13, 2025. Thirty-eight participants, including country and regional actors, United Nations (UN) partners, non-governmental organization (NGO) and institute staff, academics, and donors joined and shared their perspectives on micronutrient data losses and priorities, current stakeholder actions considering the pullback in donor funding, and innovations and key actions for moving forward to fill gaps along the spectrum from micronutrient data collection to use (see Annex A. Agenda; Annex B. List of participants). The overarching goal of the meeting was to lay the groundwork for the development of a collective action plan on micronutrient data priorities.

## Meeting objectives

1. Assess the impact of funding cuts across the micronutrient data value chain (DVC), including data generation, data innovations, data use capacity, and availability of technical assistance.
2. Identify and prioritize cost-effective and sustainable approaches to support micronutrient DVCs that directly support policy and program objectives in low-and middle-income countries, including existing and novel solutions.
3. Initiate the process of drafting a collective action plan to strengthen the micronutrient DVC.

## Session summaries

### Overview of the micronutrient data value chain

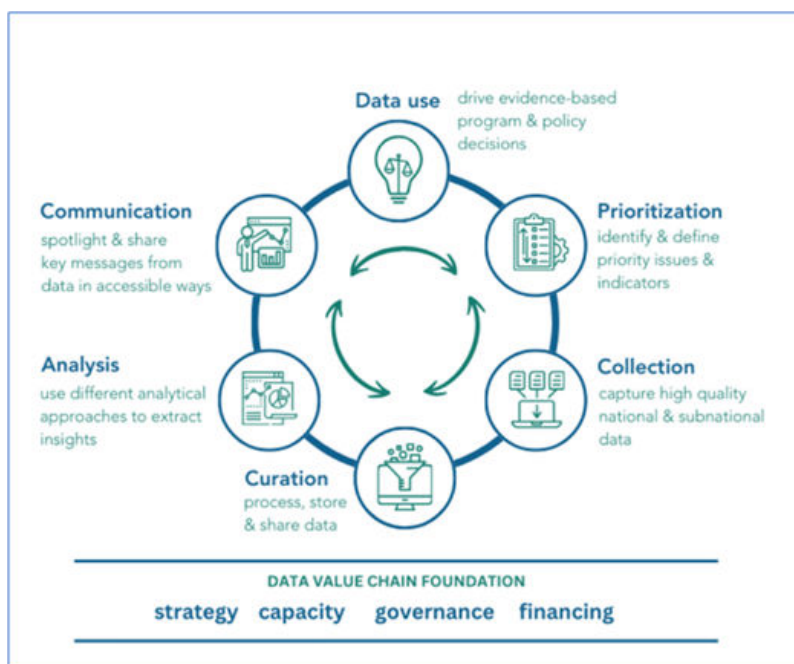
**Presenter:** *Martin Mwangi*

Micronutrient data is the foundation for policies, programs, funding decisions, and ultimately, to improve health outcomes for groups vulnerable to malnutrition. However, there have been serious gaps in the availability and quality of micronutrient data, which include biomarkers of micronutrient status, dietary intake, individual or household-level intervention coverage, and regulatory monitoring and supply chain data. When data is available, they are often under analyzed and poorly underutilized for policy guidance. There is increasing demand for data at subnational levels for more localized decision making, as well as data on a growing number of

micronutrients. Given the current funding cuts and growing data gaps and policy pressures, more than ever there is a need to maximize the value of available data.

The nutrition data value chain (DVC) shows the process from data prioritization to data use to guide policy and program action (Figure 1. DataDENT 2025).<sup>4</sup> The nutrition DVC serves as a useful framework and point of reference for the meeting discussions. The cyclical framework begins and ends with data use, reinforcing the idea that the needs of decision makers should ultimately guide data prioritization and investment in the subsequent DVC elements, including collection to curation, analysis, and communication, and should ultimately lead to better use of data.

Figure 1. Nutrition data value chain



"We need to be smarter and more innovative and we need to be intentional with collection and use of the data. The opportunity lies in choosing high-impact data, employing innovations, strengthening curation, and focusing on clear communication for policy use."

*Martin Mwangi  
Micronutrient Forum, Healthy Mothers Healthy Babies*

The DVC elements are:

- **Prioritization:** Choosing and clearly defining the most crucial indicators to maximize policy and program impact, which is especially important when funding is limited. Governments, donors, and other stakeholders must align data priorities with their goals and budgets and work to avoid duplication of efforts.
- **Collection:** Focusing on collecting high quality data while also innovating in efficiency and cost containment. Although population surveys may still be needed in some circumstances such as to measure micronutrient status, it is also important to leverage alternative data sources, such as clinical, administrative, or routine data.
- **Curation:** Ensuring data is cleaned, standardized, and accessible to all potential users. Collaborative data dictionaries and data standards including coding are

potential ways to improve interoperability among data sources and to facilitate data sharing.

- **Analysis:** Deriving actionable insights from data e.g., indicators and stratification by key demographics, modeling, small area estimates, and artificial intelligence.
- **Communication:** Providing stakeholders with clear, actionable messages in formats tailored to their needs, e.g., dashboards, policy briefs, and data stories. Effective communication converts the data into powerful decision tools and underpins data-informed policy and programming.
- **Use:** Informing policy, tracking progress, and guiding program design and implementation. If data are not used, the investment in their collection is wasted. Data must be aligned with policy cycles and timing of key decision points to maximize their impact.

In summary, in a landscape of funding cuts and growing policy pressures, there is a need to maximize the efficiency and impact of data through an optimized DVC that provides a strong foundation for cost-effective investments and policy decisions in micronutrient programs.

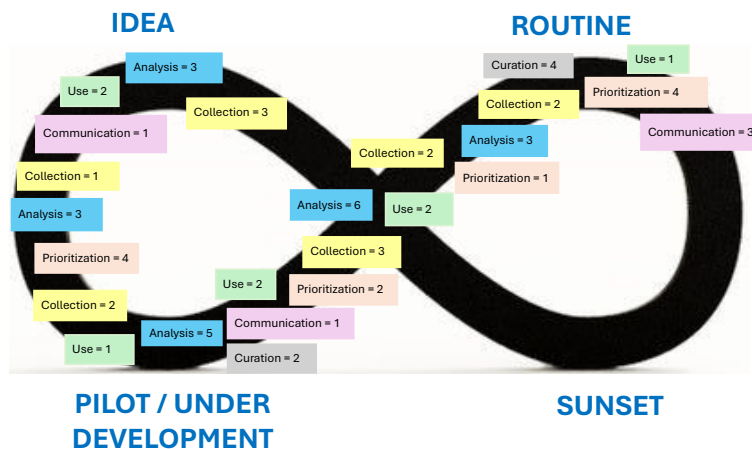
PowerPoint presentation for this session: [Overview](#)

## Identifying micronutrient data priorities across the data value chain

*Facilitator: Rebecca Heidkamp*

Current priorities across the micronutrient DVC are reflected in what stakeholders are actively doing. During the meeting, thirteen participants shared a December 2024 (pre-funding shifts) snapshot of up to five of their work activities along a figure representing a continuum, from the idea or early development stage of work to the pilot/active development stage, to routine work that is being regularly implemented, to "sunset" activities that are being phased out. In Figure 2, activities are characterized by their stage and where they fit within the micronutrient DVC.

Figure 2. Participant activities categorized in micronutrient data value chain elements and a continuum from "Idea" to "Sunset" stage



Most activities were in the categories of pilot/under development to routine, with a few also in the ideas stage, and none in the sunset stage. Examples of activities in the ideas stage included leveraging clinical biological samples for micronutrient biomarker analysis, modeling the incremental contribution of micronutrient interventions, geospatial analysis of micronutrient biomarker data, and building integrated data systems. Activities in the pilot or development stage included, for example, piloting tools and developing new statistical methods, monitoring systems, and guidelines for iodine status thresholds. Routine activity examples were updating micronutrient databases, supporting data use for subnational intervention planning and targeting, conducting coverage surveys, and supporting countries to develop costing analysis of micronutrient programs.

