gain
Global Alliance for Improved Nutrition

ACCELERATING FOOD SYSTEMS TRANSFORMATION ACROSS ASIA

Key tools and selected cases

March 2026

TABLE OF CONTENTS

About this document: This paper provides brief descriptions of eight key tools available to support national and sub-national transformation of food systems. Produced in advance of the Asia and the Pacific Food Systems Transformation Forum 2026, descriptions and cases provided focus on the Asia region.

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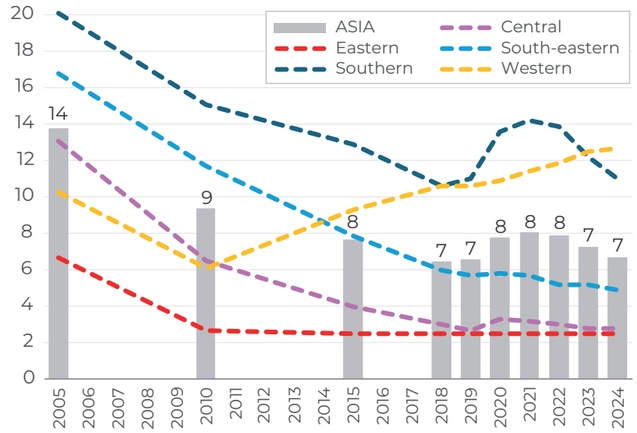
CHALLENGES AND OPPORTUNITIES

POSITIVE FOOD SYSTEMS TRANSFORMATION IS TOO SLOW

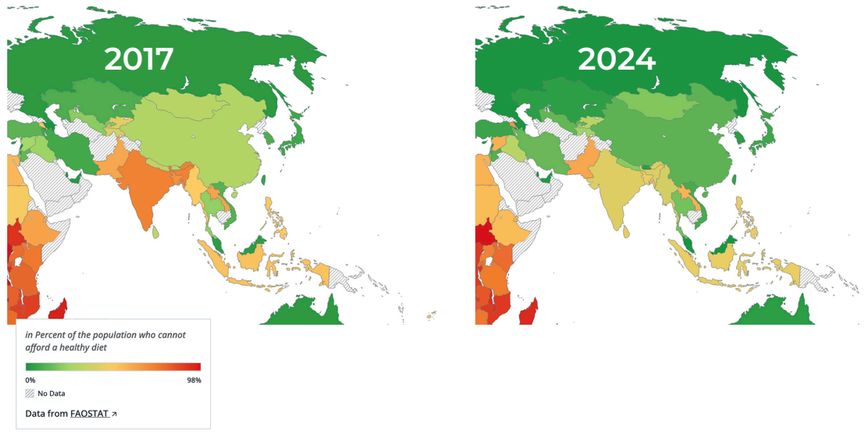
No country has managed to reshape food systems to deliver evenly on people's nutrition, on planetary welfare, or in terms of widespread prosperity. Globally, food systems continue to fail hundreds of millions when it comes to hunger and malnourishment. Asia has made improvements – for example, seeing hunger decline across most sub-regions (**Figure 1**) and healthy diet affordability improve (**Figure 2**) but challenges remain.

Figure 1. Hunger trends in Asia and subregions – Prevalence of Undernourishment, 2005-2024 (%)



Source: Data from FAO SOFI 2025. Note: Since 2015, value for Eastern Asia is <2.5

Figure 2. Snapshot of Asia's improvement in healthy diet affordability, 2017-2024



Source: The Food Systems Dashboard. The Global Alliance for Improved Nutrition (GAIN), Johns Hopkins University, Cornell University College of Agriculture and Life Sciences, and the Food and Agriculture Organization of the United Nations (FAO). 2025. Geneva, Switzerland. https://www.foodsystemsdashboard.org. DOI: https://doi.org/10.36072/db.

Too many people are unable to afford healthy diets, contributing to epidemic proportions of premature deaths and disability. The interests, contributions, and agency of women and girls, youth, and indigenous people in food systems are not embraced. All the while, the natural world – our home – is harmed by these same food systems.

But change is constant. Food system change is no exception, and meaningful progress is visible – however, the consensus view is that the widespread and deep systemic transformation needed to deliver for people and planet is not happening at sufficient speed and scale; that now we need to work harder and smarter to accelerate progress.

For many key public, private, and third-sector organisations involved in this work, the animating question has gone from – "Why do we need to transform food systems?" to, "How do we transform food systems faster?"

THE NEED TO ACCELERATE

Organisations in the ecosystem of support aiming to further government-led, food system transformation need to be able to measure and better understand what is working and why, to speed and scale improvement.

A multilateral approach to planning and supporting food system transformation is essential, and to this end, we have worked in concert with governments and other partners to develop and implement a series of practical tools to strengthen policy decision making processes and capacities. These are tools created to give users a hand over **major**, **common barriers**. They are also designed to align with or to support **ongoing national processes**, such as monitoring plans, or indeed continental and **transnational ambitions**, including for example food-systems initiatives of ASEAN or SAARC, global climate processes, and the UN Sustainable Development Goals.

The eight tools collected here can be instrumental:

- in diagnosing food systems to identify critical gaps and untapped opportunities;
- in shaping nimble action plans in line with national priorities;
- in identifying much-needed policy reforms to ensure sectors act alongside, rather than against, each other; and
- in providing practical ways to effectively navigate political, financial, and technical impediments.

Barriers have stood in the path of meaningful progress for too long – we must break through them. The objectives of this showcase are to:

1. Introduce each of 8 tools that can be used to strengthen policy decision making processes
2. Illustrate results and insights generated in Asia, and
3. Demonstrate how these results and insights are being used to progress food systems transformation.

The moment of the Asia and Pacific Food Systems Transformation Forum 2026, five years before the 2030 milestone of the SDGs is an important time to reflect, to gather support for strong government policy, and to remind stakeholders across the board of the urgency – and of what is at stake if we do too little. We must accelerate the transformation of food systems to deliver on their promise and put our resources behind work to shape a healthier, fairer future.

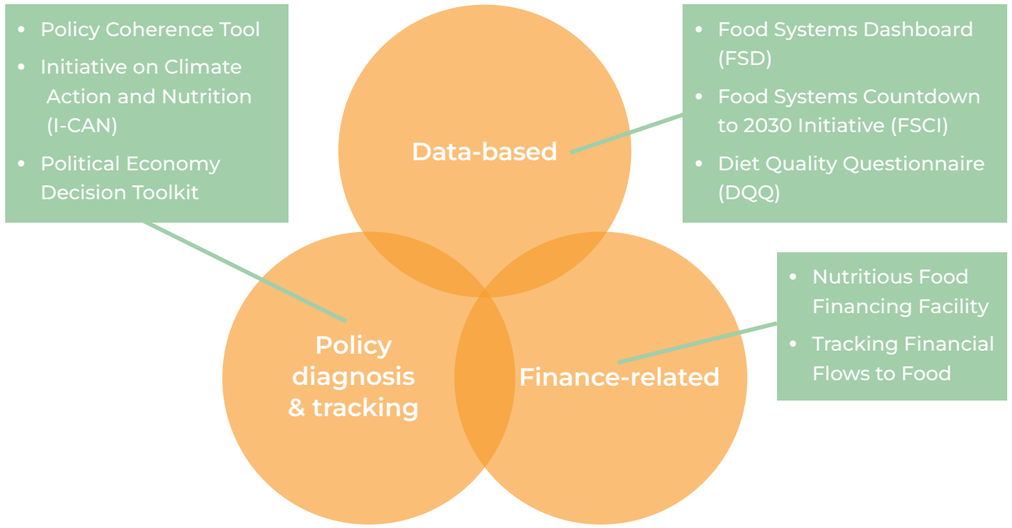
TOOLS TO ACCELERATE FOOD SYSTEMS TRANSFORMATION

GAIN is working in partnership with many organisations to provide tools, expertise, and support to help accelerate food systems transformation in nations around the world. Eight key tools are profiled here.

TYPOLOGY OF TOOLS

The eight tools highlighted here fall under three major areas, categorised by their main function – though they naturally overlap to some extent: Data-based, policy diagnosis, and finance-related tools (**Figure 3**).

Figure 3. Eight Selected Tools Profiled



DATA-BASED TOOLS

Fragmented or non-existent food systems data makes it challenging for stakeholders to take away meaningful insights for evidence-based decision-making. When food systems data is missing or difficult to visualise, there can be real-world consequences. Decision-makers may miss warning signs, overlook successful interventions worth scaling, or miss unintended trade-offs between policies aimed at different outcomes. Clear, comprehensive data collation and visualization transforms these challenges into opportunities — enabling leaders to better understand their food systems and the complex relationships between nutrition, livelihoods, and the environment that shape effective food systems policy.

Beyond data collection, we need tools that facilitate expert analysis that can help turn data into action and insights into impact.

These tools focus on collecting and sharing data on key components of food systems to spotlight statistics and track trends.

1. THE FOOD SYSTEMS COUNTDOWN TO 2030 INITIATIVE

AT A GLANCE

USING DATA TO TRACK PROGRESS AND INFORM ACTION AND INVESTMENT. The Food Systems Countdown Initiative (FSCI) provides a rigorous, science-based framework and indicators to monitor food systems transformation to 2030. Its thematic analyses have examined changes over time and interactions between indicators, and its annual monitoring updates allow users to determine areas requiring more attention and resources.

GEOGRAPHIC SCOPE

Global, Regional, National

USER TIPS

The FSCI or Countdown can provide policymakers and other food systems stakeholders with:

- A rigorous, science-based framework and indicators to monitor food systems transformation.
- An understanding of interactions and trade-offs between different areas and indicators across food systems.
- A look at which indicators are moving in the right direction and which ones are not, requiring more attention and resources.

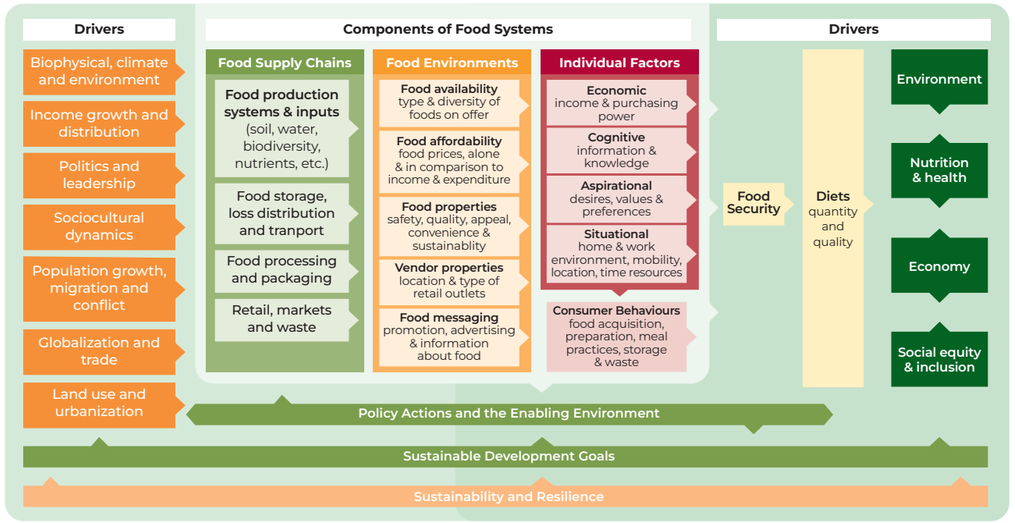
WHAT IS THE TOOL AND WHY IS IT NEEDED?

There is wide agreement on the urgent need for food systems transformation to be more equitable, sustainable, and resilient for people and the planet. However, improving what is not measured is difficult. Food systems monitoring is essential to evaluate and improve performance, and can help align food systems decision-makers (e.g., governments, civil society, and international organizations) around key priorities, incentivize action, hold stakeholders accountable, sustain commitment by demonstrating progress, and enable course corrections. The Food Systems Countdown Initiative emerged from the UN Food Systems Summit as a global interdisciplinary collaboration that currently includes over 65 food systems experts from dozens of institutions worldwide. The Countdown published a monitoring framework (Figure 4) and an indicator architecture comprising five themes:

1. Diets, nutrition, and health
2. Environment, natural resources, and production
3. Livelihoods, poverty, and equity
4. Governance
5. Resilience

The Countdown then undertook a consultative process to select a final set of 50 indicators across these themes, which constitutes the comprehensive indicator framework at global level. Each indicator can be accessed through the Food Systems Dashboard website at: https://www.foodsystemsdashboard.org/fsci-indicators

Figure 4. The Countdown monitoring framework



The Countdown aims to regularly publish global monitoring reports to showcase progress and highlight specific themes. The first 2023 global analysis provided a baseline assessment of the 50 indicators and emphasised food system opportunities and challenges in every region and country. The second 2024 analysis presented how these 50 indicators have changed over time globally, showing progress worth celebrating with 20 indicators moving in a desirable direction.

ADAPTATION TO NATIONAL CONTEXTS

More recently, FSCI country adaptations are being undertaken in approximately 15 countries to support the contextualization and adoption of the framework at national level. These processes involve consultations with local experts to ensure relevance and ownership. They result in a country framework with a finalized set of indicators, drawing primarily on country-level data sources to monitor food systems transformation. Policy briefs are also being developed to further contextualize the frameworks and offer actionable insights and are available here: https://www.foodcountdown.org/publications.

