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|  **Data collection and analysis tools for food security and nutrition****Contribution to: HLPE e-consultation on the V0 draft of the Report (**<https://www.fao.org/fsnforum/consultations/HLPE_data_collection_analysis_tools_V0> **) [1]** |

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**[1]** Contribution s**ubmitted on January 23, 2022 to the FSN Forum Team and the HLPE Steering Committee at Email:** fsn-moderator@fao.org.

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**Note: (1)** Views expressed below are of the contributor **AND NOT** of the **PERC, DLLE, SNDTWU** where he was previously employed. **(2)** Some portion of the contribution has been drawn from data published online (quoted at the end, under References).

**1.**The V0-draft introduces a conceptual framework that orders the components of the food security and nutrition ecosystem based on their proximity to people’s immediate decision making sphere, from the macro to the individual levels, and describes a four-stage data-driven decision making cycle for food security and nutrition (FSN), from priority setting to data utilization. Use of the two is illustrated through a matrix template that facilitates the concurrent operationalization of the conceptual framework and data driven decision-making cycle to address issues relevant for FSN.

1. ***Do you find the proposed framework an effective conceptual device to highlight and discuss the key issues affecting data collection and analysis for FSN?***

In broader terms, I find the proposed framework (published in document titled “Data collection and analysis tools for food security and nutrition” on web link: <https://assets.fsnforum.fao.org/public/V0_Draft_HLPE_17_data_collection_analysis.pdf>) an effective conceptual device to highlight and discuss the key issues affecting data collection and analysis for food security and nutrition (FSN). However, the proposed framework needs to elaborate on “research prioritization” to ensure that knowledge is generated across the complex global agri-food system with the highest positive impact for economic, public and environmental health. This will also ascertain sustainability in FSN initiatives **[1]**.

1. ***Do you think that this conceptual framework can indeed contribute to providing practical guidance for data collection for FSN?***

I am of the determined view that this conceptual framework can contribute to providing practical guidance for data collection for FSN.

1. ***Do you think that this four-stage data driven decision making cycle for FSN addresses the key steps in the data collection and analysis process for FSN? Where do you see the more relevant bottlenecks in the data driven decision making cycle for FSN?***

I do not agree with the proposed four-stage data driven decision making cycle. In the conceptual framework, data driven decision making cycle suggests these four steps: (1) Priority setting: Define evidence priorities and questions; (2) Data: Review, consolidate, collect, curate, and analyse data; (3) Translation: Translate and disseminate results and conclusions; and (4) Utilization: Engage and use results and conclusions to make decisions. According to my research opinion, before suggested step 4 (Utilization), there should be element of field-testing of results and conclusions. I suggest step 4 as: Field-testing: testing of results and conclusions for accuracy and taking corrective measures. Field-testing is necessary for ascertaining more accuracy of data and research methods used in the area of FSN. All involved stakeholders should necessarily be involved in the stage of field testing of results (and conclusions). There should be, thus, five-stage data driven decision making cycle. Utilization: Engage and use results and conclusions to make decisions should become step-5.

**Additional point**: On page 6 of the document titled “Data collection and analysis tools for food security and nutrition” (published on web link: <https://assets.fsnforum.fao.org/public/V0_Draft_HLPE_17_data_collection_analysis.pdf>), I find this heading/sub-heading: **1.1. Using the conceptual framework and data drive decision-making cycle to address issues relevant for FSN** (after 4. Utilization: Engage and use results and conclusions to make decisions). But after this, I do not find discussion or description under heading/sub-heading: **1.2** or **1.3**. There seems to be something lacking. This seems to be looked into.

1. ***Can you offer suggestions for examples that would be useful to illustrate in a matrix template that facilitates the operationalization of the conceptual framework and data driving decision-making cycle to address issues relevant for FSN?***

There is a critical need for developing cost-efficient methods of generating multidimensional nutrition data on immediate determinants of malnutrition as well as nutrition-sensitive sectors in the resource poor-countries. Evidence from multiple initiatives to improve nutrition shows that data presented in persuasive and interpretative ways developed awareness about the nutrition issues among the key stakeholders and influenced the decision-making process through multi-sectoral collaboration.

