

MONITORING FOOD SYSTEMS in the Philippines

KEY MESSAGES

- The Philippines has strong food systems policies and programs, but data fragmentation limits the ability to guide coordinated investment decisions.
- Establishing an integrated national food systems monitoring framework will help to translate data into actionable insights through a globally aligned, country-adaptable platform
- Strengthening data governance and subnational capacity is critical to ensure that national monitoring systems drive locally responsive action across the Philippines' decentralised and geographically dispersed food systems

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DOST-FNRI
FOOD AND NUTRITION RESEARCH INSTITUTE

Food Systems Countdown Initiative

gain
Global Alliance for Improved Nutrition

Food and Agriculture Organization of the United Nations

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Introduction

Food systems are central to the Philippines' development plan and underpin national priorities on nutrition, economic growth, environmental sustainability, and resilience[1]. Despite long-term efforts, food systems remain highly vulnerable to economic shocks, climate-related disruptions, and price volatility, with uneven impacts across population groups and regions[2,3].

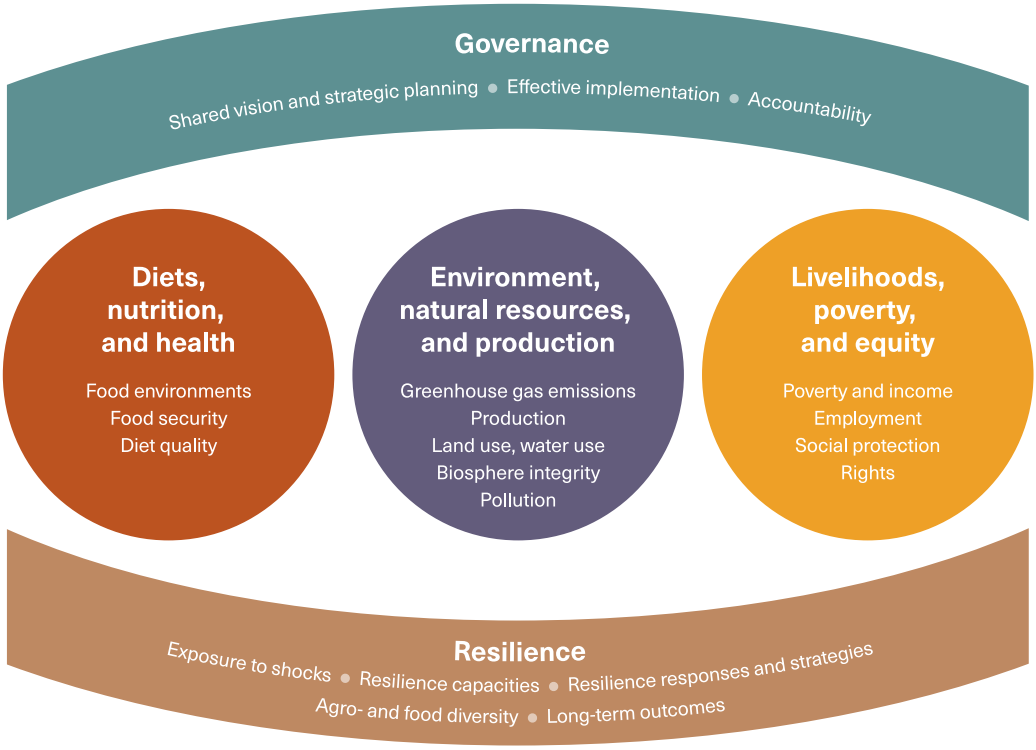
The country continues to face a complex set of food systems challenges. These include the coexistence of multiple forms of malnutrition, including stunting and micronutrient deficiencies, alongside rising overweight/obesity and burden of diet-related non-communicable diseases, highlighting the growing pressure of dietary transitions on population health[4]. These challenges are compounded by a high exposure to climate-related risks that disrupt food production and access, as well as structural inequalities that shape livelihoods in rural and coastal areas, where dependence on agriculture and fisheries remains high and poverty persists[5].

