Ethiopia food and nutrition data assessment findings

BRIEF

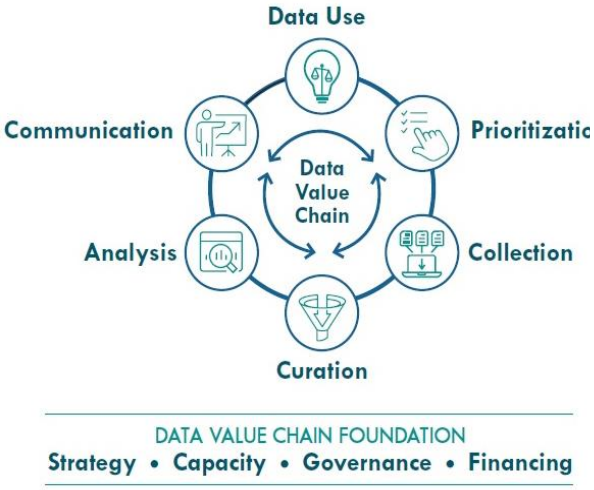
Introduction

DataDENT has partnered with the Government of Ethiopia over several years on activities to strengthen multisectoral food and nutrition data. This brief presents findings from an assessment that aimed to characterize the food and nutrition data ecosystem across Ethiopia and to identify opportunities for strengthening.

The assessment was conducted in two rounds. Round 1 (2023–2024) included exploratory work, document review, and stakeholder engagement. Round 2 (November 2024–June 2025), the focus of this brief included:

- **Policy review** of 35 documents to identify how data informed policy design, to map key strategies and objectives, to review monitoring and evaluation plans, and to collate information on costing of related activities.
- **Data mapping** exercise to identify whether, where, and how often food and nutrition indicators listed in policy documents are collected.
- **Key informant interviews** with 100 data users and producers at the federal, regional, and woreda levels to better understand how individuals engage across each stage of the data value chain.
- **Cost considerations** identified through a desk review and key informant interviews related to multisectoral nutrition data systems.

Figure 1. Data value chain



DataDENT used the data value chain (Figure 1) as an organizing framework to assess the Ethiopia food and nutrition data ecosystem, including gaps and challenges. The assessment covered these sectors: 1) multisectoral nutrition coordination, 2) agriculture, 3) education, 4) finance, 5) health, 6) humanitarian, 7) industry and trade (including food fortification), 8) statistics, 9) water and energy, and 10) women and social affairs.

