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The Food Systems Countdown to 2030 Initiative (FSCI) Baseline State of Food Systems for the Americas region

February 2025

Food systems connect people and the Earth and offer a clear entry point to address the numerous health, environmental, and socioeconomic challenges. Yet food systems around the world face formidable challenges and future risks necessitate their urgent and comprehensive transformation.

Notwithstanding these challenges, food systems around the world exhibit remarkable diversity across the supply chains and sub-regions, from production to distribution to the diversity of diets. Every region's agricultural potential is substantial, and, coupled with a rich tapestry of traditional agricultural practices and emerging technologies, presents a unique opportunity for revolutionizing the entire functioning of food systems.

Such a holistic approach is imperative to address the multi-faceted challenges facing the world's food systems and to harness the immense potential for food system innovation and development. This transformation must transcend mere production increases, encompassing improved market access, enhanced food security, diversified nutrition, climate resilience, and overall sustainability.

Food systems transformation is central to meeting the Sustainable Development Goals (SDGs) by their 2030 deadline as well as to meeting the targets and commitments established in the three Rio Conventions on climate change (UNFCCC), the Convention on Biological Diversity (UNCBD), and the UN Convention to Combat Desertification (UNCCD). Meeting these goals is possible, but decisive and deliberate decisions are required to set countries, companies, and consumers on a more sustainable, healthy, equitable, and resilient path. Choosing those right actions requires rigorous evidence.

This policy brief provides the Americas region with a snapshot of the current state of their food systems, establishing a baseline understanding of key challenges and strengths across different food system dimensions.

Overview of the Food Systems Countdown to 2030 Initiative

Food system actors and stakeholders (e.g., civil society, governments, and international organizations) need actionable evidence to make decisions that can transform food systems, yet no such mechanism currently exists. The Food Systems Countdown to 2030 Initiative (FSCI) is a collaborative effort to fill that gap and monitor global food systems. It brings together indicators that span food systems and provides annual analysis to track the holistic nature of food systems, align policy, business, and non-governmental organizations around crucial priorities, incentivize action, sustain commitment, and enable course corrections. It is hoped that the FSCI supports the transformation of food systems, so they become equitable, sustainable, and resilient and positively contribute to achieving the 2030 SDGs and other global goals.

Baseline monitoring of the FSCI

As a starting point, the FSCI published its first baseline peer review **publication** and **report** in late 2023. This report established the architecture of thematic areas, the indicators, and the current state of food systems worldwide. The architecture comprises five themes that address the challenges and benefits of food systems described above. Three themes focus on the outcomes of food systems: (1) diets, nutrition, and health; (2) environment, natural resources, and production; and (3) livelihoods, poverty, and equity. The two cross-cutting areas focus on (4) governance and (5) resilience. Each thematic area is described by several domains, under which specific indicators are identified to be tracked (Figure 1).

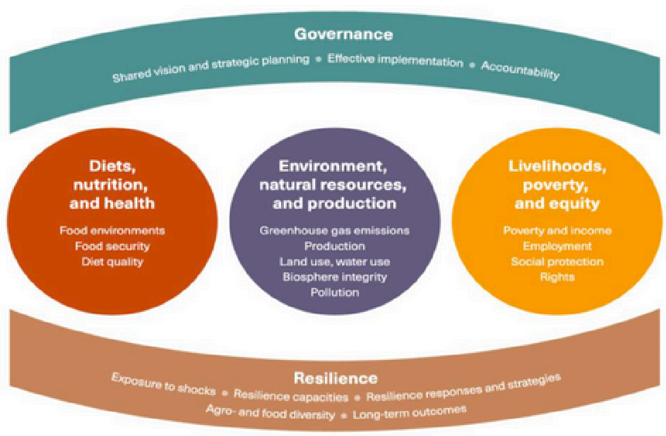


Figure 1: Thematic areas of the FSCI

Through a multistakeholder consultative process, **50 indicators** were identified to be monitored over the next five years (end date of 2030 in line with the SDGs) to jointly provide a snapshot of the current state of food systems across all five themes. The FSCI baseline shows that no single region has a monopoly on food system success. Every region and country has room for improvement, and countries can learn from each other. Governments must step up and restore the power balance and play a more active role in shepherding food systems in positive directions. Investment in place-based solutions is critical to understanding what works, where, in what context, and for whom.

The FSCI baseline of the Americas region: Trends across food systems

Using the FSCI baseline and following trends over time across select indicators of the 50 FSCI indicators, this section provides patterns of how food systems are progressing in the Americas region. Figures 2-6 show the distribution of country-level data points per indicator per year (light gray) within each region relative to the weighted mean for that region (maroon) and the global weighted mean (dark gray). The variable by which the mean is weighted varies by indicator and is shown in Table 1 in the Annex. Only indicators whose data can be viewed as a time series are depicted; all indicators that are based on survey data are excluded because the data come from different countries in each year.