The global 50-indicator FSCI framework uses standardized global data that enable cross-country and regional comparisons and to produce country profiles that allow countries to track progress through time. The FSCI indicators can be visualized for each country through the Food Systems Dashboard to show how FSCI data compares across countries, regions, and income groups using maps, graphs and table visualizations.

A regional baseline report for Asia can be accessed from the FSCI website[1]. It highlighted the following five key conclusions:

- Asia's food systems show mixed progress in their transformation journey. While agriculture's contribution to GDP remains strong at 7.4% compared to the global 4.4%, significant challenges persist. The region demonstrates notable diversity in outcomes, reflecting varying stages of economic development and agricultural modernization across countries.
- Nutrition and food security metrics present concerns despite progress. While undernourishment has decreased historically, recent trends show rising food insecurity affecting 24.8% of the population. The region maintains relatively low ultra-processed food consumption (28.7 PPP US$/year vs. global 153.6) but faces ongoing challenges in diet quality and affordability.
- Environmental pressures are particularly acute. Food system emissions (144,217.4 kt CO2eq) are nearly double the global mean, and agricultural water withdrawal (32.5%) significantly exceeds global averages (16.8%). These challenges are compounded by climate change impacts, rapid urbanization, and ecosystem stress.
- Governance and resilience indicators show promise but require strengthening. While 70% of countries have committed to food system transformation pathways, implementation metrics such as government effectiveness (0.2) and civil society participation (0.5) suggest room for improvement. The region's agricultural biodiversity (39.6% minimum species diversity) provides a strong foundation for resilience.
- Success will require coordinated action across sectors, with particular attention to water management, emissions reduction, and strengthening food security. By leveraging the FSCI baseline metrics, Asia can pursue targeted interventions that advance both regional food system resilience and global sustainability goals.

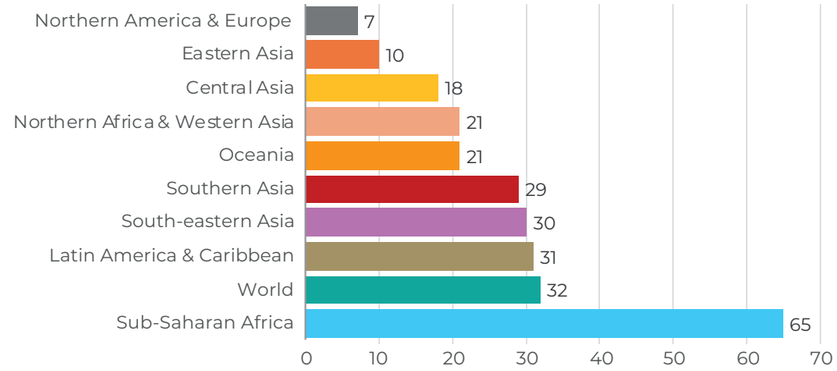
1 https://academiccommons.columbia.edu/doi/10.7916/5gs0-xw68

HOW ASIAN REGIONS COMPARE ON SOME EXAMPLES ACROSS FSCI THEMES

Selected findings[2] are presented in **Figure 2** to **6** to give an example of how Asian regions are performing on indicators under each of the five themes, compared to other global regions and the global average.

The example from the Diets, nutrition, and health theme (**Figure 5**) shows great variation among Asian regions, though all exceed the global average. Eastern and Central Asia score highest, while South-eastern and Southern Asia have values close to the global average.

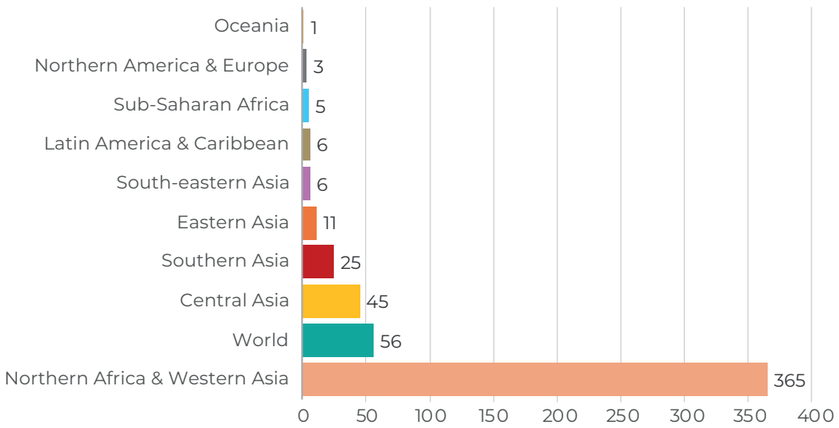
Figure 5. Percent of the population who cannot afford a healthy diet (%) (2024)



Source: Food Systems Dashboard, based on FAOSTAT data (FAO)

The example from the Environment, natural resources, and production theme (**Figure 6**) again shows variation among Asian regions. The region including Western Asia scores the lowest. While the other Asian regions do better than the global average, they remain below other major regions.

Figure 6. Agriculture water withdrawal as percent of total renewable water resources (%) (2022)

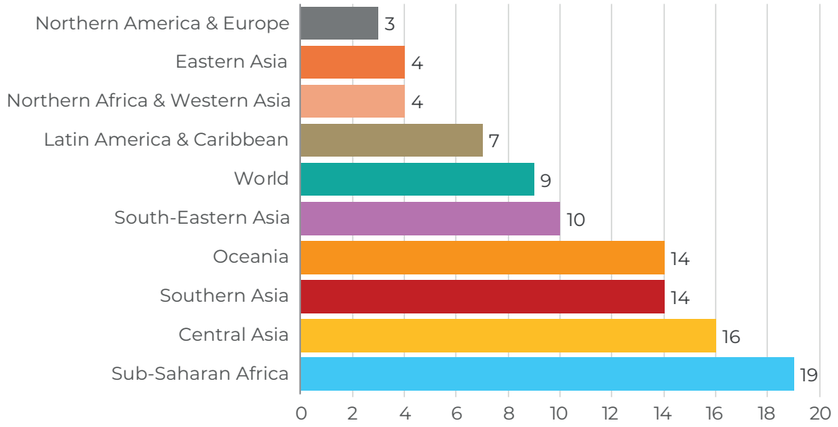


Source: Food Systems Dashboard, based on FAOSTAT data (FAO)

2 Using Countdown indicator data accessed in January 2026.

The example from the Livelihoods, poverty, and equity theme (**Figure 7**) shows Asian regions both above and below the global average. Central Asia scores as the second highest region on this indicator, while Eastern Asia is the second lowest. South-Eastern Asia sits close to the global average.

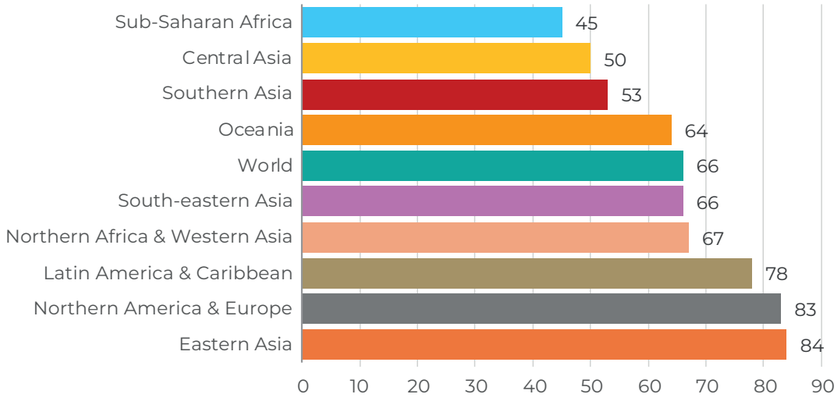
Figure 7. Share of agriculture in GDP (SDG2.a.1) (%GDP) (2023)



Source: Food Systems Dashboard, based on FAOSTAT data (FAO)

The example from the Governance theme (**Figure 8**) shows Eastern Asia scoring the highest. South-eastern Asia and the region including Western Asia both sit close to the global average, while South and Central Asia perform below the global average, but still above the lowest performing region of Sub-Saharan Africa.

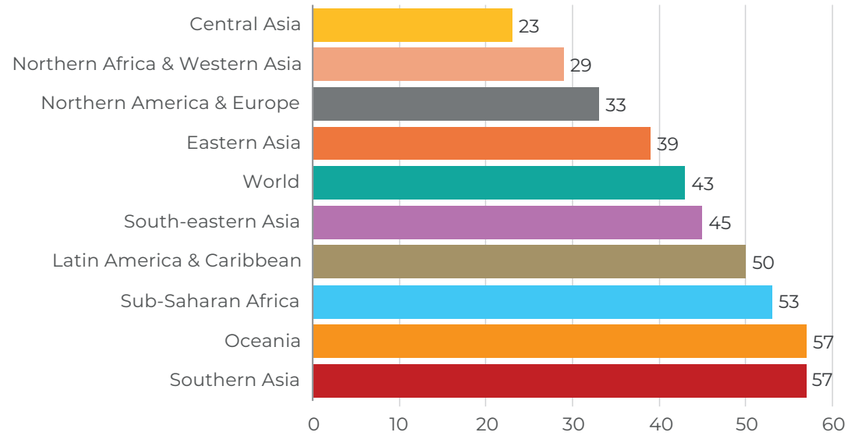
Figure 8. Food Safety Capacity (2020)



Source: Food Systems Dashboard, based on FAOSTAT data (FAO)

The example from the Resilience theme (**Figure 9**) shows Southern Asia leading, with the highest score on this indicator. South-eastern and Eastern Asia both score similar to the global average, while Central Asia and the region including Western Asia have the lowest scores of all the global regions.

Figure 9. Proportion of agricultural land with minimum level of species diversity (crop and pasture) (% agricultural land) (2020)



Source: Food Systems Dashboard, based on FAOSTAT data (FAO)

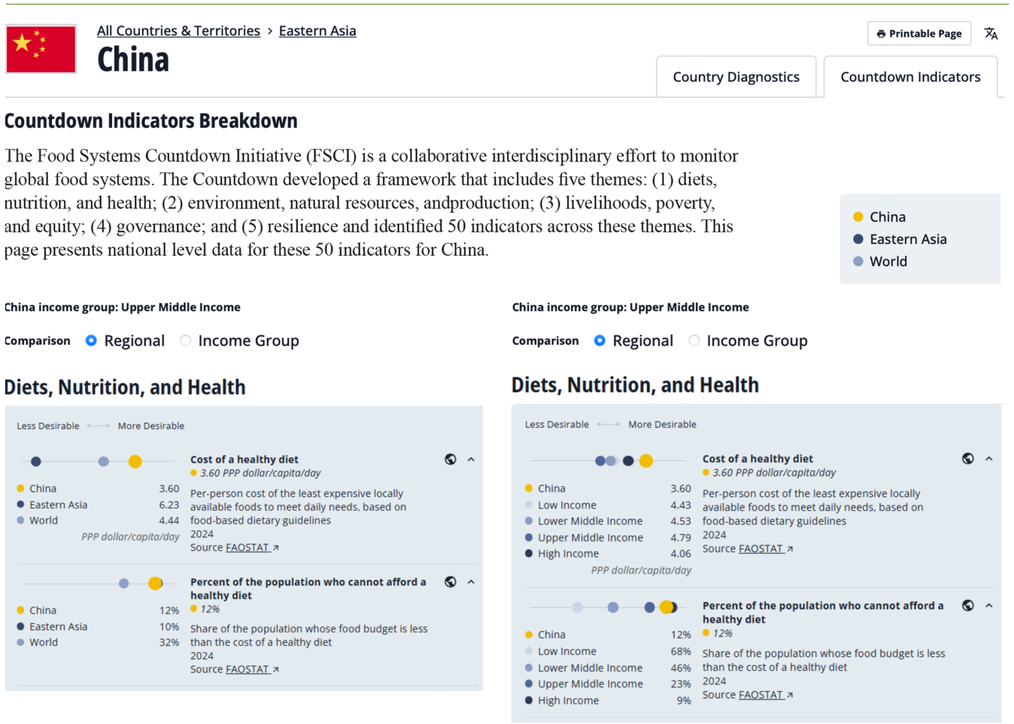
FSCI COUNTRY PROFILES

Food Systems Countdown Initiative Country Profiles help to identify where countries are doing well and where they are facing challenges compared to regional and income group means. Individual country profiles based on global datasets are available in the Food Systems Dashboard platform: https://www.foodsystemsdashboard.org/countries/fsci-data.

The country value is shown in yellow, the regional mean is displayed in dark blue, and the global mean is shown in light blue. For consistency across indicators, the more desirable outcome is always positioned on the right-hand side of the scale.

The FSCI Country Profile for China, for example (**Figure 10**), displays the indicators across five themes to show China's performance compared to Eastern Asia and the world as a whole, and to other countries groups by income group. Selecting the arrow beside the globe icon expands a table reporting the comparison data.

