MONITORING FOOD SYSTEMS in Kenya

KEY MESSAGES

- Kenya has made significant progress in establishing food systems monitoring frameworks, but coordination and integration across sectors remain fragmented, limiting the effectiveness of evidence-based decision-making.
- Critical data gaps exist, especially within real-time indicators, such as household dietary diversity, food loss and waste, seed and crop diversity, and community-level climate resilience metrics, hindering comprehensive food systems assessment.
- Strengthening county-level technical capacity and infrastructure is essential for timely data collection and analysis to support localised food systems interventions.
- Enhanced integration between monitoring systems and policy implementation mechanisms is needed to ensure that data drives meaningful action across government, development partners, and private-sector stakeholders.

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MINISTRY OF AGRICULTURE AND LIVESTOCK DEVELOPMENT
REPUBLIC OF KENYA

Food Systems Countdown Initiative

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Global Alliance for Improved Nutrition

Food and Agriculture Organization of the United Nations

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Climate, Earth, and Society

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College of Agriculture and Life Sciences

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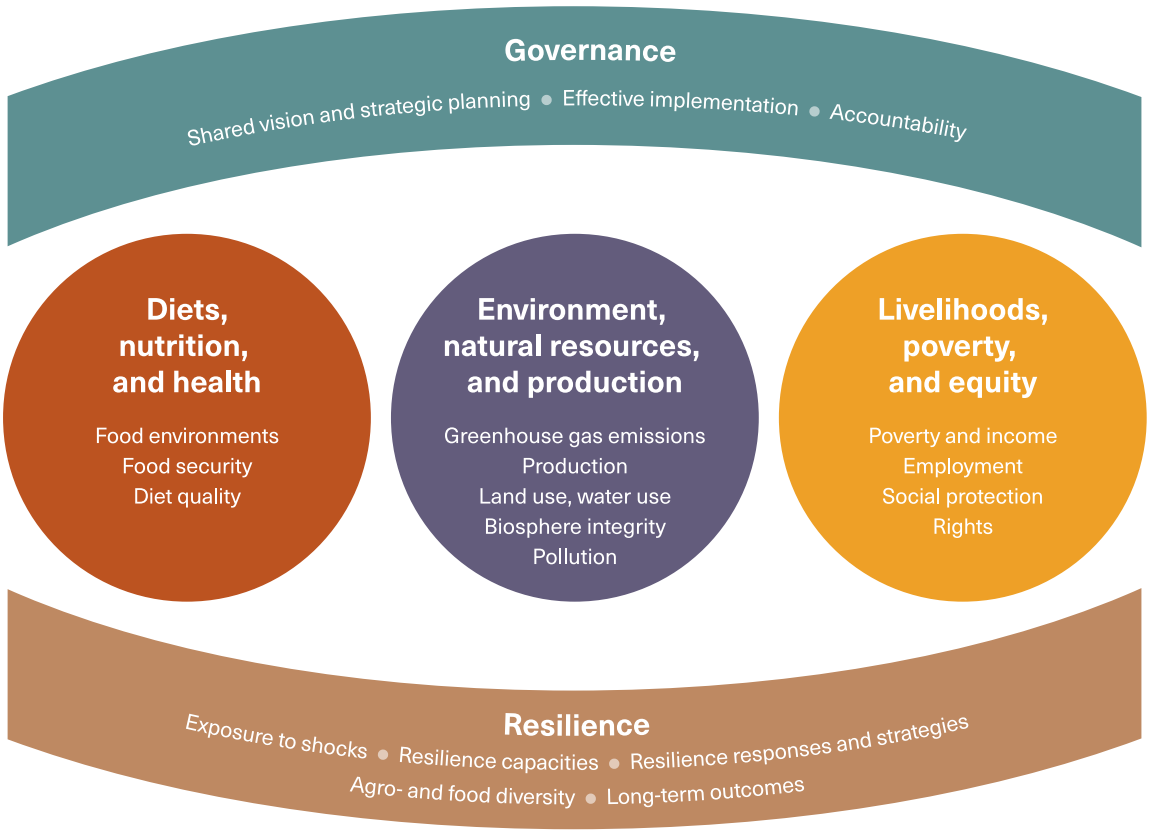
Introduction

Kenya's engagement in food systems transformation reflects a strong policy commitment and growing political will to address persistent food and nutrition security challenges. This ambition is evident in progressive national frameworks such as the National Food and Nutrition Security Policy (2011), Agricultural Sector Transformation and Growth Strategy (2019–2029), Agricultural Soils Management Policy (2023), and the newly launched National Agroecology Strategy for Food System Transformation (2024–2033). These strategies are aligned with global and regional commitments, including the Sustainable Development Goals (SDGs), the Paris Agreement on climate change mitigation, and the Malabo Declaration on comprehensive African agricultural development, signalling Kenya's intention to lead in advancing climate-resilient and equitable food systems.