All the elements in the micronutrient DVC are important because each element adds value and prepares the data one is collecting for eventual policy use. In reviewing activities along the micronutrient DVC, the largest number of activities identified by participants (20) fit into the "analysis" element of the micronutrient DVC, such as modeling micronutrient intake using household consumption and expenditure survey data, assessing predictors of folate status, and developing machine learning models. Fewer activities involved supporting prioritization of data or indicators (11) data collection (13), data curation (6), communication (5), and data use (8). The full list of actions can be found in Annex C.

This brief exercise highlights areas where participants were actively working along and contributing to strengthening elements in the micronutrient DVC, such as prioritization, collection, and analysis, and areas where there might be room for more focus, such as curation, communication, and use. Most of the 13 participants contributing to this exercise were UN, university, or NGO staff. Obtaining more information from country- and regional-level stakeholders would be important to explore further as part of the development of a collective action plan on micronutrient data priorities.

PowerPoint presentation for this session: [Micronutrient data priorities across the DVC](#).

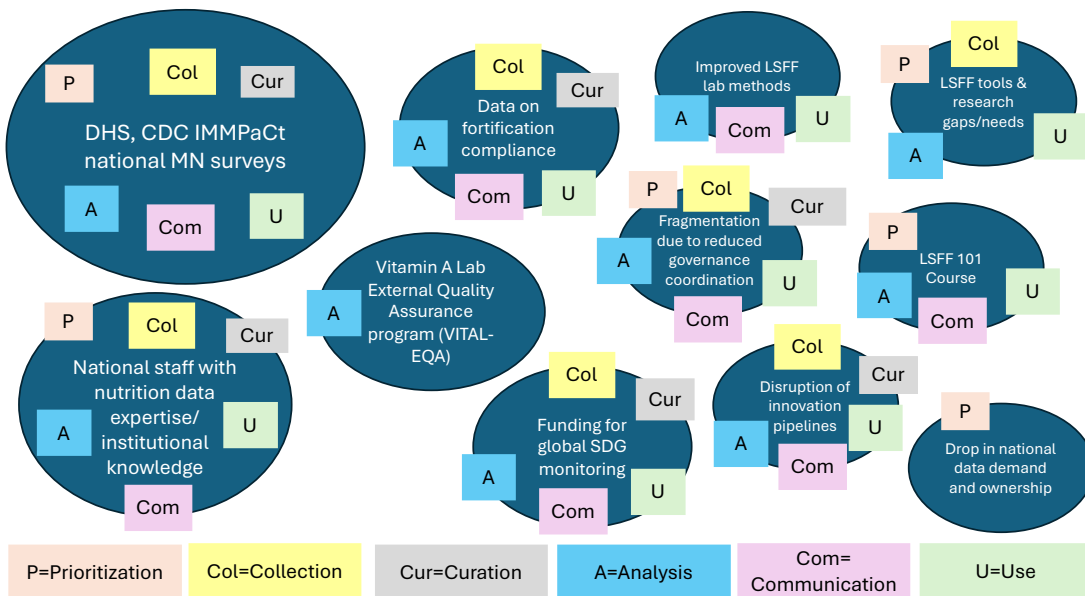
## Impacts of funding cuts across the data value chain

**Facilitator:** Sorrel Namaste

Meeting participants have experienced the impact of the early 2025 foreign aid funding cuts on micronutrient data in different ways. Seven (7) participants shared their perspectives on what has been lost across the micronutrient DVC, and also considered potential solutions to fill data gaps, (Figure 3). Most individuals mentioned the loss of the Demographic and Health Surveys (DHS) and uncertainty around the future of micronutrient surveys supported by the U.S. Centers for Disease Control and Prevention (CDC) International Micronutrient Malnutrition Prevention and Control (IMMPaCt) group. Several participants mentioned the loss of national and global staff with nutrition data expertise and significant institutional knowledge. A few participants also mentioned losses to the large-scale food fortification (LSFF) DVC, some of which were specific

to cancelled US Agency for International Development (USAID) LSFF activities, as well as general losses to governance, local ownership, and innovation. Most losses affect several if not all micronutrient DVC elements, resulting in lack of data for timely national-level policy and program decision making or global monitoring. Lost capacities in micronutrient data collection and management, whether for surveys, administrative data, LSFF, laboratories, or research, have a negative impact on generating innovations to promote data use.

Figure 3. Micronutrient Data Value Chain losses, and elements in the value chain affected\*



\*Larger oval and font size indicate higher number of individuals who mentioned the loss.

Overcoming these challenges could involve improved collaboration with partners managing ongoing survey programs like the World Bank Living Standards Measurement Study (LSMS), UNICEF Multiple Indicator Cluster Survey (MICS), Gallup World Poll, or national agriculture or market surveys, to incorporate nutrition indicators or triangulate data. In addition, it could include liaising with initiatives such as the UN Inter-Secretariat Working Group on Household Surveys (ISWGHS) to revitalize the DHS and to continue advocacy for inclusion of micronutrient indicators. Innovations in data curation could create efficiencies, such as use of biological samples from infectious disease surveys or clinics for analysis of micronutrient status, or embedded analytics and automation in reporting systems. Guidance on these different data options including their strengths, limitations, costs, and alignment with policy and program needs could help stakeholders prioritize which data may be best to access from which sources.

Regional bodies, such as the East, Central, and Southern Africa Health Community (ECSA-HC), West African Health Organization (WAHO), and Economic Community of West African States (ECOWAS), as well as regional laboratories, could play a large role in strengthening country-level government and stakeholder capacities through coordination and sharing experiences and

lessons learned. Strengthened collaborations across universities in high-, middle-, and low-income countries, with open access nutrition curricula and data sharing agreements, could provide opportunities to fill research and data gaps. Allocation of funds for a roster of national consultants to advance micronutrient data activities that had been cancelled, or support priorities highlighted in this meeting report, could help drive momentum for continued DVC strengthening. Pooled donor funding and government resource allocation could increase available funds. Nuanced considerations that affect costs of data collection and curation include data frequency, timeliness, level of precision, new sampling techniques, and disaggregation for policy and program decisions. Recommended frequency should be influenced by a better understanding of how long it takes for outcomes, like diets or biomarkers, to change over time. These potential solutions and considerations provide a critical value addition to the proposed collective action plan on micronutrient data priorities that is an important aim of this meeting.

PowerPoint presentation for this session: [Impacts of funding cuts across the data value chain](#).

## Global stakeholder actions to support micronutrient data

**Facilitator:** Roosmarijn Verstraeten

**Presenters:** Lynnette Neufeld, Chika Hayashi, Mireya Vilar, Haoyi Chen, Elaine Borghi

Global organizations, including UN agencies and the World Bank, play a key role supporting low- and middle-income countries to achieve their development goals. This includes helping countries collect, analyze, and use data to strengthen policies and programs. Representatives from the Food and Agriculture Organization of the United Nations (FAO), United Nations Children's Fund (UNICEF), the World Bank, the United Nations Statistics Division, and the World Health Organization (WHO) shared their respective organization's work along the micronutrient DVC and highlighted opportunities for collaboration. The following summarizes each organization's presentations.

**FAO:** FAO activities in the Food and Nutrition Division are not currently affected by budget cuts, except for FAO's role as the custodian of the new Sustainable Development Goal (SDG)-2 indicator on minimum dietary diversity for women (MDD-W). FAOSTAT has a new domain on Food and Diet that focuses on nutrient data. The new data on the domain include national-level nutrient availability based on supply utilization accounts (SUA); apparent intake

"Not only as the UN but all of the players that are working directly with countries need to speak with a **common voice** about the priorities for data and the methods for data. Resources are scarce, it should not be the loudest or fastest voice but a **common voice that helps to push the agenda forward and make sure we can get the best data that can support the unique needs countries have for their various purposes.**"

Lynnette Neufeld  
FAO

per capita based on household consumption and expenditure surveys; nutrient intake based on individual quantitative dietary surveys from the Global Individual Food Consumption Data Tool (GIFT) platform; and dietary diversity based on the MDD-W, from individual qualitative dietary surveys. The domain provides data on foods, energy, macro- and micronutrients. FAO is creating an add-in to consider nutrient contributions from fortified foods.