The Philippines has demonstrated sustained commitment to food systems transformation through national and global engagements, including the 2021 UN Food Systems Summit and the development of a national food systems pathway[6]. However, progress in translating these commitments into measurable outcomes depends on the ability to better understand system-wide performance across nutrition, environment, livelihoods, governance, and resilience domains.

At present, food systems-relevant data are generated through multiple national and sectoral information systems, including statistical surveys and administrative datasets. While these provide a strong evidence base, they also reflect the complexity of the food system itself and require improved coherence to fully support integrated analysis and decision-making.

This policy brief examines the current state of food systems monitoring in the Philippines and provides recommendations for building an integrated monitoring system that can drive sustainable transformation.

Countdown themes and indicator groups. Outer shapes refer to cross-cutting themes. Interior circles refer to long-term outcomes.



1 National Economic Development Authority (NEDA). Philippine Development Plan 2023-2028. NEDA Pasig City, Philippines. Available from: https://pdp.depdev.gov.ph/philippine-development-plan-2023-2028/

2 Golloso-Gubat MJ, Felix AdR, Tandang NA, et al. 2024. Sustainability of the Philippine food system. Frontiers in Sustainable Food Systems, 8, 1278891. Available from: https://www.frontiersin.org/journals/sustainable-food-systems/articles/10.3389/fsufs.2024.1278891/full

3 World Bank. 2020. Transforming Philippine Agriculture: During COVID-19 and Beyond. Available from: https://documents1.worldbank.org/curated/en/614671593417939107/pdf/Transforming-Philippine-Agriculture-During-COVID-19-and-Beyond.pdf

4 Department of Science and Technology—Food and Nutrition Research Institute (DOST-FNRI). 2024. Philippine Nutrition Facts and Figures: 2021 Expanded National Nutrition Survey (ENNS). Available from: https://enutrition.fnri.dost.gov.ph/uploads/2021%20ENNS%20Facts%20and%20Figures.pdf

5 World Bank. 2013. Disquiet on the Weather Front: The Welfare Impacts of Climatic Variability in the Rural Philippines. Available from: https://documents.worldbank.org/en/publication/documents-reports/documentdetail/548731468332660987

6 UN Food Systems Coordination Hub. 2026. PHILIPPINE AGRIFOOD SYSTEM TRANSFORMATION PATHWAY. Available from: https://www.unfoodsystemshub.org/docs/unfoodsystemslibraries/national-pathways/philippines/2026-01-29-en-philippines-national-food-systems-transformation-pathway.pdf?sfvrsn=fca2fda

The Food Systems Countdown Initiative

The Food Systems Countdown Initiative emerged from the United Nations Food Systems Summit as an interdisciplinary collaboration that now includes over 65 food systems experts from dozens of institutions worldwide. The Countdown developed a global monitoring framework, comprising five themes: (1) Diets, nutrition, and health; (2) Environment, natural resources, and production; (3) Livelihoods, poverty, and equity; (4) Governance; and (5) Resilience and undertook a consultative process to select a set of 50 indicators across these themes, which constitutes the global indicator framework. The Countdown publishes annual monitoring updates and additional analysis to monitor global food systems transformation. The Countdown's global indicator framework is being adapted at the country level to meet local needs and priorities. The Philippines, through the Department of Science and Technology-Food and Nutrition Research Institute (DOST-FNRI), is one of the first countries to undertake this process through the Food Systems Transformation Accelerator, a multi-partner platform that supports governments to turn food system priorities into investable actions, with support from BMZ, the Netherlands Ministry of Foreign Affairs, and GIZ.