Proactive role of nutrition researchers and programmers in collating, synthesizing, and communicating nutrition information has proven to be a successful strategy of accelerating the knowledge translation into action by engaging policy makers to make sustainable political commitments for nutrition improvement. Making nutrition indicators a priority and using effective monitoring and tracking tools are, therefore, necessary to further facilitate the decision making and planning for future nutrition programs, across the regions of the globe **[2]**.

**2.** The report adopts the broader definition of food security, proposed by HLPE in 2020, which includes the two dimensions of agency and sustainability, alongside the traditional four of availability, access, utilization and stability.

1. ***Does the V0-draft cover sufficiently the implications of broadening the definition of food security for data collection, analysis and use?***

The V0-draft sufficiently covers the implications of broadening the definition of food security for data collection, analysis and use. However, one should not overlook the fact that ssuccessful nutrition programming through sustainable political commitments and multi-sectoral collaboration requires robust evidence generated from multidimensional nutrition data on immediate factors of malnutrition as well as nutrition-sensitive sectors. There is a critical need for developing cost-efficient methods of generating a range of nutrition data in resource poor countries. Evidence from multiple initiatives to improve nutrition in different countries shows that data presented in persuasive and interpretative ways developed awareness about the nutrition issues among the key stakeholders of the countries and influenced the decision-making process. Proactive role of nutrition researchers and programmers in collating, synthesizing, and communicating nutrition information has proven to be a successful strategy of accelerating the knowledge translation into action by engaging the policy makers of the countries to make sustainable commitments for nutrition improvement. Nutrition information is also essential for maintaining strategic communication among the national and international nutrition partners playing critical role in decision making. To further facilitate the decision making and planning for future nutrition programs, making nutrition indicators a priority and using effective monitoring and tracking tools are required globally **[2].**

1. ***What type of data will be most useful in measuring food security dimensions such as “agency” and “sustainability”?***

The appropriate measurement of food security is critical for targeting food and economic aid; supporting early famine warning and global monitoring systems; evaluating nutrition, health, and development programs; and informing government policy across many sectors. Nutrition insecurity is sometimes used interchangeably with food insecurity, but in fact the definition is much broader. Food insecurity is necessary, but not sufficient for nutrition security. Nutrition security considers care, health, and hygiene practices in addition to food security **[3]**. In this context, it is pertinent to note that household food security is a major determinant of nutrition security that can only be fully understood through a multi-level analysis taking into account global, national/regional, as well as local, household and individual-level factors, as depicted in Figure 1 below **[4]**:



**3.**The V0-draft reviews existing FSN data collection and analysis tools, initiatives and trends.

1. ***Do you think that the review adequately covers the existing ones? If not, what would you add?***

The review adequately covers the relevant aspects.

1. ***Do you think that the trends identified are indeed the key ones in affecting data generation, analysis and use for FSN? If not, which other trends should be taken into account?***

The trends identified in the V0-draft are the key ones in affecting data generation, analysis and use for FSN. However, field-testing aspect needs to be highlighted. It is important because food security matters immensely; it is a topic of keen interest to policy makers, practitioners, and academics around the world in large part because the consequences of food insecurity can affect almost every facet of society **[3]**.

1. ***In particular, can you offer feedback on how digital technology, internet of things, artificial intelligence, big data, and agriculture 4.0 affect FSN? What is their likely impact in the coming decades?***

Big data and the Internet of things can be harnessed for a number of agricultural applications, including farmer decision support, precision farming, and insurance. However, despite the potential of big data and the Internet of things, stakeholders have expressed concern about the privacy and security concerns of agricultural data, the politics of data ownership and transparency, data breaches and access of smallholder farmers to such data. In this respect, regional and international organizations can potentially work with stakeholders to define appropriate data standards to minimize the potentially negative consequences of data sharing **[5]**.

**4.**The report discusses capacity constraints at local, national and global levels, with a special focus on statistical and analytical capacity.