Figure 10. Screenshots of a segment of the China Country Indicators showing 'Regional' and 'Income group' comparisons



Source: The Food Systems Dashboard. The Global Alliance for Improved Nutrition (GAIN), Johns Hopkins University, Cornell University College of Agriculture and Life Sciences, and the Food and Agriculture Organization of the United Nations (FAO). 2025. Geneva, Switzerland. https://www.foodsystemsdashboard.org. DOI: https://doi.org/10.36072/db

In the two panels, Figure 10 shows the first two indicators in Diets, Nutrition, and Health for China showing the Regional and Income group comparisons. The left panel shows China doing very well compared to both global and regional means on the cost of a healthy diet. This translates to better affordability compared to the global example, but not for the regional mean, where affordability measures slightly worse in China compared to Eastern Asia as a whole.

Making these same comparisons by Income Group (right panel) shows China doing better than all income groups on cost, but falling behind the High Income group on relative proportion of people able to afford a healthy diet. This indicator however remains well above the Upper Middle Income average that includes it.

Overall, looking at this breakdown allows us to highlight key successes for China, such as their availability of fruits and vegetables, as well as ongoing challenges such as Agri-food systems greenhouse gas emissions, or food price volatility.

LINKS TO FURTHER GUIDANCE

- Food Systems Countdown Initiative website https://www.foodcountdown.org/
- Food Systems Countdown Initiative data on the Food Systems Dashboard website https://www.foodsystemsdashboard.org/fsci-indicators
- Food Systems Countdown Initiative: Asia Baseline Report https://academiccommons.columbia.edu/doi/10.7916/5gs0-xw68

SECTION SUMMARY

The Countdown data reveals great variation globally. Regions and nations across Asia show significant potential for food system innovation and development, but continue to face critical and chronic challenges in food security, nutrition, and sustainable development. Urgent and comprehensive transformation of food systems around the world are needed. Beyond production increases, these changes must improve market access, enhance food security, diversify nutrition, and boost climate resilience and overall sustainability. A holistic approach is needed to address the multifaceted challenges facing our food and agriculture systems. Countdown data, which can be found on the Food Systems Dashboard can help policymakers and other stakeholders to target critical interventions – from improving regional food security to optimizing land potential. By focusing on both challenges and strengths identified in the FSCI baseline, every region of the world can build more resilient and sustainable food systems that align with both regional needs and global sustainability goals.

2. THE FOOD SYSTEMS DASHBOARD

AT A GLANCE

ALL FOOD SYSTEMS DATA – FROM NATIONAL TO SUB-NATIONAL. The Food Systems Dashboard comprises both the Global Dashboard and a set of Country Dashboards. The Global Dashboard draws on international data sources to provide nationally comparable indicators across countries. The Country Dashboards complement this by integrating country-level data, including a growing set of subnational indicators – currently available for six countries, with further expansion planned. The aim is to bring food systems data into one integrated platform, providing a comprehensive overview and enabling users to better understand the complexity of trade-offs and synergies across the system.

Through three steps – describing (data visualisation), diagnosing (identifying challenge areas and opportunities) using the FSCI indicators, and deciding (recommending evidence-based policies and targeted interventions) – the Dashboard can help decision-makers to develop targeted interventions for more equitable, sustainable, and resilient food systems.

GEOGRAPHIC SCOPE

Global, Regional, National

USER TIPS

Dashboard data can help policymakers and other food systems stakeholders to:

- Understand their food systems and critical subnational variations.
- Highlight success areas where things are going well.
- Diagnose challenge areas where more attention is needed.

WHAT IS THE TOOL AND WHY IS IT NEEDED?

The Global Food Systems Dashboard brings together food systems data for more than 300 indicators, spanning agricultural production, food availability and affordability, diets and nutrition, livelihoods, climate, environment, resilience, and governance; as well as external drivers influencing these factors. The indicators come from over 40 sources, covering all countries with up to 60 years of historical data.

The Dashboard also houses the Food Systems Countdown Initiative indicators which can be filtered through a tag system in the framework panel.

The Dashboard supports food systems transformation through three steps:

- Describe: Data visualization with maps, graphs, and tables brings food systems into focus, making complex relationships visible and understandable.
- Diagnose: Assess food systems performance using the FSCI indicators and established targets and benchmarks to identify indicators and areas that are performing well and those that require more attention.
- Decide: General evidence-based policies and actions are suggested, enabling decision makers to develop targeted interventions for more equitable, sustainable, and resilient food systems, while adapting them to their specific national and local contexts.

Country Dashboards have been developed in six countries, with more underway. Recognizing that national-level data alone is insufficient to understand the complexity and diversity of subnational food systems and target effective interventions, Country Dashboards featuring national and subnational data are being developed in close partnership with governments, civil society, and academia to ensure alignment with local priorities and decision-making needs. Country Dashboards are already available for, Bangladesh, Indonesia, Kenya, Mozambique, Nigeria, and Pakistan. Work is underway to develop them in Benin, Brazil, Ethiopia, Ghana, Mexico, Rwanda, and Philippines.

These dashboards enable the visualisation of sub-national data using the same framework, structure and features as the Global Dashboard. Country data can be displayed through interactive maps, graphs, and tables, allowing for easy comparison across subnational regions.

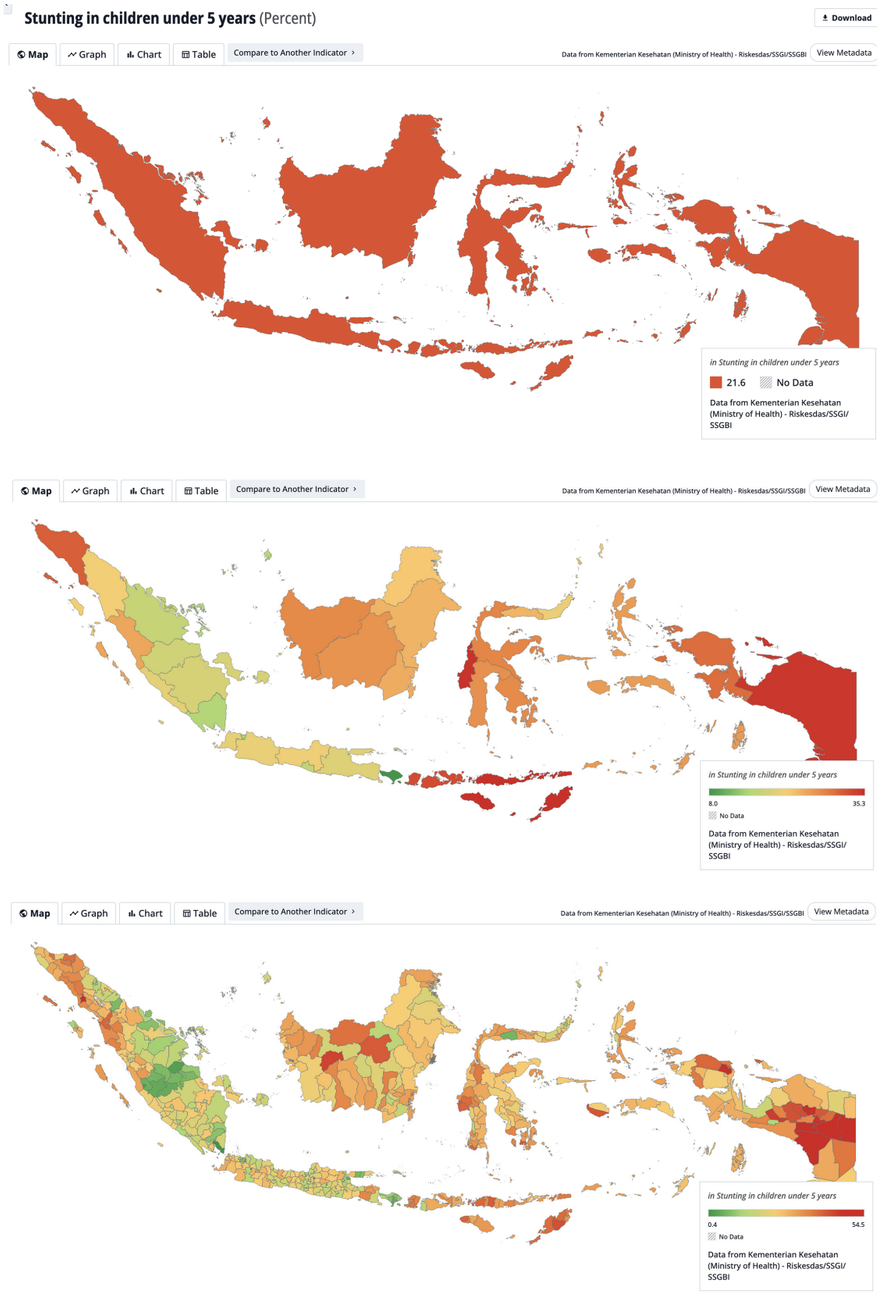
EXAMPLE OF AN APPLICATION IN ASIA

INDONESIA'S COUNTRY LEVEL DASHBOARD

Indonesia's subnational food systems dashboard is available on the Global Dashboard site as well as a dedicated site on BAPPENAS https://dspi.bappenas.go.id/

Figure 11 provides an example of a map display for an indicator in Indonesia – stunting in children under 5 years (%) in 2022. Visualisations are also offered in graph, chart, and table form, with time series shown from 2018.

Figure 11. Screenshots of Indonesia's Subnational Food Systems Dashboard for national, province and cities/regencies



Source: Food Systems Dashboard; Data from Kementerian Kesehatan (Ministry of Health) - Riskesdas/SSGI/SSGBI

Investing in data is seen as strategic for national resilience, helping to build a more inclusive and sustainable food system. Indonesia is leading by example in showing how data can be democratized and translated into real, lasting change, especially for the most vulnerable.

Testimonials from dashboard users in Indonesian government and academia[3] show it is seen as a tool with great potential.

Jarot Indarto, Director of Food and Agriculture, BAPPENAS stated:

> *"Another important thing that the dashboard provides is that we are able to obtain an overview of the current condition of the food system in a region as a basis in formulating a food system transformation strategy in accordance with the High Level Panel of Experts (HLPE) on Food Security and Nutrition.*
>
> *Food systems cover many aspects and demand integration across all fields, sectors, and actors. We hope that DSPI will be able to facilitate all of us in obtaining a more complete picture, conducting research, and formulating strategies for transforming the Indonesian food system.*

Dr Rina Agustina, Chairwoman, Human Nutrition Research Center, Indonesian Medical Education Research Institute, Faculty of Medicine at University of Indonesia stated:

> *"I commend the development of the Indonesia Food Systems Dashboard (DSPI) because potential users will be able to describe existing problems and conditions regarding our food system, diagnose them, and later use the information to take decisions and action and make the necessary changes. The Indonesia Food Systems Dashboard consists of 68 indicators on food systems compiled in one place, which is an extraordinary resource for decision makers."*

Professor Drajat Martianto, Researcher at Bogor Agricultural Institute stated:

> *"In my opinion, navigating around the dashboard is firstly, very user friendly. Secondly, of course, data and information from the dashboard can be used for cross-tabulations, connecting one region with another region, or comparing one region with another region. This can provide extraordinary results and enrich our analysis... So all the features in the food system dashboard are designed in such a way so that they can be used not only by policymakers but also by those who are conducting studies, monitoring and evaluation of the food system in Indonesia."*

As it evolves, the DSPI is incorporating further data at even more granular levels to equip decisionmakers with up-to-date, localised information to inform decisions. In a key development, more localised data from the Food Security Vulnerability Atlas (FSVA) is being included to deliver benefits across levels of government and sectors. This is expected to yield smarter governance, more equitable interventions, and enhanced national food resilience (more detail in **Box A**).

2 Using Countdown indicator data accessed in January 2026.

Box A. Benefits of redesign and integration of Food Systems Vulnerability Atlas data

1. Sharper Targeting for Public Investments. With granular analysis down to the kecamatan and desa level, FSVA 2025 will empower policymakers to identify exactly **where** food insecurity exists and **why**. This enables precision targeting for:
   - Stunting reduction programs
   - Local food reserves
   - Social protection and Village Fund
   - Nutrition-sensitive agriculture and rural development

   Result: Resources are no longer spread thinly, but focused where they can deliver the most significant impact.

2. Stronger Planning and Policy Coherence. FSVA is expected to become an integrated decision-making tool – not only for food agencies but also for health, education, social welfare, and regional development. In alignment with the By aligning with Indonesia's Medium-Term National Development Plan and other key roadmaps and visions, FSVA supports:
   - Cross-sectoral coordination
   - Alignment of national programs with local realities
   - Transparent monitoring of food security outcomes

   Result: From data to decisions, Indonesia strengthens the integrity and impact of its food system governance.

3. Evidence-Based Action. Through integration with the Indonesia Food System Dashboard (DSPI), FSVA data will become more dynamic and interactive, supporting annual monitoring, early warning, and program adjustments. While based on annual updates, this integration will enable:
   - Timelier response to food price shocks or climate-related risks
   - Data-driven policy innovation
   - Open access for research, civil society, and private sector use

   Result: FSVA evolves into a living system, guiding action with relevance and precision.

4. Empowerment of Local Governments. By decentralizing vulnerability data, FSVA enhances the capacity of local leaders to plan and advocate effectively. Villages and districts can use FSVA to:
   - Justify budget priorities
   - Design location-specific nutrition and food security programs
   - Build local food system resilience Result: Local governments become proactive champions of food security, equipped with credible, actionable evidence.