Prioritised indicators

The Philippine adaptation of the Countdown indicator framework was initiated through a stakeholder consultation and technical workshop held in March 2026. The workshop brought together representatives from government, UN agencies, academia, and civil society to identify priority indicators across the Countdown's five themes through a participatory process. This process focused on strengthening food systems monitoring to support more evidence-based policy and planning.

For **Diets, nutrition, and health**, the selected indicators reflect the multiple dimensions of diet quality, nutritional status, and food access that are most critical in the Philippine context. They capture both physical and economic access to nutritious diets through measures of dietary diversity, availability of fruits and vegetables, and the affordability of a healthy diet. Access to safely managed drinking water (SDG 6.1.1) is included as a foundational determinant of nutrition and health outcomes, particularly for young children. Food security and dietary adequacy are assessed through the prevalence of moderate or severe food insecurity (SDG 2.1.2) and the proportion of the population unable to afford a healthy diet. Nutritional status indicators span the full double burden of malnutrition, including undernutrition, overnutrition, and undernourishment, alongside key micronutrient deficiencies (iron deficiency anemia, vitamin A deficiency, and iodine deficiency disorders), which remain significant public health concerns in the Philippines. Dietary intake is assessed through measures of energy intake and nutrient adequacy for both the general population and infants and young children, complemented by indicators of minimum dietary diversity and the proportion of the population meeting recommended intake levels. Equity dimensions are captured through disaggregation of food group consumption by gender, while the exclusive breastfeeding rate (0–6 months) reflects the recognition of critical early-life nutrition practice with long-term health implications.

In **Environment, natural resources, and production**, priority indicators capture both the productivity and sustainability of the Philippine food system. Production indicators across crops, livestock, and fisheries (including aquaculture and capture fisheries) reflect the diversity of the country's food production base, while agrifood trade volumes and the import/export ratio situate domestic production within global market dynamics. The irrigation development rate is highlighted given its importance for agricultural productivity and resilience in smallholder farming systems across the archipelago. Environmental sustainability indicators focus on pressures on natural resources and ecosystem integrity. These include agricultural water withdrawal and freshwater use as shares of renewable resources, as well as pesticide application per hectare of cropland, which signals risks to environmental and human health. Greenhouse gas emissions from agrifood systems, including fisheries, provide a comprehensive measure of the sector's contribution to climate change. The fishery health index is included given the importance of marine ecosystems for food security and livelihoods in the Philippines. Land and resource governance indicators capture competing demands on natural capital, including land and aquaculture resources available for food production and the availability of alienable and disposable agricultural land. Together, these indicators reflect tensions between food production, urban expansion, and environmental conservation that are central to the sustainability of Philippine food systems.

The **Livelihoods, poverty, and equity** indicators capture the economic contribution of the food system, conditions of work, poverty and deprivation, and equity in access to opportunities and resources in the Philippines. Agriculture's share of GDP provides a macroeconomic anchor for the sector, while poverty incidence, the food threshold, and subsistence incidence reflect the depth of deprivation among populations most dependent on food system livelihoods. Labor market indicators capture the structure and quality of employment in the sector, including the share of agrifood employment in total employment and the prevalence of child labor. Functional literacy is included as a foundational enabling factor for economic mobility and participation in evolving food systems. Equity and spatial disparities are reflected through women's access to productive resources, measured by the share of women among owners or rights-bearers of agricultural land (SDG 5.a.1), and subnational economic performance, captured through per capita Gross Regional Domestic Product (GRDP). These indicators enable the analysis of geographic inequalities in agrifood-linked prosperity. Collective action is reflected through the number of agrifood system cooperatives, highlighting the role of social organisations in improving inclusion and distribution of benefits.