1. ***Do you think that the V0-draft covers all the issues – and their consequences - of capacity constraints at the different levels?***

The V0-draft covers all the issues.

1. ***If your answer a. was “no”, then what additional issues regarding capacity constraints should be added to the analysis?***

N. A.: Not applicable.

**5.**The V0-draft discusses the role of new and emerging technologies in data collection and analysis tools for FSN.

1. ***Do you think that the presentation of new and emerging technologies captures the main trends? What other new and emerging technologies could be discussed in the report?***

To address the global food and nutrition security challenge both new knowledge and enhanced movement of knowledge into use are needed. A number of generic issues apply across the themes. Climate change will have profound effects not just on production, but may also impact on food safety and spoilage, international trade via weather-related disruptions and interact with nutrition to affect health. Climate change mitigation may also require changing practice along the food chain which may affect production and transport. Many of the areas highlight “wicked problems”, where there are tradeoffs between social objectives; navigating these to produce an equitable outcome can be very difficult. Delivering outcomes contributing to the three goals of simultaneously improving the economy, public health and environment may require social or institutional reform, not just research. There is thus a broad governance task of making and implementing appropriate societal choices to optimize the agri-food system **[1]**.

1. ***In what other ways can new and emerging technologies be relevant to each of the stages/aspects of the FSN data value chain/data lifecycle (i.e., Define evidence priorities and questions; Review, consolidate, collect, curate and analyze data; Translate and disseminate results and conclusions; Engage and use results and conclusions to make decisions)?***

As a fundamental factor in quality of life, food safety is crucial to people's lives and health. It is a matter of societal concern and something that governments find difficult to regulate. The lack of integrity of some food producers who are driven by self-interest and inadequate government supervision mean that the maintenance of food safety has become a global problem. Food safety issues have, however, gravely affected human life and health and have caused great harm to society and the global economy. In this context, it is pertinent to note that exploring the intrinsic relationship between digital technology and the efficiency of food safety supervision contributes to a better understanding of the role of digital technology in food safety supervision and how to maximize its influence **[6]**. The future of agriculture hinges on the adoption of technologies such as the Internet of Things (loT), Big Data, and Artificial Intelligence.

1. ***In what other ways can new and emerging technologies be relevant to each of the FSN dimensions (i.e., Availability; Access; Utilization; Stability; Agency; Sustainability)?***

The world is today facing the pressing challenge of unsustainable food production and consumption practices. Today’s food system is the main driver of deforestation and biodiversity loss and generates a quarter of the greenhouse gas pollution globally. What is more, the world’s roughly 500 million smallholder farmers who contribute 80% of the food are amongst the poorest and most malnourished groups. In fact, climate change could force over 100 million people into extreme poverty by 2030, mostly through impacts on agriculture and food security. Hence, improving the performance of the food system is critical if the development planners and food security experts are to sustainably feed nearly 10 billion people by 2050 while raising farmer incomes, protecting them from climate change and helping them to thrive. Breakthrough digital technologies have the potential to deliver significant positive impacts across food value chains. These range from innovations that can make food systems more resource-efficient and climate-resilient such as precision agriculture, gene-editing and biological-based crop protection, or technologies that improve traceability from farm to fork **[7]**.

1. ***What are some of the issues with respect to ethical use of data, access, agency and ownership linked to these new and emerging technologies that should be further discussed in the report?***

The ethical concerns and implications of food, nutrition, and water have resonance for both planetary well-being and human health. The health of species is intertwined with that of environment. Humanity cannot survive without enough food and water to nourish the world’s people, but the planet’s resources are suffering from the ramifications of a changing climate. Food and water also hold a special status: they are essential to survival, but their inherent benefits lie in their consumption. Given that human health and nutrition thus relies on an ongoing cycle of depletion and replenishment of these resources, there is a unique moral need to ensure that food and water are constantly available **[8]**.

**6.**The report reviews issues concerning institutions and governance for data collection, analysis and use, with a focus on data governance principles, data protection, transparency and governance of official statistics, the implications for governance of an increasingly digitalized world, and examples of initiatives addressing governance challenges.