**UNICEF:** UNICEF is considering expanding the MICS program in light of the DHS stop, but this would require additional funding. They are strengthening and expanding their focus on use of data from routine surveillance systems and administrative data from clinics, schools, and sentinel community sites, for example, for collection of data on median urinary iodine concentration. UNICEF is in a major organizational restructuring phase, with a focus on providing more timely technical assistance to countries. Key UNICEF DVC actions are:

- Maintain and annually update global databases (e.g., on household iodized salt and vitamin A coverage; the infant and young child feeding and diets database including minimum dietary diversity for children; and the healthy diets monitoring initiative database); convert routine administrative data into a global database; and maintain data reporting.
- Make anemia a complementary module in the MICS.
- Develop a new LSFF module in NutriDash (a UNICEF policy and program tracker)
- Develop end-to-end LSFF monitoring (in the "idea" phase).
- Develop a prototype of a generic micronutrient survey (in the "idea" phase), which UNICEF also highlighted as an area for collaboration with partners.
- Develop measurement innovations (e.g., use of artificial intelligence to detect salt fortification strip colors), which is another area for collaboration with partners.

**World Bank:** The World Bank shared five areas of focus:

- Data prioritization and empowering governments to identify data needs to respond to policy cycle questions. This includes supporting government stakeholders to identify what data is needed for what purpose, when it is needed and how often.
- Healthy diets and helping government staff identify practical ways to measure healthy diets to have relevant data to answer policy questions, considering, e.g., the minimum dietary diversity indicator.
- Living Standards Measurement Study (LSMS) and incorporating new nutrition modules, e.g., breastfeeding, and minimum dietary diversity. However, this will require funding and technical resources.
- LSFF agenda and collaborating with three World Bank sectors: agriculture; health, nutrition, and population; and the International Finance Corporation (IFC) that links with the private sector. The focus is on supporting sectors to identify their data needs and sources and regulatory aspects of LSFF.
- Universal health coverage (UHC) strategy and the World Bank commitment to increase UHC to 1.5 billion people by 2030. Indicators on nutrition services are part

of strategy measurement, e.g., lipid-based nutrient supplements (LNS) and iron-folic acid (IFA) coverage.

**Inter-Secretariat Working Group on Household Surveys (ISWGHS)<sup>1</sup>:** In March of 2025 the ISWGHS requested formation of a working group task force to support countries in response to the termination of the DHS. The task force has four main activities:

- Ensure access to existing DHS data as a public good.
- Coordinate with stakeholders to complete on-going DHS activities.
- Assess the impacts of the DHS' termination and potential reductions in international assistance to surveys.
- Devise sustainable long-term solutions to demographic and health data production.

The task force emphasizes national survey/data ownership, technical/financial transparency and coordinated efforts, harmonization of data across countries, innovation and resilience, and building on existing global and national systems. The ISWGHS plans to share lessons learned and results of various consultations by March of 2026 and the initial agreement on sustainable solutions to DHS termination by March 2027.

**WHO:** The World Health Assembly extended the comprehensive plan on nutrition to 2030 and adopted the targets for dietary diversity in women, increasing early initiation of breastfeeding, delivering nutrition counseling including infant and young child feeding, ensuring access to iron-containing supplements as necessary during pregnancy, and preventing or reducing the consumption of sugar-sweetened beverages. Member states highlighted that national nutrition actions should be based on a multisectoral coordinated approach and countries should fully integrate essential nutrition actions in routine preventive and curative health care services in advancing toward universal health coverage. By 2026 WHO and partners will publish the implementation monitoring guidance for accelerating anemia reduction and by 2029 WHO will provide updated estimates of the global prevalence of anemia in key population groups. Key WHO DVC actions are to:

- Maintain a well-established micronutrient database, ensuring equity, identifying data gaps, and addressing gaps through various data sources, modeling, and exploring proxy indicators.
- Develop the micronutrient survey analyzer to standardize the methodology to analyze and report micronutrient data for: hemoglobin, ferritin, urinary iodine concentration, and iron deficiency anemia.

---

<sup>1</sup> The ISWGHS was established in 2015 under the United Nations Statistical Commission (UNSC) to improve coordination of household surveys, advance cross-cutting survey methodology, and enhance communication and advocacy. It includes 11 international agencies and 10 rotating UN Member States. The Secretariat is the UN Statistics Division and the current co-chairs are the World Bank and the United Nations Educational, Scientific and Cultural Organization (UNESCO) Institute for Statistics.

- Reanalyze the global database to reflect the latest cut-offs for hemoglobin, document data quality, and develop data quality guidance to support countries to collect and report on quality biomarker data and develop monitoring guidance for implementing the anemia framework.
- Update the threshold for urinary iodine concentrations.
- Research the use of proxy indicators for biomarkers to assess micronutrient status in resource constrained settings (idea stage).
- Create health management information system (HMIS) real-time data systems that allow combining nutrition and relevant health data with data from other sectors such as environment, capacity for delivery, service delivery, and supply chain, to generate real-time reports for quick decision making.
- WHO is calling across health sectors for strengthened collaborations to improve diagnostics of micronutrient deficiencies and support the design of tailored interventions and monitoring related programs.

A common focus highlighted across presenters is ensuring data quality when expanding or building on current systems, while one area of tension is perception that nutrition indicators are costly and cumbersome to collect, particularly survey costs and biomarker data. Rather than remove biomarkers from surveys to cut costs, one solution would be to reduce sample size, although this would impact the granularity of estimates. Participants proposed that a communication strategy may be needed to demonstrate and convince stakeholders that nutrition indicators are feasible to collect and analyze and valuable to inform decisions across multiple country programs like health, agriculture, education, water and sanitation, and social protection. The ongoing DVC work shared during this session provides encouraging inputs for an actionable plan to further micronutrient data priorities.

## **Advances and innovations in data initiatives and partnerships**

**Facilitator:** Sorrel Namaste

**Presenters:** Masresha Tessema, Monica Flores, Raymond Chikomba, Frances Knight, Shruthi Cyriac, and Jonathan Gorstein

The current foreign aid funding cuts, coupled with national infrastructure and technical capacity constraints hinder efforts to prioritize, collect, analyze, interpret, and use data effectively in some countries. The high cost and complexity of gold-standard surveys, call for innovative strategies to increase efficiency and effectiveness across the micronutrient DVC. Several participants from national, regional and global institutions were invited to share their efforts to strengthen different elements of the micronutrient DVC. Then a general appeal was made for examples of innovative approaches to DVC strengthening.

### **Masresha Tessema, Ethiopia Public Health Institute (EPHI): Novel Surveillance System for Fortification in Ethiopia**

Given current funding challenges, EPHI and partners are using routine data systems to fill the need for real-time information to understand and improve LSFF programs, including:

- Hospital routine data, District Health Information System 2 (DHIS2) data, and data from other systems
- Public Health Emergency Management (PHEM) surveillance data, primarily supported by the national government
- Existing surveillance:
  - o Antenatal care (ANC) routine services / Sentinel sites
  - o HIV surveillance
  - o Antimicrobial Resistance (AMR) surveillance
  - o Malaria surveillance
  - o Other infectious disease surveillance

EPHI is also validating the use of the cluster-compositing method in national surveys for measuring the performance of the salt iodization program, instead of the household method which is more expensive. This could possibly be extrapolated to other fortification programs like fortified food consumption or biomarkers, e.g., using the same method with urinary iodine concentration status based on the experience with salt.

### **Monica Flores, WHO: Leveraging HMIS to accelerate actions to reduce micronutrient deficiencies**

Anemia estimates in the WHO micronutrient database, used to inform nutrition actions, are based mostly on national survey data. WHO is now exploring the use of existing data systems with health facility records, antenatal care visits, and other nutrition surveillance systems to obtain micronutrient data to inform programs. However, challenges with using routine data include lack of data for all populations (e.g., data are often just available for pregnant women and children), fragmentation across platforms and tools like national HMIS and DHIS2, and lack of standard tools and guidance to empower governments to use tools. Opportunities to improve routine data use include developing guidance along the DVC; standards for interoperability to link administrative systems across sectors, which can be used to observe whether other health sector interventions are affecting nutrition interventions; and exchange of experiences between countries in routine data system use. Routine data has the potential to provide timely, granular, local-level data to identify gaps in resource allocation and provide an equity lens.