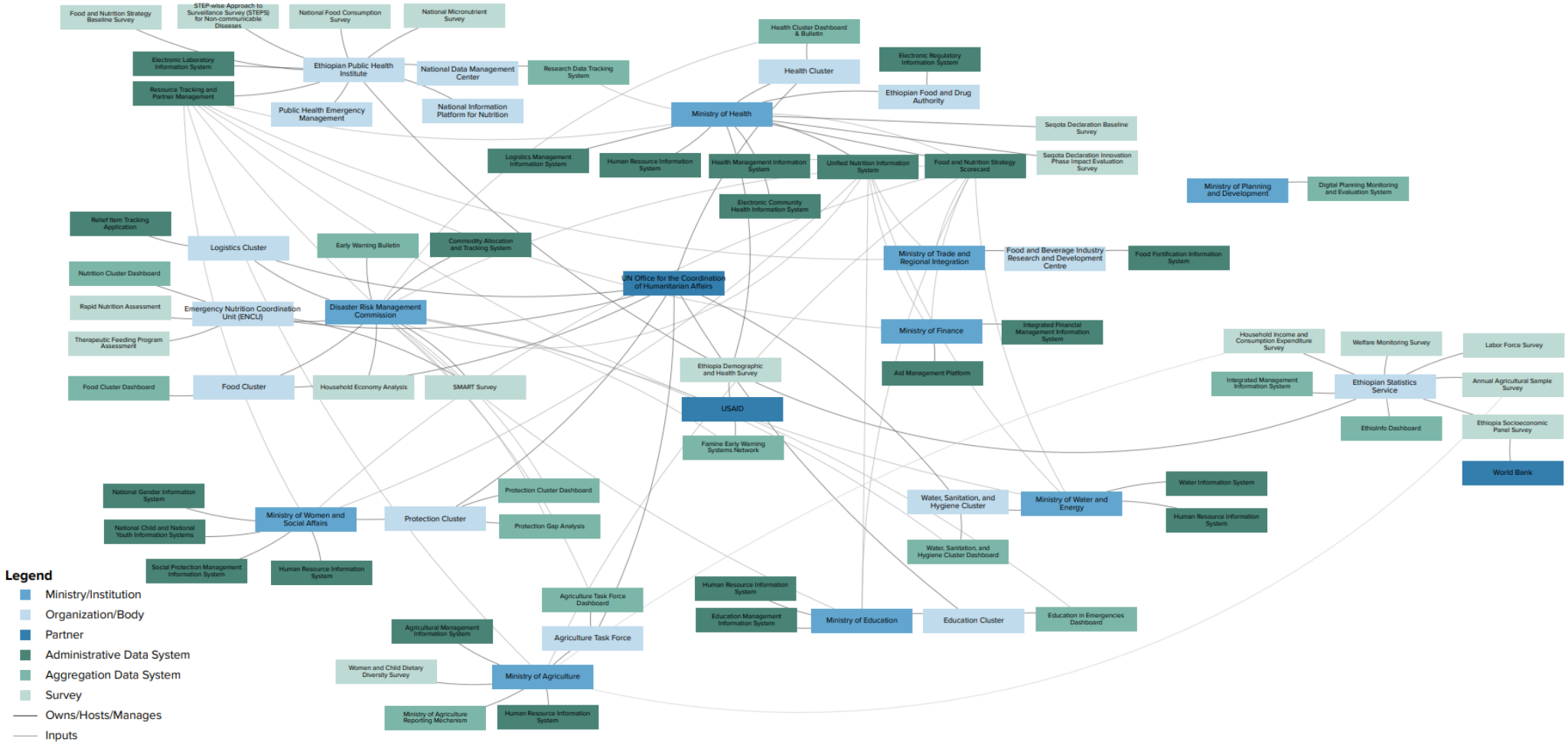
Ethiopia food and nutrition data ecosystem

The **Ethiopian food and nutrition data ecosystem is vast and complex**, encompassing 28 institutions, 41 data systems, and 17 surveys (Figure 2). Food and nutrition data are widely collected through administrative data systems and periodic surveys.

Key takeaway

Despite a wealth of food and nutrition data sources, there is limited use of data to guide decision making. The multisector data ecosystem lacks alignment, has weak interoperability, and inconsistent system functionality across sectors.

Figure 2. Ethiopia food and nutrition data ecosystem



Note: The scope for this ecosystem map includes data systems that are functional, being piloted, and under development, that respondents reported using in key informant interviews and that were validated through assessment activities. Periodic surveys are included as routine components of the food and nutrition data ecosystem, rather than one-time or ad hoc surveys. As exceptions, the Seqota Declaration Baseline Survey and the Seqota Declaration Innovation Phase Impact Evaluation are included as key data sources for food and nutrition. The ecosystem map includes institutions within and outside of the Government of Ethiopia that own or manage the data system(s) or survey(s) included in the map and/or conduct activities that are explicitly related to food and nutrition data. **See Annex I for a full description of each element in the ecosystem map.**

We found that respondents across sectors and administrative levels largely recognize the importance of nutrition and value food and nutrition data.

> "The importance of this data lies in its connection to nutrition, which is a sensitive issue. Malnutrition is a serious threat to society, especially to mothers and children, who are often the most vulnerable groups. This makes reliable and verified data crucial, as it must be carefully analyzed and understood."
> *- Woreda-level, Agriculture, Food and nutrition focal*

All sectors, apart from finance, collect food and nutrition indicators in at least one **sector-specific administrative data system**. The systems for health, education, finance, and statistics are relatively strong, while the other sectors do not have fully functional data systems.

Ethiopia also has three **multisectoral nutrition administrative data systems (Food & Nutrition Scorecard, UNISE, RTPM)**. These systems are being piloted and face implementation challenges due to inconsistent adoption across sectors and administrative levels, as well as limited interoperability. These systems are not aligned with sector-specific administrative data systems.