1. ***Are there any issues concerning governance of data for FSN that have not been sufficiently covered in the draft report?***

The demand for data on impact of policies, programmes and interventions on food and nutrition security is rapidly growing. Both governments and civil society have a need for information on food and nutrition conditions and trends and the impact of policies and interventions. The draft report adequately covers issues concerning governance of data for FSN. However, it needs to incorporate relevant information on monitoring/evaluation and impact assessment that are undertaken by governments, NGOs, international agencies and donors **[9]**.

1. ***What are some of the risks inherent in data-driven technologies for FSN? How can these risks be mitigated? What are some of the issues related to data privacy, access and control that should be carefully considered?***
2. ***What are some of the risks inherent in data-driven technologies for FSN?***

These are risks involved with data-driven technologies for FSN. Every year governments in low- and middle-income countries invest millions of dollars in agriculture without accurate and reliable information (data). This leads to losses in productivity and income and perpetuates hunger and poor nutrition, particularly among the most vulnerable. There is an urgent need for more timely, accurate and reliable data to inform the decisions that will drive a more sustainable, equitable and inclusive food systems transformation. These are some of the risks involved with data-driven technologies for FSN **[10]**.

1. ***How can these risks be mitigated?***

**One way of minimizing and mitigating risks is data sharing and integration. It is becoming more important than ever.**An analytical approach to sustainable food systems means bringing together data on many different aspects from different sources. Innovation in the area of geo-localization can be a powerful instrument for linking data across different sources to provide new insights such as by overlaying health, food and environment data sources to understand food systems interactions in a particular region or community. Yet this also has implications for data protection **[10]**.

1. ***What are some of the issues related to data privacy, access and control that should be carefully considered?***

A huge amount of data is being produced in the food industry, but the application of big data (regulatory, food enterprise, and food-related media data) is still in its infancy. Each data source has the potential to develop the food industry, and big data has broad application prospects in areas like social co-governance, exploit of consumption markets, quantitative production, new dishes, take-out services, precise nutrition and health management. However, there are urgent problems in technology, health and sustainable development that need to be solved to enable the application of big data to the food industry **[11]**.

1. ***What are the minimum requirements of an efficient FSN data system and how should these be prioritized?***
2. ***What are the minimum requirements of an efficient FSN data system?***

Statistics usually play a vital role in supporting policy. It is critical to ensure the credibility and reliability of the data we use, given that this information underpins our decision making. However, in many cases, the quality of primary data cannot be ensured, which may affect all subsequent analysis and policies. For example, the credibility of food security data can be questioned due to poor working conditions of agents and inappropriate data collection process. Evaluation, which feeds into decision making by providing evidence-based findings and recommendations, also highly relies on credible and accurate statistics **[12]**.

1. ***How should these be prioritized?***

Increasing the incomes of the poor and tackling development challenges for countries are critical elements for achieving global food security. But policies may also be needed to prioritized in order to ensure that higher incomes translate into improved nutrition, including polices focused on health, education, social protection and infrastructure. Recommendations for policies for encouraging healthier food choices need to be made. Evaluating the effectiveness of policies and in particular the needs of socio-economic and demographic groups is hampered by inadequate and irregular food data collection, including on the prevalence of food insecurity **[13]**.

1. ***Which mechanism or organization should ensure good governance of data and information systems for FSN? How to regulate and mitigate potential conflicts between public and private ownership of data?***
2. ***Which mechanism or organization should ensure good governance of data and information systems for FSN?***

Effective collaboration is fundamental for the modernization of statistical production and for enhancing trust and legitimacy of data and statistics in the food and agriculture sector. When stakeholders along the data value chain collaborate, the result is more and better data produced, more relevant and timely insights for decision-makers, and better use of the available resources, as well as enhanced digitalization. However, this requires inclusive and multi-stakeholder approaches that can enhance trust and support data governance and sharing. National governments, international agencies and other involved stakeholders working in the area of management of food security and nutrition initiatives can play a vital role in this area but is facing challenges that need to be addressed in the financing, visibility, and effectiveness of its data and statistical work and country-level support **[14]**.