### **Raymond Chikomba, Southern African Development Community (SADC), Regional coordination in strengthening micronutrient data value chain**

To address a lack of coordination among partners working in the fortification space in the East and Southern Africa (ESA) region, SADC developed the *Regional Coordination Mechanism for Food Fortification and Universal Salt Iodization* platform. Regional coordination for food fortification facilitates harmonization of fortification standards and brings fortification partners together to holistically address their challenges, which include:

- weak country-level technical capacity
- lack of recent data on micronutrient status, dietary inadequacy, food consumption, and costing

- vague coordination structures for food fortification and private sector engagement, including weak government leadership and linkages between government and the private sector
- poor infrastructure and logistics to support food fortification
- lack of consumer awareness or acceptance of the benefits of fortified foods
- weak enforcement of food fortification mandates
- high cost of premix for the private sector.

Key actions for the coordination mechanism moving forward include mapping country capacities in the ESA region, coordinating fortification activities, helping countries use data for decision making, and strengthening national-level advocacy for government fortification policy.

### Shruthi Cyriac, Micronutrient Forum/Global Fortification Data Exchange (GFDx): Indicator alignment for micronutrient data

GFDx makes food fortification data available and actionable by visualizing national-level fortification data on five food vehicles: maize flour, wheat flour, edible oil, rice, and salt. GFDx uses the collective expertise of its four organizations (Food Fortification Initiative [FFI], Global Alliance for Improved Nutrition [GAIN], Iodine Global Network [IGN], and Micronutrient Forum) and relies heavily on partnerships with normative agencies, such as WHO and UNICEF, as well as country/regional collaboration groups to align on indicator definitions and harmonize understanding of fortification data. The GFDx website has a global map and country dashboards with data across 3 main indicator categories:

- **Fortification opportunity** assesses the feasibility of effectively fortifying different food vehicles in a country
- **Foundational documents** evaluate whether fortification programs have a strong legal and regulatory foundation
- **Program performance** looks at how well existing fortification programs are implemented, particularly with respect to compliance with standards and coverage of fortified foods.

GFDx's next steps include filling data gaps in the program performance indicator category to improve program effectiveness, such as compliance (metric tons); population coverage of fortified foods (percent), and health impact before and after fortification.

### Frances Knight, World Food Program (WFP): Nutrition modeling tools and proxy estimation

For good micronutrient program design and decision making there is a need for data on who is most vulnerable to inadequate intake or micronutrient deficiencies, what they are vulnerable to and where, and what might work to reduce this risk. The Modeling and Mapping Inadequate Micronutrient Intake (MIMI) project uses a nutrition modeling tool approach to estimate micronutrient inadequacies regardless of the nutrition data landscape to help with decision making, which is particularly important now given foreign aid funding cuts. Where micronutrient data are scarce, MIMI leverages secondary data to estimate or predict the risk of micronutrient inadequacy and scenarios to reduce this risk. MIMI uses household consumption and

expenditure survey (HCES) data to estimate the risk of inadequate micronutrient intake and scenario modeling to respond to specific policy questions. In the absence of HCES data, MIMI can use food security surveys with climate data to predict the risk of inadequate micronutrient intake using machine learning models. It can also be used to predict the potential benefit of different programs to reach the most vulnerable and have an impact on their micronutrient status. MIMI also provides countries with a framework for analysis so when new data become available, there will be an existing framework in place and ideally, some capacity in the country to update the analysis.

### **Jonathan Gorstein, Gates Foundation and Rhona Baingana, Makerere University: Leveraging infectious disease data systems and repositories**

There are gaps in biomarker data and micronutrient status. Stakeholders rely on household-based surveys to fill the gaps, but they are expensive, infrequent, and are not granular enough to facilitate local-level decision making. To respond to this problem, the Gates Foundation is supporting Uganda National Health Laboratory & Diagnostic Services (UNHLDS) in collaboration with Makerere University to leverage remnant clinical samples and archived biological specimens collected for surveys such as the Uganda Population-based HIV Assessment (UPHIA) survey and analyze them for micronutrient status. The team estimates national and subnational micronutrient deficiency prevalence linked to data on inflammation and infectious pathogens. The approach is inexpensive, efficient, and empowers the government to own the process and the data.

Researchers use two approaches:

1. Archived samples from the UPHIA survey, a nationally representative household-based survey conducted every 4 years. The team is using a low-cost multiplex assay to measure seven different biomarkers from each sample.
2. Remnant clinical samples from health facilities that are transported to hubs throughout the country and on to the Central Public Health Laboratory using the national sample and results transfer network. The government set up the system for HIV early infant diagnosis. The UNHLDS-Makerere team does not travel to the field to collect samples but can use the network to bring samples to the lab for testing. The team is testing the first samples in June of 2025.

Additional innovations shared by participants included:

- running small but continuous micronutrient surveys
- employing subsamples and modular approaches to existing surveys like the World Bank LSMS
- considering all aspects of nutrition in surveys, such as unhealthy eating and obesity in addition to micronutrient malnutrition, to garner support and funding from other nutrition stakeholders
- adding collection of samples of commercial value to micronutrient data surveys, such as soil or crop samples, to generate or leverage support from the private sector

- engaging with private industry for LSFF data
- using artificial intelligence or digital technology, and/or cameras and photos—the latter proved to be a controversial topic given concerns with privacy issues.

Participants also discussed supporting the development of country roadmaps or strategies on micronutrition information systems, however there was a strong recommendation to not create a micronutrient specific strategy or roadmap but instead have cross-cutting food and nutrition data strategies and/or roadmaps. Nutrition stakeholders must advocate for inclusion of nutrition data in information systems controlled by other sectors, understand the priorities of other sectors, and create holistic strategies, or there is a risk of reinforcing the silos within nutrition and among sectors, silos that are barriers to multisectoral coordination and collaboration and enhanced impact.

PowerPoint presentation for this session: [Advances and innovations in data initiatives and partnerships.](#)

## Designing a collective action plan

**Facilitators:** *Saskia Osendarp, Mduduzi Mbuya*

A key objective of this meeting was to initiate the process of drafting a collective action plan to strengthen the micronutrient DVC. As a part of this process, participants identified priorities to respond to DVC needs, both to mitigate the negative effects of funding cuts, but also address longstanding challenges. The final action plan will include a clear goal and objectives, key performance indicators (KPIs), and an accountability mechanism to follow-up on progress. Costing of the plan and including roles and responsible for activities was also discussed. The priorities and short- and long-term actions according to thematic areas are summarized in Annex D. Common priorities and a few proposed short- and long-term actions include:

- **Advocacy and supporting country ownership and engagement**
  - o Speak with one voice as a nutrition community and elevate nutrition to a higher level.
    - Short-term: Get a seat at the table in key global and country-level data discussions
    - Long-term: Provide government with opportunities to reflect on and see evidence of nutrition's contribution to other sectors' outcomes.
- **Capacity strengthening**
  - o Strengthen government technical, institutional, and governance capacity in the DVC.
    - Short-term: Support and guide countries in their Nutrition for Growth (N4G) data commitments and create opportunities for south-to-south collaboration, regional coordination, and country involvement in global discussions.
    - Long-term: Develop harmonized practical guidance, tools, and training for the DVC, especially to help guide decisions on the type of data required for what decision, how to find data, and how to collect data and fill data gaps to answer policy and program questions; and develop standards for interoperability to link routine

administrative systems across sectors. Provide capacity strengthening and support in data curation, communication, and use. Support moving from DVC pilot activities to routine activities, as appropriate, taking into consideration the results of the pilot experiences.