Despite these efforts, improvements in human and environmental health outcomes remain slow and uneven. As of 2023, 73% of the population experienced moderate or severe food insecurity[1] and in 2022, 79% could not afford a healthy diet,[2] while 30% of food was lost before reaching consumers.[3] Undernutrition, rising overweight and non-communicable diseases, and declining agricultural productivity due to increased land degradation and climate shocks further illustrate the complex and fragile nature of Kenya's food systems.

Kenya's food systems are shaped by a mosaic of factors, including diverse agroecological zones, a predominance of smallholder agriculture, shifting dietary patterns, and farmland conversion to urbanisation. The country's devolved governance structure presents both opportunities and challenges—enabling locally tailored solutions but also exacerbating coordination, financing, and implementation gaps across sectors and levels of government. As the country increasingly prioritises resilience, equity, and sustainability in food systems policy, there is growing recognition that robust, integrated, and multisectoral monitoring systems are essential for driving evidence-based decision-making, tracking progress, and ensuring accountability. Yet, monitoring and evaluation systems remain fragmented, under-resourced, and unevenly implemented, especially at the county level.

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



1 FAO. 2024. FAOSTAT: Suite of Food Security Indicators. Available from: https://www.fao.org/faostat/en/#data/FS

2 FAO. 2024. FAOSTAT: Cost and Affordability of a Healthy Diet. Available from: https://www.fao.org/faostat/en/#data/CAHD

3 Government of Kenya. Kenya Postharvest Management Strategy for Food Loss and Waste Reduction (2024-2028). Available from: https://kilimo.go.ke/wp-content/uploads/2024/10/KENYA-POST-HARVEST-MANAGEMENT-ON-FOOD-LOSS-AND-WASTE-REDUCTION-STRATEGY.pdf

This policy brief examines the current state of food systems monitoring mechanisms in Kenya and how the Food Systems Countdown Initiative global indicator framework could add value to national efforts. It identifies critical indicators and data gaps at the national level and offers targeted recommendations for strengthening governance and coherence in the design and implementation of Kenya's food system monitoring efforts.

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 in an effort 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. Kenya is one of the first countries to undertake this process in a collaboration between the Ministry of Agriculture and Livestock Development, the Global Alliance for Improved Nutrition (GAIN), and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

Prioritized Indicators

A stakeholder engagement workshop was held in April 2025 as part of the process to adapt the Countdown global indicator framework to the Kenyan context. This workshop brought together stakeholders across government, academia, civil society, and the private sector in a participatory process to identify Kenya's priority indicators across the Countdown's five themes. Stakeholders reviewed indicators with available data, emphasising relevance to policy, methodological soundness, feasibility, and coverage.

In the **Diets, nutrition, and health** theme, Kenyan stakeholders recommended priority indicators such as dietary diversity scores and prevalence of malnutrition across different age groups. In addition, stakeholders emphasised the need for indicators related to food safety, access to safe water, and food insecurity measurement using the Food Insecurity Experience Scale. Key nutrition indicators which aligned with the global Countdown included minimum dietary diversity for women and children, affordability of healthy diets, and reduction of ultra-processed food consumption.

For **Environment, natural resources, and production**, various indicators were prioritised, with participants

emphasising climate change mitigation through greenhouse gas emissions tracking, sustainable production practices, and food security metrics. Priority indicators included agriculture value added, production volumes across key commodities (livestock, dairy, fisheries, and crops), and sustainable land management practices. Stakeholders highlighted the importance of monitoring land ownership by gender, irrigation coverage, water quality parameters, and climate adaptation measures such as rainfall patterns, forest cover, and biodiversity conservation. Import dependency reduction and value chain strengthening were also identified as critical areas for monitoring.

In the **Governance** theme, stakeholders focused on civil society participation, access to information, transparency in public spending, food safety regulation, and policy coordination mechanisms. Participants emphasised indicators around public participation in decision-making, social accountability, agricultural budget allocation as a percentage of total government expenditure, and implementation of food safety standards across the supply chain.