1. ***How to regulate and mitigate potential conflicts between public and private ownership of data?***

Enhanced FSN data management is essential. This will enable food security policy planners devise strategies needed to ensure that the target of zero hunger is met in all regions of the globe. I suggest following intervention areas in order to regulate and mitigate potential conflicts between public and private ownership of data at all levels **[14]**:

* *Lack of investment in national foundational data and statistics systems is the biggest challenge countries are facing:* Many low- and lower-middle income countries do not have sufficient financial resources to produce agri-food data and statistics, and investing in this area is rarely a political priority for donor organizations **[14]**.
* *Investments in agri-food systems data and statistics face effectiveness and sustainability challenges:* Limited coordination internally and among development partners on agricultural data and statistics has contributed to a proliferation of initiatives and data collection activities that risk duplication or may undermine country-led efforts to use data to inform decision-making on agri-food system policies **[14]**.
* *Inclusive and multi-stakeholder approaches are critical for data governance and sharing:* Establishing dialogue between stakeholders (both producers and users of data, state and non-state actors) increases trust and is a precondition for finding good governance solutions for collaboration on data and setting up suitable data-sharing infrastructures **[14]**.
* *Digitalization and the use of alternative data sources are key enablers of more effective collaboration in data and statistics for agri-food systems:* The use of new technology and alternative data sources is accelerating innovation and development in general and within the agri-food sector in particular, bringing different stakeholders together around a transformative agenda. Traditional data sources such as household surveys and agricultural censuses are required to harness this potential **[14]**.
1. ***What are the financing needs and the financial mechanisms and tools that should be established to allow all countries to collect, analyse and use FSN data?***

The inter-governmental agencies (such as the Food and Agricultural Organization of the United Nations [FAO] and the United Nations Development Program [UNDP]) need to function as a well-recognized mandate. They can act as producer, convener, and standard setter on data and statistics for agri-food systems. Also, they could play a vital role inin better FSN data management. However, it is pertinent to note that there are several challenges associated with the financing, visibility, and effectiveness of data, and statistical work **[14]**.

Governments and donors should scale up and improve the effectiveness of investments in data and statistics for agri-food systems **[14]**. Following strategies are suggested:

* Raise awareness among senior decision-makers within their organizations at the national and global levels on the value of data and the benefits of investing in robust national data and statistics systems **[14]**.
* Support the development of national data systems, statistical capacity, and digital skills that enable countries to meet and monitor the Sustainable Development Goals (SDGs) **[14]**.
* Accelerate action to support digital transformation by ensuring more predictable and sustainable investment and support for its data and statistics activities **[14]**.

In addition, national governments should improve collaboration on data and statistics for agri-food systems at national and subnational levels by:

* investing domestic resources in the digitalization of data collection and production activities;
* developing national data strategies for collaboration on agri-food system data, including guidelines for data sharing and use, legal mandates, and the roles and responsibilities of different actors in the data value chain, including donors and international organizations; and
* adopting an inclusive and multi-stakeholder approach that strengthens data governance and sharing, and establish mechanisms to connect data producers with data users including affected communities **[14]**.

Also, there is need to improve the visibility and effectiveness of its data and statistical work and country-level support by:

* developing a clear vision and integrated data strategy on innovation and digital transformation, supported by a framework for strategic oversight and data governance;
* providing guidance and thought leadership to the international community on how new and traditional data sources should be integrated and future-proofed; and
* promoting the establishment of a platform or mechanism for international organizations, and particularly Romebased agencies (RBAs) to regularly interact with members on data and statistics issues related to agri-food systems **[14]**.

Innovations in digital technology and the use of alternative data sources have decreased the cost and increased the speed of data collection and use. Countries are combining satellite and ground data with weather forecasts to project food production and get early warnings of potential crop failure in order to better plan support to small-scale farmers and vulnerable communities. Harnessing this potential requires increased investment by donors and governments and a more effective approach that strengthens foundational data systems and governance frameworks and supports local knowledge and capacity development **[14]**.