- **Coordination and collaboration**

- Incorporate and build on existing global and national surveys and integrate multisectoral approaches and strategic partnerships across the DVC
  - Short term: Hold discussions with the World Bank LSMS team about adding nutrition questions or modules to the LSMS; maintain communication with existing initiatives, including the EC-JRC team on follow-up steps in the strengthening of nutrition information systems in the humanitarian and development context.
  - Long term: Add nutrition questions or modules to the HCES, LSMS, MICS, Gallup World Poll, national agricultural or market surveys, or others and establish collaborative working relationships with groups such as Millers for Nutrition, the private sector, industry partners, trade alliances, and universities. Align with existing initiatives, including the efforts to strengthen humanitarian and development nutrition information systems which were also discussed in the EC-JRC sponsored *Breaking down Silos* workshop in Ispra preceding this meeting.

- **Research and studies**

- Conduct data and stakeholder landscape assessments, test routine administrative and surveillance data, and develop innovative data analysis methods.
  - Short term: Plan the data and stakeholder landscaping assessments.
  - Long term: Conduct the assessments, validate the use of routine administrative and surveillance data in countries with recent nationally representative survey data, and continue testing modeling, machine learning, and use of artificial intelligence to inform data gaps.

- **Human resources**

- Form country-level consultant pools to support DVC activities.
  - Short and long term: Hire consultants to finish near-completed work affected by funding cuts and document lessons learned and recommendations.

- **Funding**

- Develop use cases that show the micronutrient DVC's usefulness to donors and countries.
  - Short term: Complete data use case for Ethiopia.
  - Long term: Complete data use case for Uganda, Tanzania, and other countries.

Key constraints that may affect actions are country-level competition for scarce resources, lack of in-country capacity to manage the DVC, nutrition data's low priority in national data collection systems and its perceived complexity and expense, and difficulties obtaining funding for coordination efforts despite the fact that coordination is needed to pursue the actions above and to avoid duplication. It was already challenging to fund coordination prior to the funding cuts and has likely become more difficult since the cuts. A challenge specifically for biomarkers is the need for innovative ways to quantitatively or semi-quantitatively measure them. In addition, the nutrition community remains siloed and is not demonstrating how it contributes to other sector's outcomes.

"Regarding the constraints and actions that can be taken to move our agenda forward, particularly around nutrition-related data, is to **make that nutrition-related data more relevant not only to those planning micronutrient programs, but even more broadly, development and health programs.** I do think that there is an opportunity for us to shake up the paradigm and our assumptions and really break out of our silo in order to make what it is we are doing more relevant."

*Jonathan Gorstein  
Gates Foundation*

Opportunities for collaboration exist through various partners. Partner collaborations could strengthen engagement with countries and enable south-to-south sharing and learning, research to generate DVC innovations and improvements, co-presenting on the importance of the DVC during meetings, forums, and communities of practice, and sharing data and documents.

PowerPoint presentation for this session: [Designing a collective action plan](#).

## Next steps

**Facilitators:** *Rebecca Heidkamp, Sorrel Namaste*

Several immediate steps were proposed to continue the momentum started in the meeting (Annex E). A first step will be to present information and results from the meeting at the July DInA online micronutrient data meeting, followed by potentially convening the group again during the International Union of Nutritional Sciences (IUNS) International Congress of Nutrition (ICN) in August, or after summer, to discuss the joint action plan. In addition, there is a regional LSFF data meeting in October where input could be obtained from the regional/country perspective and priorities regarding the data landscape and action plan. The Micronutrient Forum Global Conference planned for 2026 is another opportunity to bring stakeholders together to discuss and develop the action plan if the timing aligns. Other opportunities could also be monitored in terms of workshops, meetings, or conferences. During these meetings further exercises could be conducted among stakeholders regarding priority DVC activities and

their stage of implementation (idea, pilot/under development, routine, or sunset), to build upon the understanding of the stages, where stakeholder activities are focused in terms of stage of implementation, and the transition from one stage to another.

Another key next step is stocktaking and/or landscaping of existing surveillance systems, defining the parameters for the stocktaking and landscaping exercises and potentially prioritizing those in countries where there have been recent micronutrient status surveys, as that could enable ground truthing and validation. There is a need to understand the demographic characteristics of the populations served by the different surveillance systems before comparing results from surveys and surveillance or routine data. An important step for the action plan is to be realistic about the range of possibilities for data sources other than surveys. There are gold standard surveillance systems, like Mexico's National Health and Nutrition Survey (Encuesta Nacional de Salud y Nutrición, ENSANUT), a type of hybrid survey/surveillance system, that would be ideal examples to emulate, but it is critical to focus on how systems can be built to be sustainable over the long term given the local context and resources. Other potential landscape analyses include an LSFF data landscape analysis, nutrition information system landscape analysis, and a landscape analysis of broader country-level data systems.

Participants also recommended documenting case studies or use-case scenarios where investments in collecting micronutrient data have led to tangible policy shifts, smarter program design, or more efficient resource allocation, as this would resonate with countries. To strengthen the case for increased domestic investment, these examples should also show how high-quality data on micronutrient status, coverage, or diets not only improved nutrition outcomes, but also supported goals in agriculture, infectious disease control, maternal and child health, and social protection. When governments see how micronutrient data can drive better outcomes across multiple sectors, they are more likely to see it as a strategic, cross-cutting investment—not just a donor-driven exercise. In addition to case studies, there was a recommendation to identify what is ideal in terms of the data that needs to be collected, the frequency, and the combination and sequencing of the data within the policy program cycle and advocacy for country investment in the DVC.

PowerPoint presentation for this session: [Next steps](#).

## Conclusion

Despite time and challenges with virtual participation, this meeting on micronutrient data in a changing landscape provided an opportunity for very rich discussions and agreement on the way forward towards a joint action plan. Participants were able to share their DVC activities, priorities, innovations, and challenges. The event opened doors for future collaboration to strengthen the nutrition DVC, helping participants move forward in a more efficient and inclusive way than before the event, and to reach out to colleagues in other sectors and build upon the examples that were heard during the meeting. The meeting outcome provides

optimism and hope that stakeholders will be able to overcome the obstacles of the current funding situation. Leveraging and building this meeting upon the EC-JRC workshop on strengthening nutrition information systems across the humanitarian and development sectors provided for synergies that enriched the meeting content, discussion, and outputs.

Although cuts in foreign aid have and may continue to negatively impact the DVC, the productive discussions in this meeting demonstrate that there are ongoing activities, country commitments, and innovative solutions to strengthen the DVC. Although challenges exist, like resource constraints and poor DVC governance and management, participants' priorities and proposed next steps provide a solid foundation upon which to build a collective action plan to sustainably strengthen the nutrition DVC and in turn, nutrition policies and programs that focus on improving the micronutrient status of populations vulnerable to deficiencies.

## References

1. Institute of Medicine (IOM) (US) Committee on Micronutrient Deficiencies. *Prevention of Micronutrient Deficiencies: Tools for Policymakers and Public Health Workers*. (Howson C, Kennedy E, Horwitz A, eds.). National Academies Press (US); 1998.
2. Horton S. The Economics of Food Fortification. *J Nutr*. 2006;136:1064-1067.
3. Larsen B, Hoddinott J, Razvi S. Investing in Nutrition: A Global Best Investment Case. *Journal of Benefit-Cost Analysis*. 2023;14(S1):235-254. doi:10.1017/bca.2023.22
4. Rebecca H. Revisiting the nutrition Data Value Chain: an updated framework to promote data use. DataDENT. May 23, 2025. Accessed July 1, 2025. <https://datadent.org/revisiting-the-nutrition-data-value-chain-an-updated-framework-to-promote-data-use>