The health, humanitarian, multisectoral nutrition, and agriculture sectors conduct **periodic surveys** with the support of statistics. Surveys are the unique or preferred data source for key indicators, including anthropometry (e.g., stunting), anemia prevalence, micronutrient intake, and dietary diversity.

Data value chain

The assessment used the data value chain framework (Figure 1) to evaluate how actors engage with each part: data use, prioritization, collection, curation, analysis, and communication. **Engagement with the parts of the data value chain and processes vary by sector and administrative level**.

> **Key takeaway**
>
> There is engagement across the data value chain. However, gaps in capacity—particularly in non-health sectors and at subnational levels—constrain data collection, curation, and analysis, and ultimately, limit effective data use.

Table 1. Common types of data used by administrative level

Common types of data use	Administrative level		
	Federal	Regional	Woreda
Budget planning, allocation, and utilization monitoring	✓	✓	
Program/service delivery design and planning	✓	✓	✓
Operational program/service delivery decisions			✓
Program/service delivery monitoring and evaluation	✓	✓	✓

All sectors reported **data use** at the regional and federal levels and some sectors also use data at the woreda level including health, agriculture, education, and women and social affairs. Most multisector and sector policy documents utilize data to inform some part of their content. Most sectors primarily use administrative data. Survey data use was most frequently reported by health and agriculture respondents. We found four main ways that respondents use data, with some variation by administrative level use (Table 1). Respondents with multisectoral nutrition roles reported using data from multisectoral nutrition data systems (e.g., Food and Nutrition Scorecard, UNISE) the most, while sector-specific respondents primarily use data generated by their sector.

Prioritization of nutrition issues and indicators is typically conducted at the federal level with some involvement of the regional level for agriculture and education. DataDENT identified 2,809 prioritized food and nutrition indicators across 35 policy documents **(see Annex II for a complete list of identified indicators**). However, only 28 percent had clearly defined data sources. Indicator definitions are generally lacking and/or inconsistent across documents, and 39 percent had specified targets.

Data **collection** is carried out primarily at the kebele and woreda levels. Health and education sectors have more standardized and digitized administrative data collection processes. Other sectors rely on paper-based forms and face logistical constraints such as difficulty accessing computers and electricity to input data into multisectoral systems (e.g., UNISE). All sectors reported data collection challenges, primarily relating to the capacity of staff responsible for capturing data and data quality.

> "We need to ensure the quality of data from the collection to analysis stage and to do that we need to create awareness on the importance of quality data. So unless we get accurate numeric data it will be very difficult to get the indicators."
> *- Regional-level, Finance, Monitoring and evaluation*

Data **curation**—processing, storing, and sharing—of administrative data occurs at lower administrative levels for most sectors. This is the only part in the data value chain that some respondents reported zone-level involvement. Data curation processes vary significantly by sector and data system. Respondents across sectors reported data curation challenges centered on the capacity of responsible staff and technology limitations.

Analysis of administrative and survey data is done at the regional and federal level by all sectors, with some administrative data analysis also occurring at the woreda level for health, agriculture, and women and social affairs. For administrative data, respondents to the monitoring and evaluation question guide described calculating descriptive statistics and assessing indicator trends using Excel, Google Sheets, or tools within data systems. All sectors face challenges analyzing administrative data, with capacity as the predominant challenge. Sectors that conduct surveys usually have teams with specialized capacity and/or rely on institutions in the statistics sector to complete data analysis.

Communication about administrative data occurs at the regional and federal levels for all sectors and also at the woreda level for health and women and social affairs. While the frequency of administrative reporting varies, all sectors develop reports based on analyzed data for government use. Dashboards and scorecards were described as useful ways to understand and communicate data. Respondents did not report significant challenges with data communication but still identified it as an area of capacity weakness.

Foundational factors influencing the data value chain

The DataDENT data value chain framework (Figure 1) outlines four foundational factors that influence the data value chain. These factors—**strategy, capacity, governance, and financing—influence the food and nutrition data ecosystem**. **Respondents identified capacity, governance, and financing as parts with challenges.**

Strategy: Food and nutrition priorities are well-addressed in policies and are relatively coherent across sectors. All sectors included food and nutrition-related objectives in their policy documents that are aligned with the strategic objectives in the national Food and Nutrition Strategy. All sectors have policy documents that include costing or budget estimations, yet data-related costs are often not included in budget estimations. Nearly all documents also include some content on monitoring and evaluation. However, monitoring frameworks lack detail, such as indicator definitions and data sources, and there is evidence of data collection for only 17 percent of identified indicators.