**7.** Drawing on HLPE reports and analysis in the wider literature, in the next draft the report will outline examples of potential policy pathways to address challenges to data collection and analysis tools for FSN.

1. ***What data do the global community and international organizations need in order to gain an appropriate insight into the current state of world food security and to agree on and design international action to improve it?***

Without the right data it is impossible to formulate evidence-based policy, know if interventions are having the desired impact or unintended consequences, or track changes over time. For example, measuring the productivity and incomes of small-scale food producers is critical for tracking progress toward SDG target 2.3, which aims to double agricultural productivity and increase the incomes of small-scale food producers by 2030. Globally, data on the productivity of small-holder farmers is available in only 11 countries and data on the livelihoods of small-holder farmers is available in just 38 countries. Understanding the impact of policies on different population groups is essential for meeting the commitment to leave no one behind. However, less than 10 percent of countries are able to collect or publish agri-food systems data at the required level of disaggregation **[14]**.

1. ***What data do countries need for more effective decision-making for food security and nutrition and to inform policies for the transformation of food systems?***

Effective decision-making is closely linked with filling the gaps in data. Some iinitiatives are playing a key role in bridging some of these data gaps and supporting the capacity of low and lower-middle-income countries to produce and use foundational agricultural data for policy making and SDG monitoring. At the same time, advances in technology are also changing the way that data are (a) collected, (b) shared, and (c) used. Governments and non-state actors are increasingly using digital technologies and adopting new and alternative data sources and approaches to fill data gaps, provide insights on complex development challenges, and support innovation **[14]**.

1. ***Please suggest references to cases that illustrate policies and initiatives aimed at:***
* improving equity in access to data for FSN policies and decisions, including at grassroot and local levels;
* enhancing capacities with respect to data generation, access, analysis and use by different actors;
* specifically harnessing of traditional and indigenous/first nations knowledge.

An analysis of data needs and gaps on agri-food systems is outside the scope of this report and will vary from country to country. There is need to generate (though traditional and alternative data sources) the types of data and statistics that can be used to (a) support decision-making for food security, and nutrition: and (b) inform policies for the transformation of food systems. Estimating the value of data to calculate a return on investment and incentivise investment is notoriously complex. Nevertheless, new partnerships are being developed, such as the Africa-Europe Digital Economy Partnership, which places the data economy at the heart of digitalization efforts. More work will be needed in terms of investment, capacity development, governance structures, technical infrastructure and sharing and integrating data in an inclusive and equitable manner to ensure that all countries can benefit from these opportunities. The 2021 World Development Report has called for a new social contract for data, founded on value, trust and equity, which supports integrated national data systems and requires proper financing and incentives to produce, protect, and share data and bridge the digital divide **[14]**.

1. ***Please provide references and examples of success: good data leading to good policies (context-specific), or any lessons to be learned from a failed data collection/utilization attempt.***

“The Bern Network on financing data for development” is one example of success. The Bern Network is an open, multistakeholder alliance that promotes more and better financing for development data to advance the 2030 Agenda for Sustainable Development. The Network is developing a Clearinghouse for Financing Development Data, an online platform to help countries, donors and development partners identify funding opportunities, bring projects to scale, advocate for support to data and statistics and connect to new partners **[14]**.

1. ***Please also suggest any initiative and good practice aimed at addressing:***
* the specific constraints of generating a minimum set of indicators in conflict and disaster- affected areas;
* capacity gaps of local institutions, farmers’, producers’ and workers’ organizations in generating, sharing and analysing good quality data, as well as in using data to inform decision-making in food systems;
* capacity gaps at country level to generate and use data in policy-making processes, monitoring and reporting related to SDG2; including with respect to financial resources, human resources, data management, legislation and the enabling environment and FSN governance.