For **Livelihoods, poverty, and equity**, combined with **Resilience** due to overlapping themes, stakeholders prioritised indicators measuring agricultural employment, social protection coverage, disaster preparedness policies, early warning systems, and farmer access to productive resources disaggregated by gender and age. Key indicators included youth engagement in agricultural value chains, sustainable land and water management practices, and coping strategy indices to measure household resilience to shocks.

Data Availability and Gaps

Kenya has developed a sophisticated array of monitoring systems, yet significant gaps persist that limit comprehensive food systems assessment. The Kenya Food Systems Dashboard is a comprehensive data platform co-created by the Ministry of Agriculture and Livestock Development, GAIN, and other stakeholders that brings together data for almost 100 indicators across food systems with national and subnational data at the county and town level. This platform provides the data to describe Kenya's food systems, diagnose challenges, and support stakeholders to decide on actions to address these.

Real-time data availability remains a critical constraint, particularly for nutrition indicators and household-level food security metrics. While the National Nutrition Monitoring and Evaluation Framework provides structured tracking of nutrition outcomes, gaps exist in monitoring the effectiveness of nutrition-sensitive agriculture programmes. The absence of standardised indicators and methodologies across sectors makes it difficult to compare and interpret data consistently, particularly when linking agricultural production to nutrition outcomes.

County-level data gaps are particularly pronounced, reflecting limited technical capacity and inadequate infrastructure for timely data collection and analysis. Many counties lack the human resources and technology needed to maintain consistent monitoring systems, resulting in delayed or incomplete reporting that undermines evidence-based planning. Gender-disaggregated data, while available in some sectors (for example social protection and labour statistics), is not consistently collected in other sectors, limiting the ability to assess equitable progress in food systems transformation.

Climate and environmental data present specific challenges, with limited integration between meteorological data, agricultural production statistics, and ecosystem health indicators. While early warning systems like FEWS NET provide valuable early warning, the translation of climate forecasts into actionable guidance for farmers remains weak. Additionally, community-level climate resilience metrics are underdeveloped, making it difficult to assess adaptive capacity at the grassroots level where interventions are most needed.

Private-sector engagement in data collection and sharing remains limited, creating gaps in market information, value chain analysis, and innovation tracking. The informal nature of many food system activities, particularly in urban areas and among smallholder farmers, presents additional challenges for comprehensive monitoring.

Recommendations for Strengthening Monitoring-Policy Linkages

1. **Maintain an Integrated Data System:** Integrate private-sector data sources and community-based monitoring approaches into national systems through the Kenya Food Systems Dashboard. This can be further strengthened with cross-sectoral interoperability through formal data-sharing agreements and participatory monitoring mechanisms that enhance data comprehensiveness while building grassroots accountability for food systems transformation.
2. **Embed Food Systems Monitoring within National and County Planning Cycles:** Institute joint planning at the national and county levels and integrate interventions into County Integrated Development Plans to strengthen evidence-based decision-making and influence budget allocation.
3. **Strengthen Monitoring-Policy Linkages:** Strengthen existing food systems monitoring coordination mechanisms and ensure sufficient funding and efficiency to bring together diverse actors to foster open data principles and reduce data collection silos. Link these mechanisms with the Comprehensive Africa Agriculture Development Programme (CAADP) process and Kenya's Biennial Review reporting to ensure monitoring results directly inform policy design and budget allocation processes.
4. **Strengthen Youth-Focused Data Collection and Monitoring:** Develop comprehensive data collection systems that systematically track youth engagement across food systems value chains, including disaggregated indicators for youth access to productive resources, employment in agri-food sectors, and entrepreneurship outcomes. Establish youth-specific monitoring protocols that capture both formal and informal sector participation to inform evidence-based youth inclusion policies.[4]
5. **Harness Innovation and Digital Technologies:** Deploy mobile-based data collection platforms and digital tools to improve real-time monitoring of food systems indicators, particularly in remote areas where traditional data collection is challenging. Integrate farmer-facing mobile applications with national monitoring systems to capture production data, market prices, and agricultural practices while building farmers' digital literacy for participatory data contribution.[3]

4 UNFSS. 2021. Kenya's Pathway to Sustainable Food Systems: National Position Paper. Available from: https://www.unfoodsystemshub.org/docs/unfoodsystemslibraries/national-pathways/kenya/2021-09-27-en-kenya-fss-dialogue-series-national-position-paper.pdf?sfvrsn=7a668679_1