The **Governance** indicators reflect institutional effectiveness, policy implementation, public investment, and inclusivity in the governance of the Philippine food system. The government effectiveness index provides a high-level measure of the state's capacity to design and implement coherent food policies, while food safety capacity captures the regulatory infrastructure needed to ensure that the food supply is safe and trustworthy for all consumers. Indicators on public expenditure, covering agrifood research and development, nutrition and food safety, and infrastructure such as farm-to-market roads, track whether financial commitments are aligned with food systems transformation priorities. The extent of land redistribution under agrarian reform is included as a structural indicator of equity in access to productive resources, reflecting the Philippines' long-standing agrarian reform agenda. Policy environment indicators assess the extent of nutrition-sensitive governance through the adoption of health-related food environment policies and the functionality of local nutrition coordination mechanisms. Together, these indicators reflect institutional capacity for translating national policy commitments into subnational action. Implementation reach is captured through the coverage of workplace and community-based food system and nutrition programs, as well as food access interventions implemented across local government units, reflecting the operationalisation of governance mechanisms at the local level. Inclusivity in governance is reflected through the presence of gender-responsive institutions within agrifood systems, highlighting the importance of equitable decision-making structures for achieving inclusive food system outcomes.

The **Resilience** indicators assess the capacity of the Philippine food system to anticipate, withstand, adapt to, and recover from a range of shocks and stressors. As one of the world's most disaster-exposed countries, the Philippines faces frequent typhoons, flooding, droughts, and seismic events that pose significant risks to food production, supply chains, and household food access. Macroeconomic exposure is captured through the ratio of total disaster damages to GDP, while food price stability and the agricultural stress index reflect how shocks translate into market volatility and production disruptions. Household resilience is reflected through indicators of coping strategies and population displacement, capturing the human impacts of food system disruptions. Enabling social factors such as social capital are included to reflect the role of community networks in supporting collective responses during crises. System infrastructure and adaptive capacity are assessed through indicators of ICT and energy access, production variability and sourcing flexibility, and logistics and storage capacity, which together reflect the ability of the food system to maintain continuity under stress. Financial resilience is captured through access to financial services, including credit, insurance, and savings mechanisms that support recovery and rebuilding among farmers and other food system actors following shocks.

Data availability and gaps

The Philippines has a robust multi-source data ecosystem, including national surveys, administrative systems, monitoring frameworks, and global datasets. However, workshop discussions highlighted that these data are not being fully leveraged for food systems decision-making, due to limited accessibility, uneven analytical capacity, and weak translation into integrated policy-relevant outputs.

A key constraint is the fragmentation of data across institutional and thematic silos. Despite a broad and active stakeholder landscape, several governance challenges persist. Agencies maintain separate databases with differing standards, formats, and reporting timelines, limiting interoperability and constraining integrated food systems analysis. The absence of formalised data-sharing mechanisms further reinforces duplication and reduces consistency in interpretation across sectors.

Additional constraints relate to data quality, coverage, and inclusiveness. Variability in indicator definitions, reliance on proxy measures, and infrequent updates reduce comparability and timeliness. Significant gaps persist in subnational and disaggregated data, as well as in sectors such as fisheries, informal livelihoods, and environmental monitoring. These limitations reduce the system's ability to consistently capture distributional outcomes and emerging risks, constraining evidence-based prioritisation and coordinated decision-making across national and subnational levels.

Recommendations for Strengthening Monitoring-Policy Linkages

1. **Establish a formal inter-agency food systems data coordination mechanism:** Create a mandated coordination body with clear authority to standardise data-sharing protocols, harmonise definitions, and strengthen interoperability across agencies. This will directly address fragmentation and improve the efficiency and consistency of food systems data use.
2. **Embed the food systems monitoring framework into national and subnational planning and accountability systems:** Integrate indicators into development plans, investment frameworks, and monitoring systems at both national and local levels to ensure that data are systematically used to inform decision-making, and to guide resource allocation, policy coherence, and accountability.
3. **Strengthen equity-focused data systems to improve policy responsiveness:** Prioritise improved disaggregation and expand coverage of vulnerable and underrepresented groups to enable more inclusive analysis and better-targeted interventions, particularly in geographically dispersed and underserved regions.