Note: For more information see https://www.gainhealth.org/resources/reports-and-publications/maps-action-strengthening-indonesias-food-security-through

LINKS TO FURTHER GUIDANCE

- The Food Systems Dashboard website https://www.foodsystemsdashboard.org/
- Example of a country dashboard – Indonesia https://dspi.bappenas.go.id/

SECTION SUMMARY

The Food Systems Dashboard resources make food systems data more accessible to support evidence-based policymaking and more effective food systems transformation. The data allows for the investigation of regional trends as well as unique country contexts. The Dashboard offers multiple data visualizations, it includes a wide variety of indicators including the SDGs and FSCI indicators, as well as data projections. It also includes Country Profiles for all countries, highlighting successes while also pointing to potential challenge areas that may need more attention and resources. Where Country Dashboards are available, subnational data can provide additional details on variation across the country and where challenges may be felt most intensely. Governments are already in the process of taking full ownership of these dashboards and they are being used by policymakers and civil society.

3. DIET QUALITY QUESTIONNAIRE

AT A GLANCE

UNDERSTANDING WHAT PEOPLE ARE EATING. The Diet Quality Questionnaire (DQQ) collects data that policymakers can use to understand dietary challenges and how women and men are eating, including to track new Sustainable Development Goal indicators looking at minimum dietary diversity for women and children.

GEOGRAPHIC SCOPE

Global, National, Subnational where applicable

USER TIPS

Data collected using the DQQ can help policymakers and other food systems stakeholders to:

- Understand dietary challenges that contribute to micronutrient deficiencies, other forms of malnutrition, and risks of noncommunicable diseases.
- Observe differences in diet quality between men and women, with implications for gender equality.
- Track new Sustainable Development Goal (SDG) indicators – minimum dietary diversity for women and children.
- Assess progress towards the achievement of food systems transformation and global nutrition goals.

WHAT IS THE TOOL AND WHY IS IT NEEDED?

The foods people consume (their diet) play a central role in shaping nutrition, health, economic productivity, and environmental sustainability. Diets are influenced not only by individual preferences, but also by the foods available to people as they conduct their daily activities and the affordability,

convenience, and promotion of these foods (food environments). In Asia, rapid economic growth, urbanisation, and related changes in food systems have transformed food environments and what people eat, contributing to persistent micronutrient deficiencies alongside a growing burden of diet-related noncommunicable diseases (NCDs) such as heart disease and diabetes. Figure 12 highlights food environment influences on diet quality as well as outcomes associated with diet quality.

Figure 12. Diet quality as a link between food environments and nutrition outcomes in Asia

Understanding what people eat, and whether their diets support healthy and productive lives, is therefore critical for informing food systems, health, and human capital investments. However, many existing dietary assessment methods are costly, time-consuming, or difficult to integrate into large-scale surveys and development programmes, limiting routine use for policy and investment decision-making.

The Diet Quality Questionnaire (DQQ) addresses these challenges. It is a standardised, low-burden tool developed to facilitate rapid assessment of diet quality across diverse contexts. The DQQ can be administered in approximately five minutes and provides actionable information about 1) adherence to healthy diet recommendations; 2) likelihood of inadequate micronutrient intakes; and 3) dietary risk factors associated with NCDs.

Country-adapted versions of the DQQ are available for more than 140 countries globally, including 31 countries across Asia. The tool is available for both young children (6–23 months) and for people (male and female) 15 years old and older, enabling consistent assessment across the life course.

By generating comparable, policy-relevant diet quality data, the DQQ can support governments, development partners, and institutions to:

- Better diagnose food system constraints
- Monitor progress towards nutrition-related Sustainable Development Goals
- Design investments that improve access to healthy diets while reducing long-term health, productivity, and environmental risks.

ASIA'S DIET QUALITY MEASURED USING THE DQQ

DQQ data was collected between 2021 and 2024 in 31 Asian countries, creating an opportunity to compare dietary patterns across the region, its sub-regions, and country income category. The findings highlight diet quality as a systems-level outcome shaped considerably by food environments (availability, affordability, convenience, and desirable food practices, rather than cultural similarity or income alone.

ADHERING TO HEALTHY DIET RECOMMENDATIONS

Healthy diet guidelines globally recommend that at least one food item from each of five food groups (fruits; vegetables; pulses, nuts or seeds; animal-source foods; and starchy staples) be consumed daily. People who achieve this recommendation are described as having met All-5. In Asia, the prevalence of people meeting All-5 was low across countries, and was less than 40% in 18 of the 31 countries.

Consumption of All-5 ranged from 9% in Mongolia to 64% in Tajikistan, and was not obviously linked to country income group or sub-region. There was poor consumption of All-5 among countries from each sub-region and country income level, but there were also countries with relatively high consumption of All-5 across the various strata (**Figure 13**).

Figure 13. Percent of adults who ate at least one item from each of five food groups

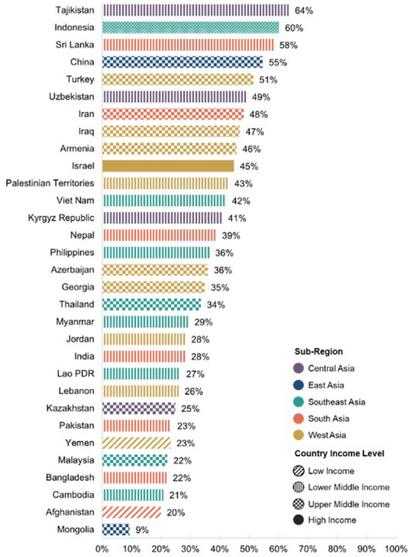
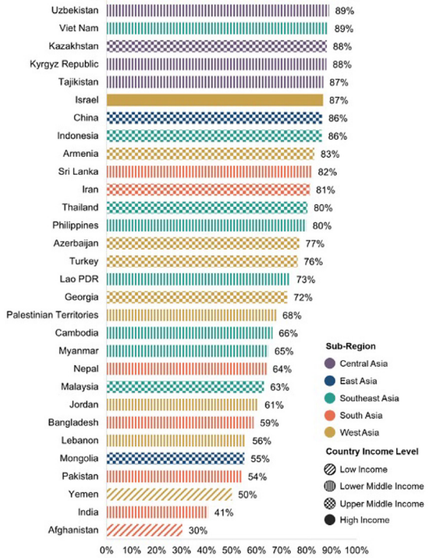


Figure 14. Percent of women who achieved minimum dietary diversity score for women



DIETARY DIVERSITY AND LIKELIHOOD OF ADEQUATE MICRONUTRIENT INTAKES

Achieving the minimum dietary diversity score for women (MDD-W) of five out of ten defined food groups has been validated to reflect a likelihood of adequate micronutrient intakes among women[4]. In 2025, MDD-W was adopted as an SDG monitoring indicator, signalling a global recognition of the importance of assessing dietary diversity to track progress in food systems.

The percent of women who achieved MDD-W ranged from 30% in Afghanistan to 91% in Iraq, and was above 70% in more than half of the countries. Countries in central Asia had a high proportion of women achieving MDD-W (greater than 85%), while South Asian counties tended to cluster at lower levels of MDD-W. Lower income countries also concentrated in the lower half of countries meeting MDD-W (**Figure 14**). Overall, MDD-W values are consistently higher than All-5 values, indicating recommended food group adequacy is a bigger challenge than micronutrient adequacy as reflected by MDD-W.

4 The ten food groups are (1) grains, white roots and tubers, and plantains; (2) pulses (beans, peas and lentils); (3) nuts and seeds; (4) dairy; (5) meat, poultry and fish; (6) eggs; (7) dark green leafy vegetables; (8) other vitamin A-rich fruits and vegetables; (9) other vegetables; (10) other fruits.

RISKS OF NONCOMMUNICABLE DISEASES

The DQQ assesses the risk of NCDs using two indicators – Protective Food Consumption (PFC) and Unhealthy Food Consumption (UFC). PFC includes consumption of at least one vegetable, fruit, and whole grain, pulse, nut, or seed. UFC includes consumption of any sugar-sweetened soft drinks or processed meat, more than one sugary food or beverage, or more than one salty ultra-processed food. PFC in Asian countries was generally inadequate, with less than 50% of the population consuming all three food groups in 18 of the 31 countries surveyed (**Figure 15**). Central Asian countries were largely in the upper half of the consumption distribution, while most South and South-East Asian countries appeared in the lower range. Other sub-regions showed substantial variation. No consistent income gradient was visible.

Figure 15. Percent of adults who consumed protective foods

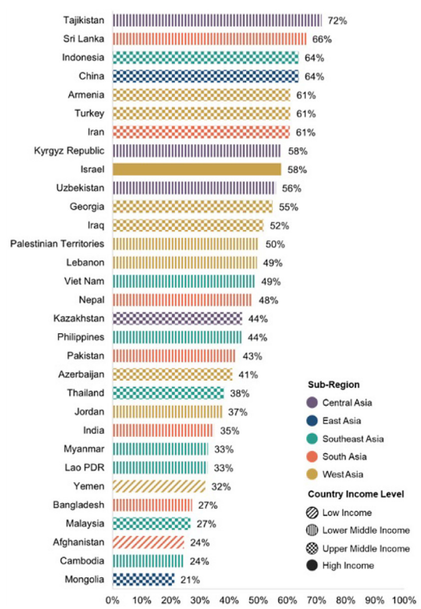
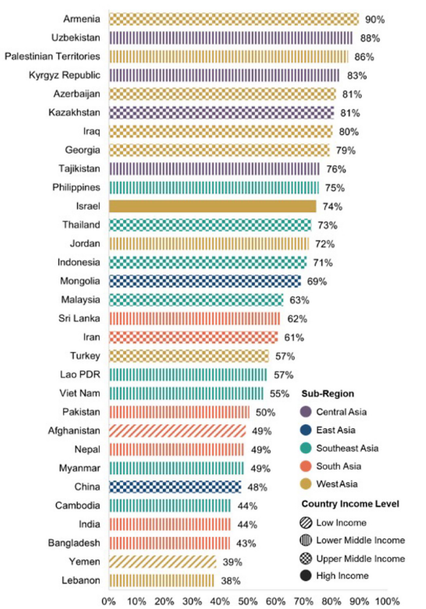


Figure 16. Percent of adults who consumed unhealthy foods



UFC was considerable, greater than 50% in 21 of the 31 countries (**Figure 16**). All included central Asian countries had greater than 75% consumption, whereas included south Asian countries had relatively low consumption. There were wide variations in consumption among other sub-regions. There were no obvious consumption patterns by country-income level. The most commonly consumed unhealthy foods were sweet beverages, sweet foods, salty or fried snacks, soft drinks, and deep-fried foods.

IMPLICATIONS OF FINDINGS

In general, diet-related patterns vary substantially across countries and indicators. There was likewise substantial variation within country income categories and sub-regions. No single country consistently adhered to high All-5, high MDD-W, high protective foods, and low unhealthy foods. Thus, no country appeared uniformly protected from poor diet quality in one form or another.

The overall Asia regional picture suggests that diet quality is shaped by multiple, interacting food system factors. Together, the findings suggest a region undergoing dietary transition, with coexistence of adequate diversity, intermediate consumption of all recommended food groups, and high unhealthy food exposure.

USE OF DQQ DATA TO INFORM FOOD SYSTEMS TRANSFORMATION

Asian countries are increasingly using the DQQ to monitor food systems transformation, conduct research to understand food systems outcomes, and support decision making.

Country DQQ pages on the Global Diet Quality Project platform provide downloadable indicator data and detailed indicator breakdowns, enabling decision makers and other stakeholders to move from aggregate indicators to more specific entry points for action. For example, a national report[5] triangulates Lao PDR DQQ data with other data and explicitly links results to recommendations for priority actions in the food system to improve healthy diets. Also, DQQ indicator definitions have been used in a study of six Asian countries (Bangladesh, Kyrgyz Republic, Lao PDR, Pakistan, Philippines, and Sri Lanka)[6] to integrate diet quality considerations into a food system resilience framework and examine the nutrition implications of food imports. Other studies have used the DQQ to assess age, sex, or rural/urban differences in diet quality; associations between diet quality and poor health; and food systems factors contributing to poor diet quality.

These examples illustrate the versatility of the DQQ across research, monitoring, and policy domains, and underscore the value of embedding diet quality measurement within food systems analysis. By translating dietary patterns into clear indicators linked to food environments and trade, the DQQ supports more targeted and accountable food systems investments.

LINKS TO FURTHER GUIDANCE

- Global Diet Quality Project website https://www.dietquality.org/

SECTION SUMMARY

Diet quality is increasingly recognised as a food systems outcome and is shaped by what foods are available, affordable, convenient, and promoted, as well as the broader policy and macroeconomic context. The DQQ provides a practical way to generate comparable population-level diet quality indicators (including MDD-W, All-5, PFC, and UFC) from a low-burden, short module, making it feasible to embed diet quality measurement into routine monitoring and surveys.

DQQ data collected across 31 Asian countries highlights moderate to high dietary diversity, inadequate consumption of some food groups protective against noncommunicable diseases, and widespread consumption of unhealthy foods.

The DQQ has been used as a monitoring and research tool, as well as a practical instrument for linking dietary outcomes to food system drivers. As countries seek to align food systems with health and nutrition objectives, the DQQ offers a scalable and comparable framework for tracking progress and identifying priority areas for action.