***Initiative and good practice-1:*** Real time agriculture data for COVID-19 response in Kenya:

During the pandemic, Kenya’s Ministry of Agriculture set up a Food Security War Room and deployed a mobile-based Food Staples Survey to track the availability of food stocks from stockists, farmers, traders, and other agricultural food operators in the country at the subnational level. The data was used to guide decision-making on food availability and prices, communicate to the public on supplies, distribute relief food to vulnerable communities and support value-chain actors to take advantage of trade opportunities. More importantly it enabled the government to re-think its strategic approach to how data can and should underpin agricultural transformation **[14]**.

***Initiative and good practice-2:*** The Africa Regional Data Cube:

The Africa Regional Data Cube, now known as Digital Earth Africa, piloted the use of Earth observation (EO) data and satellite technology to support Ghana, Kenya, Sierra Leone, Senegal, and Tanzania as they develop policies for agriculture, food security, deforestation, urbanization, and water access. In Senegal, by combining EO data with traditional data on agricultural productivity, the Ministry of Agriculture was able to identify regions that were at high risk for low or no agricultural productivity due to scant, delayed, or no rainfall and, in partnership with the FAO, provide climate resistant crops to farmers **[14]**.

1. ***Please also provide any additional references with respect to:***
* minimum data requirements (baseline) for FSN at country level;
* qualitative data;
* data representing traditional knowledge.

The COVID-19 pandemic and its socioeconomic implications have intensified the urgency of not only scaling up financing for data and statistics at both the country and global levels, but also ensuring that financing is spent more efficiently and effectively. Stakeholders are keen to understand where data gaps are, how these could be potentially filled with innovative sources of data, and how better collection and use of data can support the implementation of the SDGs and lead to better development outcomes. Current financing models are inadequate and there is a need to explore options for a new approach to financing data and statistics in the agri-food sector that supports country leadership, fosters greater alignment with country priorities and drives coordination among donors. Effective collaboration on data by stakeholders is fundamental for the modernization of statistical production and enhancing trust and legitimacy of data and statistics in the food and agriculture sector. However, support to date has faced challenges surrounding prioritization, coordination, country ownership, and sustainability, which have limited its effectiveness **[14]**.

Governments and donors should scale up and improve the effectiveness of investments in data and statistics for agri-food systems **[14]**. Following actions are needed:

* *Raise* awareness among senior decision-makers within their organizations at the national and global levels on the value of data and the benefits of investing in robust national data and statistics systems;
* *Prioritize* and/or *integrate* agri-food data and statistics within cooperation strategies, sectoral dialogues on agriculture and food systems, national planning processes, and global forums; and
* *Support* the development of national data systems, statistical capacity, and digital skills that enable countries to meet and monitor the sustainable development goals (SDGs) **[14]**.

In addition to the points made above, national governments, from across the regions of the globe, should improve collaboration on data and statistics for agri-food systems at national and subnational levels **[14]**. This will require:

* *Investing* domestic resources in the digitalization of data collection and production activities **[14]**.
* *Developing* national data strategies for collaboration on agri-food system data, including guidelines for data sharing and use, legal mandates, and the roles and responsibilities of different actors in the data value chain, including donors and international organizations **[14]**.
* *Adopting* an inclusive and multi-stakeholder approach that strengthens data governance and sharing, and establish mechanisms for feedback on data quality and dissemination **[14]**.
* *Exploring* mechanisms that ensure that information produced on agri-food systems meets users’ needs by connecting data producers with academia, policymakers, service providers, affected communities, and other data users **[14]**.
* *Ensuring* the sustainability and long-term financing of digital and data platforms **[14]**.

**8.***Please provide your feedback on the following:*

1. ***Are there any major omissions or gaps in the V0-draft?***

No, there are no major omissions or gaps in the V0-draft.

1. ***Are topics under- or over-represented in relation to their importance?***

No, topics are either under- or over-represented in relation to their importance.

1. ***Are there any redundant facts or statements that could be eliminated from the V0-draft?***

No, there are no redundant facts or statements that could be eliminated from the V0-draft.

1. ***Are any facts or conclusions refuted, questionable or assertions with no evidence-base?***

No, there are no facts or conclusions refuted, questionable or assertions with no evidence-base.

**References:**

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