## Annexes

### Annex A. Meeting agenda

Start Time	Minutes	Session	Facilitator/Speaker
10:30 CEST 4:30 EDT 14:00 IST	15 min	Welcome and meeting objectives	Saskia Osendarp
10:45 CEST 4:45 EDT 14:15 IST	10 min	Overview of the micronutrient data value chain	Martin Mwangi
10:55 CEST 4:55 EDT 14:25 IST	30 min	Identifying our micronutrient data priorities across the data value chain	Rebecca Heidkamp (Facilitator)
11:25 CEST 5:25 EDT 14:55 IST	25 min	Taking stock: What has been lost with the funding cuts? How has or might the micronutrient data value chain be impacted?	Sorrel Namaste (Facilitator)
11:50 CEST 5:50 EDT 15:20 IST	50 min (8 min each, 10 min Q/A)	What actions are key global stakeholders currently taking to support micronutrient data? FAO – Lynnette Neufeld UNICEF – Chika Hayashi World Bank – Mireya Vilar UN statistics – Haoyi Chen WHO – Elaine Borghi	Roosmarijn Verstraeten (Facilitator)
12:40 CEST 6:40 EDT 16:10 IST	60 min	Lunch	
13:40 CEST 7:40 EDT 17:10 IST	60 min	Highlighting advances and innovations in data initiatives and partnerships across the micronutrient data value chain Masresha Tessema, Monica Flores, Raymond Chikomba, Shruthi Cyriac, Frances Knight, and Jonathan Gorstein/Rhona Baingana Novel surveillance system for fortification in Ethiopia Routine data for micronutrient coverage data Role of regional coordination in strengthening micronutrient data value chain Indicator alignment for micronutrient data Nutrition modeling tools and proxy estimation Leveraging infectious disease data systems and repositories Other examples from group	Sorrel Namaste (Facilitator)
14:40- CEST 8:40 EDT 18:10 IST	20 min	Tea and Coffee break	

Start Time	Minutes	Session	Facilitator/Speaker
15:00 CEST 9:00 EDT 18:30 IST	60 min	<p>How do we move forward together? Designing a collective action plan to strengthen the micronutrient data value chain</p> <p>What common priorities around needs and actions are emerging (e.g., scaling current practices and/or innovations around indicators, tools, guidance, and other resources)?</p> <p>What are the constraints and actions that can be taken to move the agenda forward in the short and long-term?</p> <p>How do we promote commitments/donor interest in micronutrient data value chain?</p> <p>How do we collaborate successfully now and moving ahead?</p>	Mduduzi Mbuya (Facilitator)
16:00 CEST 10:00 EDT 19:30 IST	25 min	Next steps	Sorrel Namaste/ Rebecca Heidkamp
16:25 CEST 10:25 EDT 19:55 IST	5 min	Closing remarks	Saskia Osendarp

## Annex B. List of participants

Name	Organization
Reed Atkin	Micronutrient Forum
Mandana Arabi	Nutrition International
Barbara Baille	National Information Platform for Nutrition (NIPN), Global Coordination Team led by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
Rhona Baingana	Makerere University, Uganda
Elaine Borghi	World Health Organization, Department of Nutrition and Food Safety
Zipporah Bukania	Kenya Medical Research Institute, Center for Public Health Research in Kenya
Haoyi Chen	United Nations Statistics Division
Raymond Chikomba	Southern African Development Community (SADC) Secretariat
Shruthi Cyriac	Micronutrient Forum / Global Fortification Data Exchange (GFDx)
Monica Flores Urrutia	World Health Organization - Department of Nutrition and Food Safety
Valeria Galetti	GroundWork
Maria Nieves Garcia Casal	World Health Organization, Department of Nutrition and Food Safety
Jonathn Gorstein	Gates Foundation
Chika Hayashi	UNICEF, Data and Analytics Section at UNICEF Headquarters
Rebecca Heidkamp	Johns Hopkins Bloomberg School of Public Health / Lead DataDENT initiative
Anna Herforth	Wageningen University
Sonja Y Hess	University of California Davis
Edward Joy	London School of Hygiene and Tropical Medicine
Sunny Kim	International Food Policy Research Institute
Rolf Klemm	Helen Keller International / Johns Hopkins Bloomberg School of Public Health
Frances Knight	World Food Program / London School of Hygiene and Tropical Medicine
Emily LaRose	Independent Nutrition and Global Health Consultant
Mildred Maingi	TechnoServe, Kenya
Mduduzi Mbuya	Global Alliance for Improved Nutrition
Andrew Mertens	University of California Berkeley
Kristina Michaux	Micronutrient Forum
Martin Mwangi	Micronutrient Forum - Lead the Healthy Mothers Healthy Babies Consortium
Sorrel Namaste	Micronutrient Forum

Name	Organization
Lynnette Neufeld	Food and Agriculture Organization of the United Nations, Food and Nutrition Division
Saskia Osendarp	Micronutrient Forum
Lisa Rogers	World Health Organization, Department of Nutrition and Food Safety
Kumiko Takanashi	Organization for Economic Co-operation and Development (OECD)
Kevin Tang	World Food Program and London School of Hygiene and Tropical Medicine
Masresha Tessema	Ethiopia Public Health Institute
Roos Verstraeten	European Commission Joint Research Centre
Mireya Vilar	World Bank, Global Unit
Chris Vogliano	Wageningen, supporting Anna on the Global Diet Quality Project and the World Food Map, and previously with USAID Advancing Nutrition
James Wirth	GroundWork
Monica Woldt	Independent Consultant - Johns Hopkins Bloomberg School of Public Health

**Annex C.** Activities and actions along the data value chain, as listed by participants, and status along the data value chain (idea, pilot/development, or routine [note none were sunset so column not included])

Idea	Pilot/Development	Routine
Remnant clinical samples (urine) from ANC for iodine surveillance	Reviewing proposed MN-related questions/content for DHS-9	Technical support for DHS 9 Program surveys, one with MN component
Leverage remnant samples	Alternative sample sources for MN biomarker analysis: archived samples from other surveys e.g., UPHIA and remnant clinical samples	HH iodized salt and VA coverage database update
Predict VMD prevalence		MMS/IFA and MNP in DHIS2
Convene meeting of data partners	Measurement of Hb from DBS	Building resources, capacity, systems for custodianship of MDD-W as SDG2 indicator
Strengthen national data alliances	Anemia Module in MICS	Continuing to expand MN data availability on FAO's FDD
Model incremental contribution of MN interventions	Discuss MMS/IFA coverage in surveys	MAPS working with MIMI, Tanzania Food & Nutrition Centre, and LUANAR Malawi to advance methods to estimate dietary MN supplies using HCES
Geospatial analysis of MN biomarker data with Zambian MNS team	LSFF End-to-End Monitoring	Analyzing protein and amino acid intakes in India using HCES, to inform crop breeding priorities
Integrated data systems (building on existing e.g., DHIS2 Tracker) (and other health risks, other multi-sector data layers) throughout mother, neonatal and young children (key actions) to collect and analyze real-time individual data, interpret and provide clear inputs to inform actions, monitoring programme implementation, and forecast demand vs supplies	Generating evidence of usability of MN data from FAO's FDD	Data governance: global database, developing analytical tools and global estimates (anemia, iodine), granularity, standardization, data quality promotion, identification of gaps and exploring ways to address them.
Guidance on the diagnosis of anaemia and underlying	Include fortification contribution in FAO's Food and Diet Domain (FDD)	
	PhD supervisory support for student at Addis Uni to assess predictors of folate status in clinical settings	
	PhD supervisory support for student at Addis Uni to estimate national disease burden attributable to selenium deficiency in Ethiopia	
	Guidelines on thresholds for defining iodine status	