5 https://www.foodsystemsdashboard.org/resources/Diet-Quality-Monitoring-in-Lao-PDR-2022-web.pdf

6 Favas, C., Cresta, C., Whelan, E., Smith, K., Manger, M. S., Chandrasenage, D., ... & Goudet, S. (2024). Exploring food system resilience to the global polycrisis in six Asian countries. Frontiers in Nutrition, 11, 1347186. https://doi.org/10.3389/fnut.2024.1347186

POLICY DIAGNOSIS AND TRACKING TOOLS

Addressing interlinked challenges related to nutrition, health, environmental sustainability, livelihoods, and economic growth requires integrated approaches that work across all aspects of food systems, as opposed to in sectoral silos.

Understanding how policies are intended to work and the ways they potentially or in practice interact is a key part of this process. The tools in this section are intended to aid the process of policymaking, or to analyse existing policy landscapes to determine how they are functioning, particularly in previously overlooked ways, that might lead to their being strengthened.

Identifying areas of coherence and incoherence within food systems policies for example can help governments to pinpoint ways in which coherence can be improved to craft food-related policies that are better able to achieve health, environmental, social, and economic goals. Through deploying these tools, countries seeking to accelerate food systems transformation can improve outcomes in one area without sacrificing another, minimise negative feedback and take advantage of synergies to achieve improved outcomes for all.

4. DIAGNOSING FOOD SYSTEMS POLICY COHERENCE

AT A GLANCE

DO POLICIES CONSPIRE OR CLASH? The Policy Coherence Tool can help users to identify policies that may be undermining the achievement of food systems outcomes and to understand the extent to which governance structures support coherent policy across food systems, with emerging recommendations for strengthening policy coherence.

GEOGRAPHIC SCOPE

National, Subnational where applicable. This tool has been developed primarily considering low- and middle-income country contexts. Adaptation may be required for application in high-income countries, in small island developing nations, city-states, and conflict-afflicted countries.

USER TIPS

Insights from the application of the PCT can help policymakers and other food systems stakeholders to:

- Understand the extent to which current governance structures and mechanisms are supportive of policy coherence and identify aspects that require strengthening.
- Assess the level of coherence between existing sectoral policies in support of food systems goals.
- Observe recommendations for strengthening policy coherence.
- Track improvements in policy coherence over time.

WHAT IS THE TOOL AND WHY IS IT NEEDED?

Food systems policy coherence is the alignment of policies that affect the food system with the aim of achieving socio-economic and environmental goals. Coherence ensures that policies designed to improve one food system outcome do not undermine others and that synergies across policy areas are taken advantage of to achieve better outcomes for all. Without coherent approaches, even well-intentioned policies may undermine one another, diluting their collective impact and squandering limited resources. Yet examples of incoherence are not uncommon. Governments often have health sector policies that promote increased consumption of healthy foods to reduce levels of diet-related diseases such as diabetes, while also subsidising the production of ingredients, such as sugar, edible oils, and refined grains often used to produce unhealthy foods. But assessing the extent of coherence in a country's food policy landscape is challenging, with no standardised or easy-to-use empirical approaches. A Food Systems Policy Coherence Diagnostic Toolkit developed by the Global Alliance for Improved Nutrition, in collaboration with AKADEMIYA2063, addresses this gap. The toolkit, which has been tested in multiple countries in Africa and Asia, offers a practical methodology to assess food systems policy coherence and to provide actionable recommendations for enhancing it.

The Food Systems Policy Coherence Diagnostic Toolkit consists of two modules. **Module 1** examines whether there are structures and mechanisms in place that would increase the likelihood of achieving policy coherence, such as whether a country has a cross-sectoral food systems policy or pathway and ongoing mechanisms for cross-sectoral coordination on food related issues. It comprises a series of questions relating to each of the dimensions illustrated in **Figure 17** to assess the extent to which these structures and mechanisms are supportive of improved coherence. **Module 2** considers the actual conflicts and synergies between existing agriculture, health, environment, social, trade and industrial policies in relation to the achievement of ten key outcomes of food system transformation as set out in **Figure 18**.

Figure 17. Structures and mechanisms examined in the tool

Figure 18. Food systems goals

While achieving perfect coherence among all food-related policies across all goals is unlikely – and potentially undesirable given the costs associated with coordination and alignment – by identifying and managing critical synergies and trade-offs, governments can better align efforts towards achieving key goals.

Note that the Policy Coherence Diagnostic Toolkit is not designed to compare or to rank countries in terms of levels of coherence achieved, given the differences in both policy context and in socio-economic objectives across countries. It is intended for use in identifying a number of patterns that suggest where attention can be focused to improve the overall coherence of food systems policies.

EXAMPLES OF APPLICATION IN THE ASIA REGION

AVERAGE LEVELS OF COHERENCE ACROSS A SAMPLE OF 4 ASIAN COUNTRIES

The sector with the most coherence with key food system goals is Health, which only shows poor coherency against policies to do with climate change mitigation, and those promoting adequate wages for food systems workers. The sector with the least coherence with key goals is Trade, which only shows high coherence in one area – policies to do with effective nutrition – sensitive social protection. Horizontally, the key goals with the least coherence issues are those promoting 'increased supply of main staples' and 'climate adaptation', and 'effective nutrition-sensitive social protection' – each having four out of six highly coherent sector matches. The two goals with the highest number of 'less coherent' sector intersections – three of six – are 'climate change mitigation', and 'adequate wages for food system workers'.

Table 1. Coherence between 4 Asian Countries' Policies and Key Food System Goals

	Goal/Policy	Agriculture	Health	Environment	Trade	Social	Industrial/ Economic
Zero Hunger	Increased supply of main staples						
	Affordable prices for main staples						
Climate Resilience	Adaptation						
	Climate change mitigation						
Healthy Diets	More nutritious food consumption						
	Less unhealthy food consumption						
	Reduction of Food Loss Waste						
Decent Work	Adequate wages for food system workers						
	Effective nutrition-sensitive social protection						
	Empowerment of Women & Girls						

Legend: Highly Coherent | Somewhat Coherent | Less Coherent | Not Assessed

Policies reviewed in this sector were very much in line with achieving this goal

Policies reviewed in this sector were generally not in line with achieving this goal

POLICY COHERENCE IN PAKISTAN'S FOOD SYSTEMS

The two modules of the Food Systems Policy Coherence Diagnostic Tool were applied to Pakistan in 2025 via an extensive document review and expert consultations.

The first module examines whether structures exist to support coherent policy. Results, summarised in **Table 2**, indicate Pakistan's food system policy landscape is strong in providing the framework documents to guide food system transformation, with inclusive processes of stakeholder engagement, and that these are backed up by political commitment. There are, however, areas to strengthen in terms of capacity and implementation, coordination structures, and particularly monitoring and accountability.

Table 2. Pakistan's Structures and Mechanisms in Support of Food System Policy Coherence

Framework Documents	Note: Green shading indicates domains where systems are highly supportive of coherence; yellow where they are moderately highly supportive; orange where they are only somewhat supportive, and red where they are generally not supportive
Political Commitment	
Capacity & Implementation	
Coordination Structures	
Inclusivity, Stakeholder Engagement, & Voice	
Monitoring & Accountability	

The second module considers the conflicts and synergies between existing policies across six sectors (shown in the columns of the table below) and the achievement of key goals of food system transformation (shown in the rows of the table below). Results appear in **Table 3**.

Table 3. Coherence between Pakistan's policies and key food systems goals

	Goal/Policy	Agriculture	Health	Environment	Trade	Social	Industrial/ Economic
Zero Hunger	Increased supply of main staples						
	Affordable prices for main staples						
Climate Resilience	Adaptation						
	Climate change mitigation						
Healthy Diets	More nutritious food consumption						
	Less unhealthy food consumption						
	Reduction of Food Loss Waste						
Decent Work	Adequate wages for food system workers						
	Effective nutrition-sensitive social protection						
	Empowerment of Women & Girls						

Legend: Highly coherent | Somewhat coherent | Neither coherent nor incoherent | Somewhat incoherent | Highly incoherent | Highly incoherent

Policies reviewed in this sector were very much in line with achieving this goal

Policies reviewed in this sector were generally not in line with achieving this goal

Encouragingly, many policy areas were found to be highly or somewhat coherent with most food systems goals. This was particularly true for trade policies and industrial/economic/monetary policies.

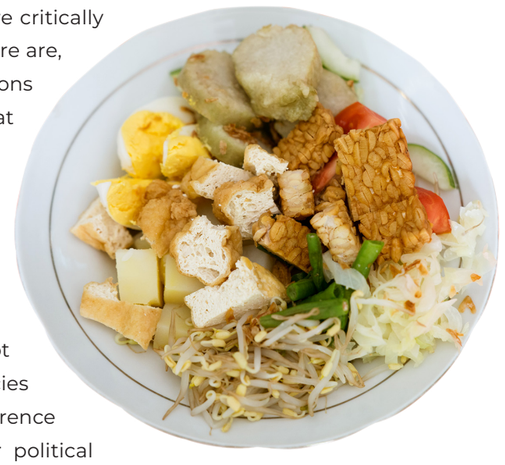
It is however worth noting that this application was conducted at the national level, so relevant province-level policies and initiatives were not reflected, which may under- or overestimate the level of coherence. Moreover, policy is complex and dynamic, and the goals of food system transformation are numerous; this analysis considers only a limited number of food systems goals and policies at one point in time. Finally, it is not always the case that areas of incoherence in policies are 'bad'; there are instances where incoherence may make sense, e.g. owing to goal prioritisation or issues of political economy. Nevertheless, policy incoherence can lead to inefficiency and lower likelihood of achieving goals, as well as missed opportunities for leveraging synergies where they exist. While achieving perfect coherence among all food related policies across all outcomes is unlikely—and potentially undesirable, given the costs associated with coordination and alignment—by identifying and managing critical synergies and trade-offs, Pakistan's government and the stakeholders who support it can better align efforts towards achieving key goals.

LINKS TO FURTHER GUIDANCE

- Policy Coherence Toolkit website https://www.gainhealth.org/policy-coherence-toolkit
- Brief for Pakistan Case https://www.gainhealth.org/sites/default/files/pakistan-country-brief.pdf

SECTION SUMMARY

The Policy Coherence Diagnostic Toolkit provides a relatively easy-to-use approach for identifying food systems policies and related structures and mechanisms that are likely to require attention if government objectives of improving policy coherence in support of food systems transformation are to be achieved. Often, adjustments to policies can be win-win in terms of boosting both the generation of improved outcomes under the mandate of the implementing sectoral ministry and improving other food systems outcomes. The Tool can also alert policymakers to key trade-offs, where there is a risk of undermining one food systems outcome in pursuit of another.



The structures and mechanisms assessed in Module 1 are critically important for ensuring that such risks are mitigated. There are, of course, some caveats to the analysis. First, the applications discussed in the cases and examples were conducted at the national level. Potentially relevant sub-national level policies and initiatives are not reflected, which may under- or overestimate the level of coherence. Second, policy is complex and dynamic, and the goals of food system transformation are numerous; this analysis considers only a limited number of food systems goals and policies at one point in time. In addition, is not necessarily the case that areas of incoherence in policies should be seen as 'bad'; there are some cases where incoherence may make sense due to prioritisation across goals or political economy necessities.

5. INITIATIVE ON CLIMATE ACTION AND NUTRITION (I-CAN)

AT A GLANCE

INTEGRATING AND FINANCING CLIMATE AND NUTRITION GOALS. The Initiative on Climate Action and Nutrition (I-CAN) tool provides an evidence base on climate-nutrition integration across policies and financing, helping to highlight opportunities for closer integration and areas where actions might be taken.

GEOGRAPHIC SCOPE

Global, Regional, National, Subnational.

USER TIPS

The core value of I-CAN lies in:

- Providing an evidence base on climate-nutrition integration across policies, strategies, programmes, and financing.
- Identifying current best practices on climate-nutrition integration.
- Highlighting opportunities for, and gaps and barriers towards, closer integration.
- Recommendations to policymakers on action areas for improvement.

WHAT IS THE TOOL AND WHY IS IT NEEDED?

Our food systems face major challenges around rising climate risks, persistently high rates of malnutrition, and increasing food insecurity. Climate shocks drive food crises, and fragile food systems heighten vulnerability to climate impacts. The Initiative on Climate Action and Nutrition (I-CAN) aims to catalyse climate actions for nutrition benefits, and vice versa. By ensuring climate-nutrition coherence in policies, financing, and programming, countries can build more resilient, equitable, and sustainable food systems.