Key takeaway

Data value chain implementation is hindered by systemic capacity gaps, fragmented governance, and chronic underfinancing—especially at subnational levels—limiting the generation, quality, and use of food and nutrition data.

Capacity: Respondents described capacity as a key challenge related to food and nutrition data, and the capacity challenges that respondents identified span the data value chain. Respondents identified multiple factors that contribute to capacity challenges. First, the limited technological capacity of staff to use existing computer and software technology impacts each part of the data value chain. Second, current training

strategies do not adequately address challenges (e.g., lack of refresher training, training not targeted to role). Third, human resource practices include hiring individuals without adequate qualifications, missing or incomplete job descriptions, and high staff turnover.

> "The current approach often leans heavily toward the roles of the health and agriculture sectors, while other sectors, such as education, are not sufficiently engaged."
> - *Woreda-level, Education, Monitoring and evaluation*

Governance: The government has made strong commitments to multisectoral nutrition. Governance mechanisms exist at federal and subnational levels that support multisectoral coordination and collaboration, some of which were put in place relatively recently. Yet respondents shared limitations and demand for improving multisectoral leadership, collaboration and coordination, and accountability.

Financing: Insufficient budgets present challenges across sectors. Budget allocations are often lacking for monitoring, evaluation, and research at all levels; some respondents noted broader nutrition funding issues. Many cited inadequate resources for laptops, tablets, internet, and basic supplies like printers and paper. These constraints particularly affect woreda and kebele monitoring and evaluation staff, hindering data collection, curation, and analysis. They lead to reporting delays, inconsistent data system use, and difficulty completing data-related tasks. Transportation funding for overseeing data collection was also cited as a problem, especially in large woredas.

DataDENT developed the *Cost Considerations for Food and Nutrition Data: Decision Support Tool* to help policymakers, advocates, and implementers anticipate the monetary and non-monetary costs that food and nutrition data activities incur across the data value chain. Monetary costs fall within four activity categories—coordination and cooperation, including expenses for meetings and workshops; individual and institutional capacity building; system equipment, technology, and maintenance; and other cross-cutting costs that are not activity specific. The non-monetary costs of data collection and data systems include the level of trust that communities and partners have in government decisions and how they are made; the quality of the data, including its accuracy and reliability; political priorities, especially related to relationships, roles, responsibilities, and preferences; burden on staff; and sustainability of the data system. This full range of monetary and non-monetary costs needs to be considered for sustainable financing.

Conclusion

Ethiopia's food and nutrition data ecosystem is diverse and embedded across sectors, yet it remains complex, in need of greater alignment, and constrained by systemic challenges. While administrative data systems are the primary data source for government stakeholders, their quality, consistency, and functionality vary significantly. Actual use of food and nutrition data across sectors and administrative levels is also often limited by capacity, coordination, and financing barriers. Many of these issues are not unique to food and nutrition data, but reflect broader, cross-cutting challenges across sectors.

Despite these constraints, there is strong policy alignment on nutrition objectives and clear recognition among stakeholders across sectors of the critical need for improved coordination, prioritization, and accessibility of food and nutrition data. The assessment validates both the demand and need for collaborative solutions that can address these challenges systemically and sustainably. Potential solutions include the development and implementation of a multisectoral food and nutrition data strategy, targeted support to both multisectoral and sector-specific data systems, and strategic investments in survey data.

Project Note

DataDENT (Data for Decisions in Nutrition, www.datadent.org) aims to transform the availability and use of nutrition data by addressing gaps in nutrition measurement and advocating for stronger nutrition data systems. This work was carried out by the following DataDENT partners: *Johns Hopkins Bloomberg School of Public Health (JHBSPH) and Results for Development (R4D).* Collaborators included team members from the Ethiopian Ministry of Health Seqota Declaration Federal Program Delivery Unit (SD F-PDU). This work was funded by the Gates Foundation. The findings and conclusions contained within are those of the authors and do not necessarily reflect positions or policies of the Gates Foundation.