Idea	Pilot/Development	Routine
<p>causes in pregnancy and post-partum</p> <p>Monitoring guide for Comprehensive framework on anaemia</p> <p>Develop cross-country specific machine learning model for Sri Lanka, they have a very good HCES data set but it is from before the economic crisis and we want to develop a machine learning model just for that country that they could apply to food security data collected more routinely.</p> <p>GAVA meeting in NYC – discussing differing VAD prevalences from MRDR and retinol</p> <p>Model the different micronutrient interventions</p> <p>Develop and test guide for consumer monitoring (social auditing). Social auditing involves collecting market samples of fortified foods to test micronutrient content and using the data to assess the contribution of LSFF to micronutrient adequacy</p> <p>Develop and test guide for household consumption survey (for countries without LSMS/HCES household consumption data)</p>	<p>Build evidence on uses and interpretation of haemoglobin by measurement method (blood and equipment)</p> <p>Design and conduct studies to assess acceptability and adherence (e.g. MMS)</p> <p>Develop monitoring systems to assess the quality of fortification programs</p> <p>Developing cross-country machine learning models to be able to predict the risk of inadequate micronutrient intake in data constrained settings</p> <p>Developing new statistical method for analyzing spot urinary iodine samples for assessing iodine status</p> <p>Supporting WHO to validate micronutrient survey analyzer tool</p> <p>Country dashboard on micronutrient status</p> <p>Innovative data (surveillance)</p> <p>Finalize design/ webpage with USAID ELEVATE to share LSFF Assessment tools on USAID's planned, new "Nutrition Linkages" website (modeled on USAID's "AgriLnks")</p> <p>Pilot civil society assessment tool. The tool is used to assess civil society interest in and</p>	<p>Supporting subnational planning and targeting of interventions using data</p> <p>Conduct coverage surveys—MMS, VAS, other interventions</p> <p>Support countries to develop costing analysis of micronutrient programs (e.g., costed MMS Roadmaps)</p> <p>Working with countries we support to identify policy questions relevant to fortification or other micronutrient programs or policy or advocacy that could be informed by the type of analyses our groups do, that is, by estimating or predicting the risk of inadequate intake.</p> <p>Using household consumption and expenditure survey data to estimate risk of inadequate intake and model different intervention scenarios</p> <p>Applying evidence that we were generating to support advocacy and decision making</p> <p>Creating interpolated maps to display micronutrient status at sub-national</p> <p>Finalize policy briefs using national data from Lebanon nutrition survey</p> <p>Finalize national survey of micronutrients</p>

Idea	Pilot/Development	Routine
<p>Build capacity of national fortification coordination platforms for them to be able to plan using data and be data driven</p>	<p>capacity to advocate for improved LSFF policies and programming</p> <p>Improve data ecosystem to support evidence-based LSFF decision making: USAID AFFORD had started a landscape analysis; next step was a data ecosystem assessment in 1 country and based on the assessment, to develop a plan with local stakeholders for improvement, and implement the plan</p> <p>How the Regional Coordinating Mechanism (RCM) could also be data driven in terms of the way we operate and function and we had begun engagement with key players who could support this area</p> <p>Strengthen the linkages between the regional coordination and the national coordination efforts so there is alignment and able to fit efforts into the needs of the countries, bringing all the regional fortification arena players to support countries.</p> <p>Co-coverage and composite coverage analysis methods</p> <p>Update / add coverage indicators &amp; MN assessment to global surveys (DHS-9)</p>	<p>Validation of cluster composite to Universal Salt Iodization (USI) program</p> <p>Landscaping of fortification efforts in countries and being done in country after country to get a picture of all countries</p> <p>Sharing best practices across the region, we had annual gatherings to share best practices.</p> <p>Conduct data assessment across sectors in ET and NG</p>

Annex D – Detailed elements for consideration in collective action plan on micronutrient data priorities

Thematic area	Priorities to respond to data value chain needs	Proposed short-term (<6 months) and long-term (>6 months) actions
<p><b>Advocacy and country ownership and engagement</b></p>	<ul style="list-style-type: none"> <li>- Speak with one voice as a nutrition community on nutrition data systems.</li> <li>- Elevate nutrition to a higher level in countries and globally, advocating for nutrition across multisectoral stakeholders, and taking the lead/becoming part of the conversation about efforts to strengthen the micronutrient data value chain given funding cuts.</li> <li>- Support country ownership and ensure country involvement in the micronutrient data value chain.</li> </ul>	<p>Short-term</p> <ul style="list-style-type: none"> <li>- Ensure a seat at the table for:               <ul style="list-style-type: none"> <li>➤ Someone from the meeting on the ISWGHS Task Force global conversation on next steps following the DHS program termination.</li> <li>➤ in-country nutritionists on MICS and DHIS2 discussions.</li> </ul> </li> <li>- Create targeted advocacy materials for different audiences; clear 1-page messages for different use cases.</li> </ul> <p>Long-term</p> <ul style="list-style-type: none"> <li>- Provide opportunities for government staff to reflect on why it is important to invest in resilient data value chains (e.g., large country-level review meetings with all levels of government).</li> <li>- Provide governments with evidence to combat the perception that nutrition data collection is expensive and cumbersome.</li> <li>- Provide evidence for multisectoral stakeholders to see the value addition of nutrition investments to their sector's outcomes, policy space, and donor agenda (e.g., double fortified salt with iodine and folic acid and reductions in neural tube defects; nutrition's contribution to reduce excess mortality).</li> <li>- Empower country-level nutritionists to advocate for nutrition and its relevance across sectors.</li> </ul>
<p><b>Capacity strengthening</b></p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Strengthen government</li> </ul>	<p>Short-term</p>

Thematic area	Priorities to respond to data value chain needs	Proposed short-term (<6 months) and long-term (>6 months) actions
	<p>technical, institutional, and governance capacity in the data value chain.</p>	<ul style="list-style-type: none"> <li>- Support and guide countries in their Nutrition for Growth (N4G) data commitments.</li> <li>- Create opportunities for south-to-south collaboration, regional coordination, and country, involvement in all global discussions.</li> <li>- Map country experience in the micronutrient data value chain to facilitate identification of countries for south-to-south exchanges.</li> </ul> <p>Long-term</p> <ul style="list-style-type: none"> <li>- Provide technical assistance and develop and apply tools and guidance to assist countries to decide on the impacts they want to invest in, the priority data to measure each desired impact, and identify the data sources and approaches across ministries, focusing on data fit-for-purpose to meet country policy and global target needs, short term and long term, and defining the ideal approaches in the policy program cycle, e.g., a prioritization matrix of information, with selection of indicators to fit information needs.</li> <li>- Develop harmonized guidance, tools, and training to collect data and fill data gaps including: <ul style="list-style-type: none"> <li>➤ guidance on the type of data required for what decision, how to find data, and how to collect data and fill data gaps.</li> <li>➤ innovative methods and data sources such as adding nutrition questions or modules to existing surveys and using routine administrative data and surveillance data.</li> </ul> </li> </ul>

Thematic area	Priorities to respond to data value chain needs	Proposed short-term (<6 months) and long-term (>6 months) actions
		<ul style="list-style-type: none"> <li>➤ allowing for context specific flexibility on what data to collect.</li> <li>➤ efficient ways to collect the data (e.g., composite sample testing, phone interviews).</li> <li>➤ considerations such as data collection feasibility and frequency and data use, building upon existing guidance such as the new UN Handbook on Household Surveys anticipated in March 2026 and the DHIS2 guide.</li> <li>➤ guidance/consensus on appropriateness of data to answer policy and program questions, data strengths and limitations, what data is “good enough”, as well as when data are not appropriate or good enough, advocating for precise estimates when needed, using a combination of data tools, and providing an indication of cost.</li> <li>- Develop standards for interoperability to link routine administrative systems across sectors to assess whether other health sector interventions are affecting nutrition interventions and vice versa, interpreting nutrition indicators in an integrated manner with other health outcomes.</li> <li>- Provide capacity strengthening and support in data curation, communication, and use, which are DVC elements that appear to currently have fewer activities/focus.</li> <li>- Support stakeholders to move from data value chain pilot activities to routine activities, as appropriate, taking into</li> </ul>