The I-CAN assessment approach assesses how well climate and nutrition actions are integrated across policies, data and evidence, and financing. It serves as a mirror of where we currently stand, a beacon to where we want to be, and a spotlight for best practices and untapped opportunities. This approach has been applied at the global level to analyse 16 indicators across all countries in 2025 and 2023. Key findings include:

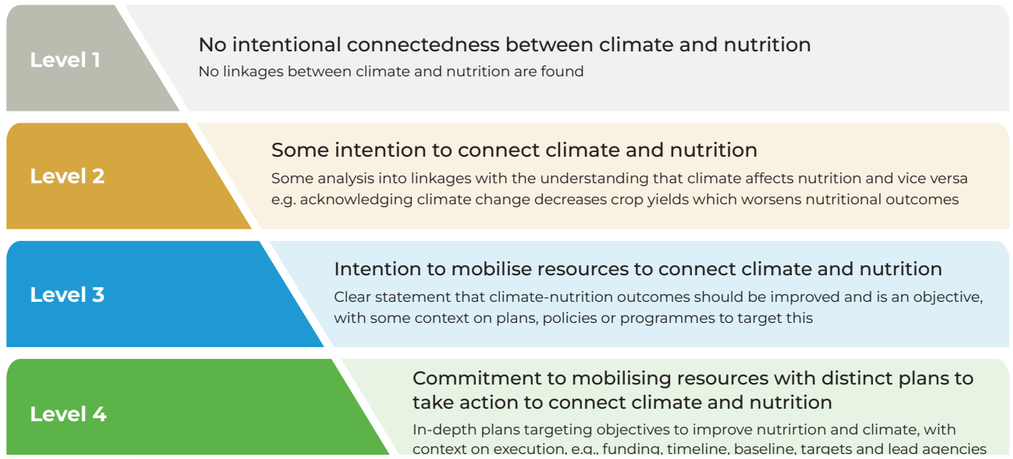
- Africa, Asia, and Latin America are leading in integrating nutrition into climate policies, with Africa showing the highest integration in Nationally Determined Contributions (NDCs).
- Integration between climate and nutrition is low overall, particularly in the private sector.
- Nutrition is also often conflated with food security – while food security tends to be addressed in climate policies, explicit nutrition considerations are far less common.
- Significant barriers persist: a lack of shared definitions, concepts, and metrics.
- Integrated nutrition and climate financing lags well behind policy commitments.

7 The Initiative on Climate Action and Nutrition (I-CAN) is a multistakeholder initiative that aims to advance action to address the critical nexus of climate change and nutrition. Launched by the Government of Egypt, as COP27 President and hosted by WHO, core partners include FAO, GAIN, the SUN Movement, and UNEP.

Building on the methodology developed for the global analysis, the I-CAN assessment approach has also been applied to national and sub-national level policies in India, Pakistan, Cambodia, Nigeria, Kenya, Tanzania and Brazil. Each assessment analyses relevant policies across a wide range of sectors including nutrition and health; climate and environment; food systems and agriculture and general development. The analysis is further supported by key informant interviews and stakeholder mapping to identify examples of best practice and potential gaps to be addressed. In India, this approach was applied to state-level policies to provide insight into which states led progress on climate and nutrition action.

All I-CAN assessments employ the same basic methodology. Once the relevant policy documents have been identified, a keyword search is used to identify the relevant sections to both climate and nutrition. Following this, the policy text is reviewed in full to assess the degree of integration using a four-level classification system (**Figure 19**). This enables users of the assessment to understand both whether or not climate and nutrition are considered together, but also opportunities to deepen these connections to advance integrated action.

Figure 19. I-CAN's classification system



EXAMPLES OF APPLICATION IN THE ASIA REGION

I-CAN FINDINGS OF NOTE ACROSS THE ASIA REGION

- 87% of Asian National Adaptation Plans (NAP) include some level of nutrition consideration (levels 2–4), with a promising 27% of NAPs demonstrating full commitment (level 4).
- Out of 167 NDCs globally, 45% of Asian NDCs include some level of nutrition consideration (levels 2–4) compared to 40% from the rest of the world
- In Cambodia, 32 active, inactive and draft policies were reviewed with 38% making no connection between nutrition and climate. There were two policies that scored at the highest level of integration (level 4) and these are: The Third National Strategy for Food Security and Nutrition (NSFSN) 2024 - 2028 and Cambodia's National Climate Change Action Plan for Public Health (NCCAPPH) (2020-2024).
- In Pakistan, the NAP was highlighted as an example of best practice (level 4) but highlighted a gap in other climate policies such as the NDC and provincial plans where food security and agriculture were referenced, but lacked concrete nutrition targets, indicators and budgets. The assessment also highlighted fragmented monitoring systems with no integration of climate and nutrition indicators.

To fully harness the potential of climate-nutrition integration, I-CAN demonstrates that policymakers should consider shifting from broad commitments to more specific, actionable measures. Priority actions include:

- Enhancing NDCs, NNPs, NAPs, and other action plans and strategies with concrete nutrition targets, implementation plans, and financing commitments.
- Leveraging public procurement programmes and policies (school meals, hospitals) to drive demand for climate-smart, nutritious foods.
- Mobilizing private sector leadership, especially in sustainable food value chains, and green business models.
- Strengthening cross-sectoral governance, particularly by linking agriculture, health, water, and social protection systems and better alignment across key ministries.
- Capacity building for policymakers on the links between climate and nutrition.
- Filling data gaps by creating and maintaining centralized databases and collaborating with private sector, NGO, academia, government and other partners on data collection.

Leaders around the world have a unique opportunity to drive global progress on integrated climate and nutrition action to deliver meaningful benefits for their people. Key reasons to act:

- Win-win outcomes: Joint climate and nutrition action strengthens resilience to external shocks, reduces long-term costs and public health burdens, and improves livelihoods.
- Leadership opportunity: Asia is already one of the world's leading regions in NDCs and other key areas; further scaling up of integration can help to shape global standards, such as best practices of nutrition integration into climate policies, and drive increased investments into Asia for instance in climate-smart, nutrition-sensitive investments for agriculture.
- Entry points abound: Food security strategies, NDCs/NNPs/NAPs and other key policy updates, school feeding programs, and R&D investments are immediate priorities.

A CASE STUDY OF I-CAN IN INDIA

What makes the India I-CAN (**Initiative on Climate Action and Nutrition**) case study distinctive is the governance context in which climate-nutrition integration was assessed.

In India's federal system, implementation is a state subject, even when policies and flagship programmes are designed and financed by the Union government. Climate change, nutrition, and agriculture are shared responsibilities between Union and State governments, making outcomes highly dependent on how states interpret and operationalise national frameworks. Recognising this, the India I-CAN baseline assessment (2016–2023) focused on state-level implementation of national programmes alongside state-initiated policies and schemes, rather than limiting analysis to national policy intent.

Using a structured indicator framework for 28 states spanning implementation, data and knowledge, policy and strategy, and investments, the assessment reveals a consistent pattern across states: high levels of recognition, but limited translation into action. While 82% of State Action Plans on Climate Change acknowledge links between climate and nutrition, only 7% include concrete strategies or measures to address this linkage. **Nutrition** is frequently framed as a climate-affected issue but rarely treated as an outcome that climate action should deliberately improve. A similar gap is evident in disaster preparedness. Although 69% of State Disaster Management Plans mention nutrition, only 8% define nutrition action as an explicit objective, despite the well-documented nutrition risks associated with climate shocks.

Agricultural initiatives demonstrate stronger engagement with climate resilience, but weak integration of nutrition outcomes. While 44% of agricultural initiatives aim to enhance climate resilience, only 8.8% explicitly link these efforts to nutrition security. Organic and natural farming policies illustrate this imbalance clearly: 80% include concrete climate-resilience actions, yet only 10% integrate nutrition objectives, despite their potential to improve diet quality. Millet-focused initiatives show how integration can work in practice, particularly where climate-resilient crops are linked to public nutrition programmes, but such examples remain uneven across states.

The gaps are most pronounced in **data systems** and financing. Among 25 national data and knowledge portals reviewed, none intentionally integrate climate and nutrition information to support joint analysis or decision-making. Financing patterns show a similar disconnect. Between 2017 and 2023, USD 146.6 billion was mobilised across climate, agriculture, and nutrition related initiatives in India, yet only 1.39% of projects and 1.23% of total funding explicitly targeted both climate action and nutrition improvement. Climate finance continues to prioritise infrastructure and resilience, with nutrition co-benefits largely underutilised.

By grounding analysis in state-level implementation, the I-CAN tool shifted the focus beyond generic national averages to pinpoint where policy intent has successfully transitioned into operational action within India's federal structure. This granular, comparative lens illuminated localized best practices that remain obscured at the national level. Examples include Odisha's Shree Anna Abhiyan, which converges climate-resilient millet production with public nutrition programmes; Madhya Pradesh's State Nutrition Policy, which embeds climate risk mitigation into nutrition planning; and Assam's State Disaster Management Plan, which systematically integrates nutrition-sensitive strategies into disaster reduction. Furthermore, the tool highlighted pivotal financial support through IFAD-supported initiatives, such as the Rural Enterprise Acceleration Project in Uttarakhand, which exemplify the deliberate alignment of climate-resilient livelihoods with improved nutritional outcomes. **Beyond India, these insights hold clear relevance for a global audience**. The case study illustrates how climate-nutrition integration unfolds in large, federal systems where implementation is decentralised and uneven, and why national commitments alone are insufficient.

LINKS TO FURTHER GUIDANCE

- I-CAN Assessment 2025 https://www.gainhealth.org/advancing-synergies-across-nutrition-and-climate-action-i-can-assessment-2025
- I-CAN Baseline Assessment 2023 https://www.gainhealth.org/resources/reports-and-publications/accelerating-action-and-opening-opportunities-closer-integration-climate-and-nutrition
- Example of national level assessment from Cambodia https://www.gainhealth.org/resources/reports-and-publications/i-can-landscaping-analysis-climate-and-nutrition-policies-and-0
- Example of national level assessment from Pakistan https://www.gainhealth.org/resources/reports-and-publications/climate-and-nutrition-integration-evidence-generation-0

SECTION SUMMARY

The Initiative on Climate Action and Nutrition (I-CAN) assessment approach offers a practical, evidence-based way to understand how well climate and nutrition objectives are being integrated across policies, data systems, and financing. Using a consistent indicator framework and a four-level integration scale, I-CAN reviews key national and subnational policy documents, complemented by stakeholder interviews and financing analysis, to assess whether climate and nutrition linkages move beyond recognition to concrete, actionable measures. This is particularly relevant in Asia, where most National Adaptation Plans and an increasing share of Nationally Determined Contributions already acknowledge nutrition, but where the depth and quality of integration vary widely across countries and sectors.

For policymakers in Asia seeking to transform food systems, I-CAN is valuable because it pinpoints where strong policy intent has not yet translated into implementation, coordinated data systems, or targeted investment. The approach highlights region-specific opportunities, such as strengthening NDCs, NAPs, and national nutrition plans with clear nutrition targets and budgets, leveraging large public procurement programmes like school meals to support climate-smart and nutritious diets, and improving coordination across agriculture, health, and social protection ministries. It also highlights systemic barriers, including fragmented governance, weak metrics, and misaligned financing, while offering evidence-based recommendations to address them. By enabling cross-country comparison and adaptation to different governance contexts, I-CAN provides policymakers with a replicable, evidence-driven foundation for designing more resilient, equitable, and nutrition-sensitive food systems policies.

6. THE POLITICAL ECONOMY DECISION TOOLKIT

AT A GLANCE

IDENTIFYING AND CHARTING A COURSE AROUND POLITICAL HURDLES. The Political Economy Decision Toolkit unpacks political economy factors across six domains, from policy stability and inclusionary decision-making, to administrative capacities. It allows users to identify political economy dynamics that might derail progress towards a common policy agenda, and looks at ways around likely constraints.

GEOGRAPHIC SCOPE

National, Subnational where applicable.

USER TIPS

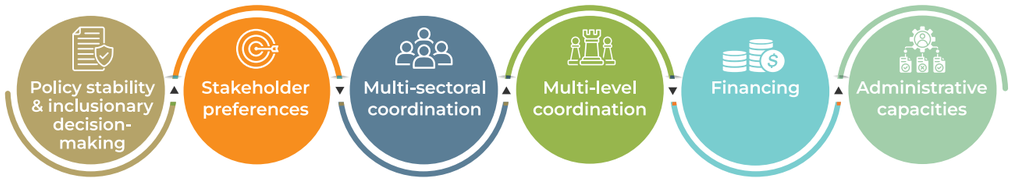
Using a Political Economy Decision Toolkit can help policymakers and other food systems stakeholders to understand:

- Six key domains where political economy factors matter to food systems policy;
- Political economy dynamics that might derail progress towards a common policy agenda;
- Constraints that are likely to arise and interventions that might prevent or overcome them.

WHAT IS THE TOOL AND WHY IS IT NEEDED?

Political economy dynamics, namely the conflicts and trade-offs across different interest groups, permeate decisions about food systems policy design and implementation. Development practitioners and policymakers working to positively transform food systems – through changes to agriculture, nutrition, environment, and elsewhere – need to be alive to these dynamics in order to support policy advocacy, development, and implementation. The Political Economy Decision Toolkit (PEDT) has been developed to help stakeholders to anticipate policy bottlenecks to food systems transformation. It encompasses six domains within national policy systems (**Figure 20**): policy stability and inclusionary decision-making, stakeholder preferences, multi-sectoral coordination, multi-level coordination, financing, and administrative capacities.

Figure 20. Six domains in the Political Economy Decision Toolkit



The toolkit includes components making up these domains and offers metrics that can help to assess them. It provides examples of how to aggregate the metrics, as well as examples of best practices for tackling political economy constraints uncovered using the toolkit.

Several metrics are covered under each of PEDT's six domains. **Figure 21** illustrates the 32 questions covered. Accessing these through the full toolkit highlights examples of best practices for tackling political economy constraints, offering guidance to practitioners on where and how to target their 'politically smart' engagement strategies with country partners.

Figure 21. Questions covered by each domain of the Political Economy Decision Toolkit

Domain 1 — Stability and Inclusion domain

1A	Are there institutionalised constraints on the executive's decision-making powers?
1B	What is the likelihood that the government will be destabilised?
1C	How frequently have ministers in the relevant food system policy domain changed, on average, in the last 5 years?
1D	What is the likelihood of upcoming electoral turnover?
1E	Are there restrictions on associational and organisational rights?
1F	Are there restrictions on freedom of expression and belief?
1G	Are there modalities for public participation in food system-related policies?

Domain 2 — Stakeholder Preferences domain

2A	Who has decision-making power with respect to the relevant food systems policy?
2B	Who has influential power with respect to the relevant food systems policy?
2C	What are the preferences of the stakeholders with decision making and influential powers?

Domain 3 — Multi-sectoral Collaboration domain

3A	Is there a coordinating body that has been established for the relevant food system policy?
3B	Where is the coordinating body for implementation housed?
3C	How many ministries belong to the coordinating body?
3D	Have clear functions been delineated among coordinating members for information exchange and reporting with regards to the relevant food system policy?
3E	Have clear functions been delineated among coordinating members for accountability for performance, with regards to the relevant food system policy?
3F	Is the body sufficiently financed and staffed?
3G	Are there well-recognised institutional hierarchies or conflicts across key agencies/ministries?
3H	Are there divergent policy mandates / goals across key ministries / agencies that impede coordination?

Domain 4 — Multi-level Collaboration domain

4A	Are mandates clearly defined by tier for relevant food system responsibilities?
4B	Are there existing inter-governmental coordinating mechanisms
4C	Are there existing inter-governmental coordinating mechanisms related to the relevant food system policy?
4D	If federal, how pronounced is vertically divided authority at the state/ provincial level? If unitary, how pronounced is vertically divided authority at city level?
4E	Are there other related food system policies at the subnational tier?

Domain 5 — Financing domain

5A	To what degree is the macroeconomic environment a concern for implementing the food systems policy?
5B	Are there diverging donor initiatives in the food system?
5C	To what degree is there transparency over the budget?
5D	Is the relevant food system policy costed with a clear plan for resource mobilisation?
5E	Is there a multi-sectoral budgeting mechanism in place?
5F	Are there formula-based inter-governmental transfer rules?

Domain 6 — Administrative Capacities domain

6B	What is the overall level of skill and competency in the public sector?
6C	Are there enough existing staff, sufficiently trained in the appropriate skills, for implementation of the relevant food system policy?
6D	To what degree are staff insulated from political interference while performing their jobs?

For each of these diagnostic questions, the PEDT provides a way to measure and code responses with a score from 1 (less enabling environment) to 3 (more enabling environment). One advantage of this scoring approach is that it can highlight not only where bottlenecks are most pronounced across the six domains but also among the metrics within each domain. For a scoring example, consider question 1C about ministerial turnover. The PEDT suggests operationalising this by determining which ministries are relevant for the food system and how often they have collectively changed leadership on average in the previous five years. It suggests the use of secondary sources, such as WhoGovs dataset2 on worldwide cabinet ministers since 1966. The expectation is that more turnovers lead to less continuity in policy decisions and uptake, while the scoring proposed is: 1 – for an average of 3 or higher ministers; 2 – for an average between 2-3 ministers; and 3 – for an average of less than 2 ministers. The full toolkit provides examples of how to aggregate the metrics, with an application to Mozambique, determined in early 2024, provided.

EXAMPLES OF APPLICATION IN THE ASIA REGION

APPLYING THE POLITICAL ECONOMY DECISION TOOLKIT TO BANGLADESH, 2025

Bangladesh provides a very timely and illustrative application of the Political Economy Diagnostic Toolkit (PEDT) in the context of a major political transition that took place during 2024. Following the fall of a regime and the formation of an interim government, programme implementation, donor engagement and government partnerships required careful adjustment to a highly sensitive, political and security environment. The PEDT was applied in 2025 to see how this transition affected governance of the food systems and to identify potential constraints and opportunities for engagement. The analysis was informed by consultations with the government counterparts, development partners, the private sector and academia. It also took insights from the review of the UNDSS security assessment and relevant secondary literature.

The overall assessment across the six PEDT domains provides a clearer picture of how Bangladesh's food system is governed and where political economy constraints may arise (Figure 22). Results suggest that policy system stability and inclusion pose a significant constraint, with weak executive checks, limited electoral turnover, and restricted civic space reducing adaptability and public participation. Stakeholder group preferences reveal relatively low levels of overt policy conflict, which may support policy continuity, but also indicate a concentration of influence among a small group of actors, with limited representation of smallholder farmers and women. This raises risks that food policies may insufficiently address the needs of the most vulnerable, particularly during climate or market shocks.

Figure 22. Assessment of Bangladesh compared to maximum possible scores across six PEDT domains

Multisectoral coordination shows relatively strong financing arrangements and functioning coordination bodies, but weaknesses in inclusive membership and policy alignment reduce their effectiveness. Similarly, multilevel coordination remains only moderately developed, with unclear or weak linkages between national and subnational authorities constraining the translation of national food policies into locally responsive action. Financing emerges as a mixed domain: while macroeconomic conditions and donor support remain broadly stable, weak budget transparency and costing create vulnerabilities if fiscal pressures or donor priorities change. Administrative capacities are assessed as moderate, with reasonable technical skills and training but ongoing risks from political influence and limited monitoring capacity.

Taken together, the PEDT findings indicate that Bangladesh has established foundational structures for coordination and policy coherence, but faces binding constraints related to inclusiveness, financial governance, and decentralization. For technical partners supporting food system transformation, these results highlight the importance of designing interventions that are politically informed, sensitive to the transitional context, and focused on strengthening participation, fiscal planning, and subnational implementation capacity to enhance resilience, equity, and sustainability in Bangladesh's food system.

LINKS TO FURTHER GUIDANCE

- PEDT Working Paper https://www.gainhealth.org/resources/reports-and-publications/gain-working-paper-ndeg43-political-economy-food-system-pathways

SECTION SUMMARY

The six different modules and corresponding metrics of the PEDT can be used in combination to uncover the largest political economy constraints, or they can be used on their own if practitioners prefer to focus on a particular challenge. Another advantage of the toolkit is that, for some of the metrics, the domains cannot be scored until a particular analytical component is completed, such as a circle of influence graphic of stakeholder preferences (diagnostic question 2C) or a landscape mapping of relevant donor initiatives (diagnostic question 5B). As such, this leads to the production of additional outputs that can be used for policy planning and engagement as well as for identifying valuable partnerships to advance food systems policy implementation. The PEDT also shares examples of good practices for tackling political economy constraints – for example, on how to promote budget transparency for food systems. These examples allow practitioners to begin to proactively address some of the bottlenecks uncovered with the toolkit. The toolkit should offer users a practical way to understand and grapple with political economy dynamics as they work to further food systems transformation.

FINANCE-RELATED TOOLS

Transforming food systems requires more than coherent plans and policies; these plans need to be actioned with budget and stable investment. While long-term benefits of financing food systems transformation (for example people's health and wellbeing and the global environment) will outweigh costs, market forces cannot be relied upon to finance better nutrition and enhanced socioeconomic impact.

To ensure that all people can access a safe, healthy and diverse diet, efforts to deliver food systems transformative financing need to be accelerated all over the world. There is a well-recognised need for: i) greater influencing on nutrition investing; and ii) innovative methods of resource mobilisation that focus on nutrition and food-system businesses.

At the centre of this set of concerns, sit small- and medium-sized enterprises (SMEs). Most of the food that is produced, processed, transported, and sold in the Global South is handled by SMEs. Although they play this substantial role, their success is hindered by several constraints, including a lack of financial and technical capacity to improve and grow their businesses. Constraints faced by enterprises led by women are even greater. According to the IFC, the estimated global gap in SME funding is $5.7 trillion.

As well as increasing financing, we need to better understand it. Another key tool in this category includes one to help understand what financial flows are already going towards food systems transformation and the extent to which they need to be modified to deliver desired outcomes.

7. INNOVATIVE FINANCE FOR FOOD SYSTEMS TRANSFORMATION (N3F)

AT A GLANCE

FUNDING SMALL AND MEDIUM SIZED ENTERPRISES AT THE HEART OF FOOD SYSTEMS. Nutritious Foods Financing Facility (N3F) is an innovative fund with a linked technical assistance facility and continual assessment feature. While investing in innovative financing and developing tailored solutions for food system transformation, it is also designed to demonstrate that food that is good for nutrition is good for business, as well as for socioeconomic and environmental goals.

GEOGRAPHIC SCOPE

This tool only operates in African countries south of the Sahara at this stage, but expansion is planned.

USER TIPS

The N3F can inspire policymakers and other food systems stakeholders to:

- Believe that food that is good for nutrition can also be good for business, as well as other socioeconomic and environmental goals.
- Showcase the role of innovative financing in food systems transformation
- Invest in innovative financing and develop tailored solutions for food system transformation

WHAT IS THE TOOL AND WHY IS IT NEEDED?

Experts agree that food systems transformation needs to be funded. While eventual economic, social, and environmental benefits of transformation will far outweigh short-term costs, at present, finance still needs to be mobilised to drive positive food systems transformation. The Nutritious Foods Financing Facility – or N3F – launched in December 2023 aims to do this through three components:

1. The Fund;
2. Technical Assistance, and
3. Monitoring, Assessment, and Learning.

The N3F Fund is an impact investment debt fund managed by Incofin Investment Management, applying a blended finance approach to provide debt financing to small and medium-sized enterprises (SMEs) in sub-Saharan Africa (SSA) who are providing safe and nutritious foods to local lower income consumers.

Technical assistance is provided by GAIN to the Fund's investee SMEs in two main areas: 1) general business management practices to support improved efficiency and financial sustainability (e.g. through business planning and strategy development); and 2) impact enhancement and food safety, such as product formulation, labelling and supply chain strengthening, to ensure, improve and oversee SMEs' nutrition impact, as well as gender equity and environmental sustainability.

Finally, monitoring, assessment, and learning – also managed by GAIN – focuses on knowledge dissemination and the development and validation of metrics for targeting nutrition-sensitive investments. The N3F aims to finance up to 60 nutritious food SMEs across 15+ countries in SSA, reaching between 7 to 10 million end consumers with safe, nutritious foods by 2030.

N3F is a relatively new and innovative facility, with ambitious impact targets. In the first 2 years of implementation, N3F has already invested in 10 SMEs across 6 sub-Saharan African countries – Zambia, Rwanda, Kenya, Tanzania, Senegal and Uganda – that operate in diversified nutritious foods value chains – dairy, fish, fortified and blended flours, poultry, legumes and nuts, and cold chain storage and logistics. Nine of the investees are actively accessing technical assistance to strengthen their operations and impact. The first five investees of the fund collectively enabled access to 647.3 million nutritious food servings, reaching an estimated nearly three million end consumers across sub-Saharan Africa.

The aim is that through demonstrating success, N3F will act as a pioneer proof of concept, ushering in further nutrition impact-investment mechanisms to unlock the potential in nutritious food value chains. The learnings from N3F in sub-Saharan Africa as a proof of concept in nutrition investing are also being applied to inform and develop the N3F model for Asia.

Another aim of N3F is to demonstrate not only how investing in nutrition-focussed businesses can deliver tangible nutrition and business benefits, but also how additional benefits in further areas aligned with the UN Sustainable Development Goals (SDGs can accrue. These include gender equality, child welfare, livelihoods, environmental sustainability, and other aspects of human development.

CASES AND EXAMPLES OF APPLICATION

Note: Examples shared here are from N3F activities in Africa. The facility is planning to expand into Asia in coming years.

KENYAN SMEs SUPPORTED BY THE N3F

Two examples of SMEs supported in Kenya include Shalem and Camino Ruiz. Shalem is co-founded and co-owned by a female Kenyan entrepreneur. Based in Meru, central Kenya, Shalem works across grain aggregation, grain milling, fortified flours, and animal feed processing. Shalem provides local communities with affordable, high-quality fortified maize and wheat flour, crucial for staple foods like Ugali and porridge. They also produce a line of porridge dedicated to children under five years old. Fortified flours can play an important role in addressing malnutrition, as they provide an affordable source of micronutrients, especially in rural areas of low- and middle-income countries like Kenya, where access to diverse and nutritious foods may be limited. Shalem supports livelihoods by purchasing from over 30,000 Kenyan smallholder farmers.

Camino Ruiz distributes tilapia fish and partners with Global Tilapia and farmers' groups for production. Tilapia is a vital source of protein and essential nutrients, providing vitamins and minerals like B12 and selenium to low-income communities. Camino Ruiz also supports women's groups in Homabay County, providing training and economic opportunities, particularly for women and youth.