Thematic area	Priorities to respond to data value chain needs	Proposed short-term (<6 months) and long-term (>6 months) actions
		<p>consideration the results of the pilot experiences.</p> <ul style="list-style-type: none"> <li>- Discuss with countries adding nutrition to scorecards (Scaling up Nutrition [SUN]; African Leaders Malaria Alliance [ALMA], given countries prioritize what they are scored on.</li> </ul>
<b>Collaboration and coordination</b>	<ul style="list-style-type: none"> <li>- Incorporate and build on existing global and national surveys.</li> <li>- Integrate multisectoral approaches and strategic partnerships, across the data value chain.</li> <li>- Consider including roles and responsibilities for each activity in the action plan.</li> </ul>	<p>Short term</p> <ul style="list-style-type: none"> <li>- Hold discussions with the World Bank LSMS team about adding nutrition questions or modules to the LSMS.</li> <li>- Maintain communication with existing initiatives, including the EC-JRC team on follow-up steps in the strengthening of nutrition information systems in the humanitarian and development context.</li> </ul> <p>Long term</p> <ul style="list-style-type: none"> <li>- Add nutrition questions or modules to the HCES, LSMS, MICS, Gallup World Poll, national agricultural surveys, or others.</li> <li>- Establish collaborative working relationships with groups such as Millers for Nutrition, the private sector, industry partners, trade alliances, universities, and others to strengthen the micronutrient data value chain.</li> <li>- Align with existing initiatives, including the efforts to strengthen humanitarian and development nutrition information systems which were discussed in the EC-JRC sponsored Breaking down Silos workshop in Ispra preceding this meeting.</li> </ul>
<b>Research and studies</b>	<ul style="list-style-type: none"> <li>- Conduct data and stakeholder landscaping assessments across the value chain to</li> </ul>	<p>Short term</p> <ul style="list-style-type: none"> <li>- Plan data and stakeholder landscaping assessments.</li> </ul> <p>Long term</p> <ul style="list-style-type: none"> <li>- Conduct landscape assessments of surveillance systems, nutrition information</li> </ul>

Thematic area	Priorities to respond to data value chain needs	Proposed short-term (<6 months) and long-term (>6 months) actions
	<p>inform ways to strengthen it.</p> <ul style="list-style-type: none"> <li>- Conduct studies to test indicators for use with routine administrative and surveillance data.</li> <li>- Develop innovative data analysis methods to improve access to micronutrient data.</li> <li>- Study the use of existing data to inform the micronutrient data value chain.</li> <li>- Capture lessons learned from large-scale surveys.</li> </ul>	<p>systems, and the broader data systems that exist within a country.</p> <ul style="list-style-type: none"> <li>- Validate use of routine administrative and surveillance data in countries with recent nationally representative survey data, analyzing level of feasible granularity, ability to provide an equity lens, and sample bias. If/when validated, work with countries to get the indicators in the local systems.</li> <li>- Model the limitations of routine data and representativeness issues.</li> <li>- Continue testing of modeling, machine learning, and use of artificial intelligence to inform data gaps.</li> <li>- Continue to explore filling data gaps using existing data from the household consumption and expenditure survey (HCES), World Bank Living Standards Measurement Study (LSMS), MICS, FAOSTAT, GFDx, and longitudinal cohort studies e.g., The African Population Cohort Consortium, and use of biological specimens from infectious disease studies, surveillance, and routine health care to estimate micronutrient status.</li> <li>- Analyze and share lessons learned from the DHS and other surveys that have been terminated due to funding cuts.</li> </ul>
Human resources	<ul style="list-style-type: none"> <li>- Form a pool of consultants in countries.</li> </ul>	<p>Short and long term</p> <ul style="list-style-type: none"> <li>- Hire country-level consultants to support data value chain activities, e.g., finish up near-completed work affected by funding cuts, start new activities, document lessons learned and recommendations, and/or provide inputs to the action plan.</li> </ul>
Financing	<ul style="list-style-type: none"> <li>- Develop compelling use</li> </ul>	<p>Short term</p>

Thematic area	Priorities to respond to data value chain needs	Proposed short-term (<6 months) and long-term (>6 months) actions
	<p>cases showing tangible policy and program impacts and the value of the micronutrient data value chain to donors and countries.</p> <ul style="list-style-type: none"> <li>- Achieve consensus on an agreed action plan, including how the action plan will be country centric, which can spark donor interest.</li> <li>- Consider undertaking a costing exercise of the activities in the action plan.</li> </ul>	<ul style="list-style-type: none"> <li>- Develop the collective action plan on micronutrient data priorities.</li> <li>- Develop a use case given the micronutrient data value chain experience in Ethiopia.</li> </ul> <p>Long term</p> <ul style="list-style-type: none"> <li>- Develop use cases for Uganda, Tanzania multisectoral data platform, and other countries as appropriate.</li> <li>- Share examples of country commitments to strong micronutrient data value chains to demonstrate sustainability and encourage donor support and co-financing.</li> </ul>

**Annex E.** Immediate next steps and opportunities for collaboration to advance strengthening the micronutrient data value chain

Immediate next steps	Immediate opportunities for collaboration
<ul style="list-style-type: none"> <li>- Share meeting information and results and will explore country engagement/development of the collective action plan through the following:               <ul style="list-style-type: none"> <li>o Quarterly DInA meeting in July</li> <li>o ICNS-ICN in Paris in August</li> <li>o MNF/DInA LSFF conference in the fall</li> <li>o Micronutrient Forum in 2026</li> </ul> </li> <li>- Conduct further exercises among stakeholders regarding priority DVC activities and their stage of implementation (idea, pilot/under development, routine, or sunset) to build upon understanding of the transition from one stage to another.</li> <li>- Coordinate with the World Bank to present on the micronutrient data value chain and importance of nutrition data at the World Bank global community of practice in the fall.</li> <li>- Plan for data and stakeholder stocktaking and landscape analyses.</li> <li>- Document case studies or use-case scenarios where investments in collecting micronutrient data have led to tangible policy shifts, smarter program design, or more efficient resource allocation (responsible party to be determined)</li> </ul>	<ul style="list-style-type: none"> <li>- World Bank               <ul style="list-style-type: none"> <li>o Discuss and provide inputs to the World Bank on the nutrition data to go into LSMS.</li> <li>o Provide inputs into the World Bank healthy diets program.</li> <li>o World Bank can share costing information and economic analysis, including regional estimates for a number of interventions, many related to micronutrient deficiencies</li> <li>o World Bank can facilitate south-to-south collaborations and information sharing/lessons learned</li> </ul> </li> <li>- Coordination and follow up with those who have already conducted landscape assessments (e.g., WFP and University of California, Davis)</li> <li>- Continued communication and coordination with the EC-JRC team that is working on the roadmap to strengthen nutrition information systems in the humanitarian-development context</li> </ul>

## Annex F. Acronyms and abbreviations

AMR	antimicrobial resistance
ANC	antenatal care
CDC	US Centers for Disease Control and Prevention
DataDENT	Data for Decisions in Nutrition
DHIS2	District Health Information System 2
DHS	Demographic and Health Survey
DInA	Micronutrient Data Innovation Alliance
DVC	data value chain
EC	European Commission
ECOWAS	Economic Community of West African States
ECSA-HC	East, Central, and Southern Africa Health Community
ENSANUT	National Health and Nutrition Survey (Encuesta Nacional de Salud y Nutrición)
EPHI	Ethiopia Public Health Institute
ESA	East and Southern Africa
FAO	Food and Agriculture Organization of the United Nations
FFI	Food Fortification Initiative
GAIN	Global Alliance for Improved Nutrition
GFDx	Global Fortification Data Exchange
GIFT	Global Individual Food Consumption Data Tool
HCES	Household Consumption and Expenditure Survey
HMIS	health management information system
IFA	iron-folic acid
IFC	International Finance Corporation
IGN	Iodine Global Network
IMMPaCt	International Micronutrient Malnutrition Prevention and Control
ISWGHS	Inter-Secretariat Working Group on Household Surveys
JRC	Joint Research Center
KPI	key performance indicator
LSFF	large-scale food fortification
LSMS	Living Standards Measurement Study
LMIC	low- and middle-income country
LNS	lipid-based nutrient supplements
MDD-C	minimum dietary diversity for children
MDD-W	minimum dietary diversity for women

MICS	Multiple Indicator Cluster Survey
MIMI	Modeling and Mapping Inadequate Micronutrient Intake
N4G	Nutrition for Growth
NGO	non-governmental organization
PHEM	Public Health Emergency Management
SADC	Southern African Development Community
SDG	Sustainable Development Goal
SUA	supply utilization accounts
UHC	universal health coverage
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
UNSC	United Nations Statistical Commission
UPHIA	Uganda Population-based HIV Assessment
USAID	US Agency for International Development
WAHO	West African Health Organization
WFP	World Food Programme
WHO	World Health Organization