A ZAMBIAN SME SUPPORTED BY THE N3F

Good Nature Agro is an innovative Zambian SME specializing in legumes and seeds, focusing on soybean, groundnuts, cowpeas and beans as seed for replanting as well as for local consumption. Not only does Good Nature Agro partner with a network of over 15,000 smallholder farmers across Zambia to purchase seeds, it also provides farmers with inputs and training to help improve seed and food-grade commodity production. Good Nature Agro has been recently ranked among the fastest growing companies in Africa by the Financial Times, demonstrating its capacity to scale its impact in Zambia and beyond. N3F's investment in the company will contribute to increased access to quality beans and groundnuts by smallholder farmers and households in Zambia as either seed for replanting or food for consumption in their homes.

SECTION SUMMARY

Small and medium-sized enterprises are the backbone of food systems in Africa and Asia. Unfortunately, the vast majority, even those which are involved in providing food that is good for people's nutrition and under-produced, face severe funding and technical challenges preventing scale-up. This means local production of goods like fruits and vegetables, chicken, fish, and more, is being held back. SMEs involved in nutritious food value chains must be supported as part of greater efforts to transform food systems. Public and private blended finance coupled with technical assistance and sound monitoring, is proving an effective instrument in the toolbox with which to bridge the funding gap faced by SMEs in the region.

8. TRACKING FINANCIAL FLOWS TO FOOD SYSTEMS (3FS)

AT A GLANCE

UNDERSTANDING THE FLOW OF PUBLIC, PRIVATE, DOMESTIC, AND FOREIGN FINANCES TO FOOD SYSTEMS. The Financing Flows to Food Systems (3FS) is a tracking tool developed by IFAD and the World Bank, partnered with GAIN (Global Alliance for Improved Nutrition) and others, to map food system financing. Data and visuals help governments and investors find gaps and opportunities. GAIN has supported the application of 3FS to help governments to align financial flows with food system transformation priorities.

GEOGRAPHIC SCOPE

Country and global level (aims). All countries can be included, but the tool has been applied to only a few cases to date. Ideally a facilitator with presence in country is required.

USER TIPS

The Financing Flows to Food Systems (3FS) tracking tool has been developed to fill crucial gaps in understanding faced by policymakers and governments:

- Financing dedicated to urgent food systems transformation is understood to be far less than needed, though exact figures are unknown.
- The 3FS is a response to the lack of evidence on financial flows to food systems.
- It aims to capture evidence on the scale and scope of financial flows to food systems at country and global levels to inform decisions taken and foster greater accountability.

WHAT IS THE TOOL AND WHY IS IT NEEDED?

Stakeholders from all sectors agree that scaled-up financing is needed to fund national pathways for food systems transformation. Estimates from the costs of ending hunger to the global cost of transitioning to high-performing food systems vary and range between US$33 billion and US$350 billion per year. It's also understood that in relation to their national economies, the least developed countries bear the heaviest financing burden to meet the costs of food systems transformation.

Regardless of the estimated need, it is still not known how much is being mobilized to finance the transition to improved food systems. Meeting financial commitments for this urgent transformation requires keeping track of financial flows to food systems. Yet, a major knowledge gap facing decision-makers and stakeholders is that there is limited evidence on how countries and the global community are financing food systems transformation. The volume and targeting of the financial flows to food systems, gaps and needs are unknown. To bridge these gaps, the 3FS was developed by the International Fund for Agricultural Development (IFAD) and the World Bank (WB) while also leveraging the expertise and instruments of additional players in the ecosystem. The 3FS aims to capture evidence on the scale and scope of financial flows to food systems at country and global levels to inform impactful decisions and foster mutual accountability for transformative financing to food systems.

The 3FS methodology has been successfully piloted by the World Bank and IFAD in: Kenya, Niger, and Peru. It is currently being applied with the support of GAIN in Benin, Bangladesh, Indonesia and Rwanda.

The 3FS builds on the SDG financing strategy and tracks three financial flows to food systems:

- Domestic public financing
- International development financing
- Private sector financing

The 3FS addresses different needs by displaying data on financial flows to food systems in three windows:

- The country window offers evidence on financing to food systems at country-level by examining the domestic public spending and international development financial flows.
- The global window displays trends of international development financial flows in support of domestic resource mobilization efforts, based on the OECD Creditor Reporting Systems, which includes Official Development Assistance (ODA), Other Official Flows (OOF), and philanthropic contributions.
- The private sector window, which is still under development, will provide information on the quantity and quality of private sector financing for food systems, differentiating between the economic agents within food value chains, the banking system, and capital market operators.

The methodology requires three key stages:

- **Convening key government actors**: Facilitation of collaboration between ministries, departments, and agencies.
- **Technical expertis**e: Deployment of financial data expertise to guide the application of the 3FS methodology.
- **Workshops and training:** Hands-on workshops to build capacity and ensure effective implementation.

EXAMPLE OF AN APPLICATION

Note: The 3FS tool is currently under application in both Bangladesh and Indonesia, but results remain preliminary and under embargo. Here we share a recent application in Africa.

APPLYING 3FS IN RWANDA

In line with its Second National Strategy for Transformation 2024-2029 (NST-2) and the Fifth Strategic Plan for Agriculture Transformation 2024-2029 (PSTA-5), the Government of Rwanda is driving an integrated agenda for sustainable and inclusive food systems transformation. PSTA-5 positions food systems transformation as a central pillar for achieving climate-resilient growth, nutrition improvement, and private-sector-driven agricultural modernization. Rwanda's continued high-level engagement in the UN Food Systems Summit Stocktake 2025 (UNFSS+4) reinforces this national commitment, linking domestic priorities with the global agenda on sustainable food systems financing and accountability.

The Government of Rwanda has adopted the tracking of the Financial Flows to Food Systems (3FS) tool to develop deeper evidence on financial flows in the country's food systems. 3FS helps policymakers and key actors understand where funding – both domestic and external – is being directed and informs the prioritization of investment programmes and government budgeting.

Between December 2024 and June 2025, the Government of Rwanda, with the support of the Global Alliance for Improved Nutrition (GAIN), IFAD, the World Bank, AKADEMIYA2063, and AGRA, and in collaboration with the United Nations (UN) Food Systems Coordination Hub, the UN Resident Coordinator's Office, and extended UN partners, deployed a first phase of the 3FS to assess the country's trends in financial flows to food systems over the fiscal years between 2018/19 and 2023/24 (inclusive).

The Ministry of Agriculture and Animal Resources (MINAGRI), which is the national convenor for food systems transformation in Rwanda, led the 3FS initiative in collaboration with the Ministry of Finance and Economic Planning (MINECOFIN) and 34 other key Ministries, Departments and Agencies (MDAs) involved in food systems expenditures.

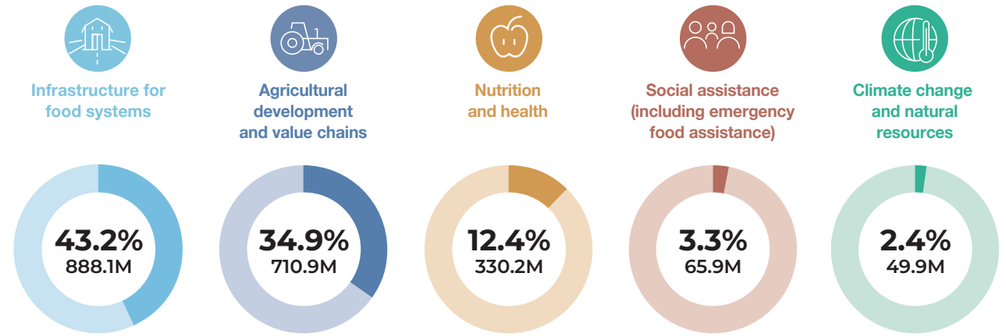
In this first phase, analysis examined two sources of funding for food systems, namely domestic public expenditures and external development financial flows. The source of data for tracking Rwanda's domestic public expenditure on food systems was the country's executed national budget for the fiscal years under consideration, as provided by the Integrated Financial Management Information System (IFMIS) system hosted by MINECOFIN. For external development financing, the data was accredited to the Organization for Economic Cooperation and Development Creditor Reporting System (OECD-CRS).

Findings revealed that between 2018 and 2024, Rwanda's **domestic public spending on food systems** averaged USD $340 million annually (constant 2023/24 prices), and totalled USD $2.04 billion for the 6 years.

Spending was largely concentrated on two components: 1) infrastructure for food Systems (43.2% of spending, or USD $881 million over the 6-year period) which includes roads, electricity transmission, and transport infrastructure; 2) agricultural development and value chains (34.9% of spending, or USD $711 million over the 6-year period), reflecting investments in sustainable and climate-smart crop and livestock production.

Other components included nutrition and health (USD $330 million, 16.2%), social assistance including emergency food aid (USD $66 million, 3.2%), and climate change and natural resources (USD $50 million, 2.4%) (**Figure 23**). Rwanda maintains a clear focus on long-term productive investments that strengthen agri-food systems resilience, while continuing to support human capital and social protection measures.

Figure 23. Government spending per component – 3FS Rwanda application



Source: Data from Government of Rwanda MINECOFIN
Note: Average 2018-2024, in US$, constant base year 2023/2024

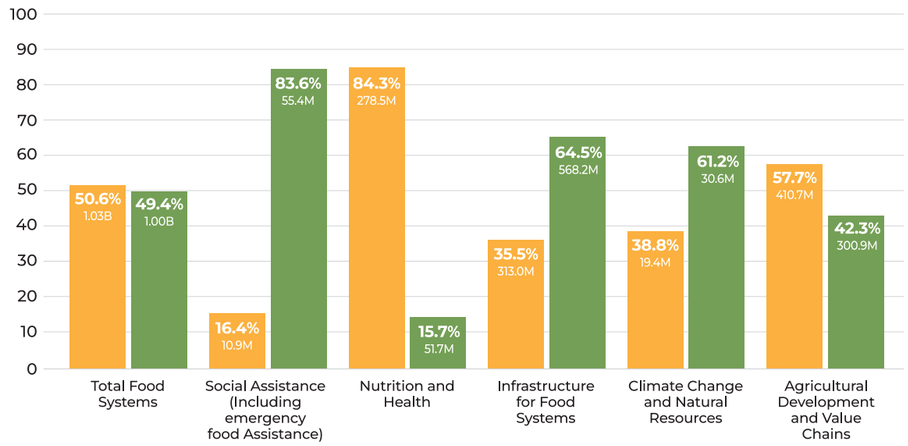
In terms of **external development financing to food systems** over the period 2018–2023, Rwanda received an average of USD $316 million per year in external (constant 2023 prices), totalling USD $1.9 billion. These flows went towards agricultural development and value chains (USD $ 207.3 million, 65.6%); infrastructure for food systems (USD $59.1 million, 18.7%); climate change and natural resources (USD $19.8 million, 6.3%); nutrition and health (USD $18.1 million, 5.7%); and social assistance, including emergency food aid (USD $11.6 million, 3.7%) for the averages per year.

Official development assistance (ODA) remained the dominant financing source, complemented by smaller shares from other official flows and philanthropic partners.

The United States, the European Union (EU), the World Bank Group, African Development Bank (AfDB), the Netherlands, and IFAD were among the top bilateral and multilateral contributors.

Figure 24 illustrates government spending of national and external funds by component. Clear distinctions appear between nationally and externally funded priorities.

Figure 24. Source of Government spending by component – 3FS Rwanda application



Data accredited to Government of Rwanda MINECOFIN

The 3FS work in Rwanda was a fully government-led process, including full ownership of all results produced. The work builds on Rwanda's national pathway for food systems transformation and aligns with the government's monitoring efforts under NST-2, PSTA-5, and the UNFSS+4 follow-up. Insights from the 3FS will inform the future budgeting and investments, improve coordination between national and international stakeholders, and support evidence-based planning and implementation toward a resilient, inclusive, and sustainable food system.

SECTION SUMMARY

Stakeholders from all sectors agree that scaled-up financing is needed to fund national pathways for food systems transformation. Still, not enough is known about how much is mobilized to finance the transition to improved food systems. Meeting financial commitments for this urgent transformation requires keeping track of financial flows to food systems. The 3FS can help capture evidence on the scale and scope of financial flows to food systems at country and global levels to inform impactful decisions on the part of governments and investors, and to foster mutual accountability for transformative financing to food systems.

CONCLUSION

The eight tools highlighted in this paper are instrumental in a) diagnosing food systems to identify critical gaps and untapped opportunities; b) shaping nimble action plans in line with national priorities; c) identifying much-needed policy reforms to ensure sectors act alongside each other, rather than against; and d) providing practical ways to effectively navigate political, financial, and technical impediments.

They are applicable to countries across income groups and regions – including Asia and the Pacific.

More tools like these are becoming available to support countries to follow their pathways to food systems transformation. The **Accelerator Tools Management Kit (ATMK),** an online repository currently under development will serve as a practical resource to consolidate priority tools from across several partners. Its aim is to provide governments with accessible data tools, policy diagnostic instruments, and finance-related resources to help identify bottlenecks, design solutions, and mobilise funding for food systems transformation.

The moment of The Asia and the Pacific Food Systems Transformation Forum 2026, five years before the 2030 milestone of the SDGs is an important time to reflect, to gather support for strong government policy, and to remind stakeholders across the board of the urgency – and of what is at stake if we do too little. We must accelerate the transformation of food systems to deliver on their promise and put our resources behind work to shape a healthier, fairer future.

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