Across the diets, nutrition, and health thematic area (Figure 2), the Americas perform well when examining some of the indicators. The region has maintained consistently lower undernourishment rates than the global mean (13.5%) over the last 20 years, at 3.6% in 2021. Similarly, food insecurity rates (21.9%) remain below the global average (29.9%), though with significant variation among countries. Access to safe water is higher than the global average consistently over the last 25 years with 74.7% having that access. On diets, the story is a bit different. Ultra-processed food sales stand at 534.7 PPP dollar/year, more than triple the global mean of 153.6. While the region is a major horticultural producer, fruit availability (400.7 g/day) and vegetable availability (235.0 g/day) show contrasting patterns. Fruits exceed the global mean (267.9 g/day) while vegetables fall below it (299.8 g/day). While the cost of a healthy diet (3.6 PPP dollar/day) aligns closely with the global mean (3.7 PPP dollar/day), affordability is notably better - 18.2% of the population cannot afford a healthy diet, compared to 35.7% globally.

Analysis of select indicators from the environment, natural resources and production thematic area (Figure 3) reveals mixed performance. Emission intensities in the Americas align closely with global averages: beef (29.9 vs 28.3 kg CO_2eq/kg globally), cereals excluding rice (0.2 kg CO_2eq/kg, matching global mean), and milk (0.7 vs 1.0 kg CO_2eq/kg globally). However, total food system emissions remain high at 118,064 kt CO_2eq compared to the global mean of 83,275, primarily driven by North American emissions. Agricultural productivity in the region exceeds global averages across multiple categories: vegetable yields (2.3 vs 2.0 tonnes/ha globally), fruit yields (1.7 vs 1.4 tonnes/ha), and beef production (279.3 vs 221.0 kg/animal). However, this higher productivity has not translated into greater domestic availability of fruits and vegetables, suggesting significant export orientation. While cropland area shows minimal change (-0.1%), pesticide use has intensified to 5.1 kg/ha, more than double the global average of 2.4 kg/ha. Agricultural water withdrawal remains relatively efficient at 4.2% of total renewable water resources, compared to the global mean of 16.8%.

Figure 2: Select FSCI indicators in the diets, nutrition and health thematic area, Americas

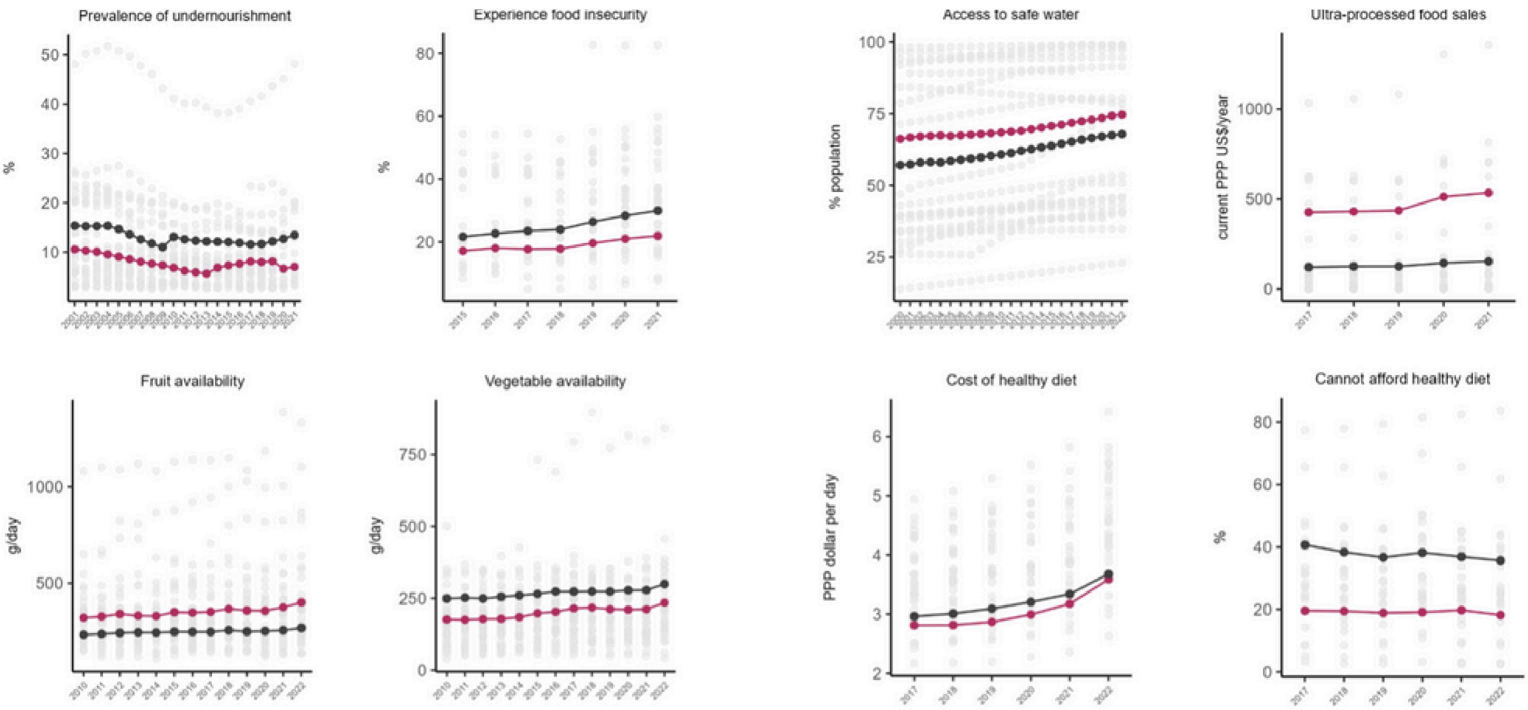
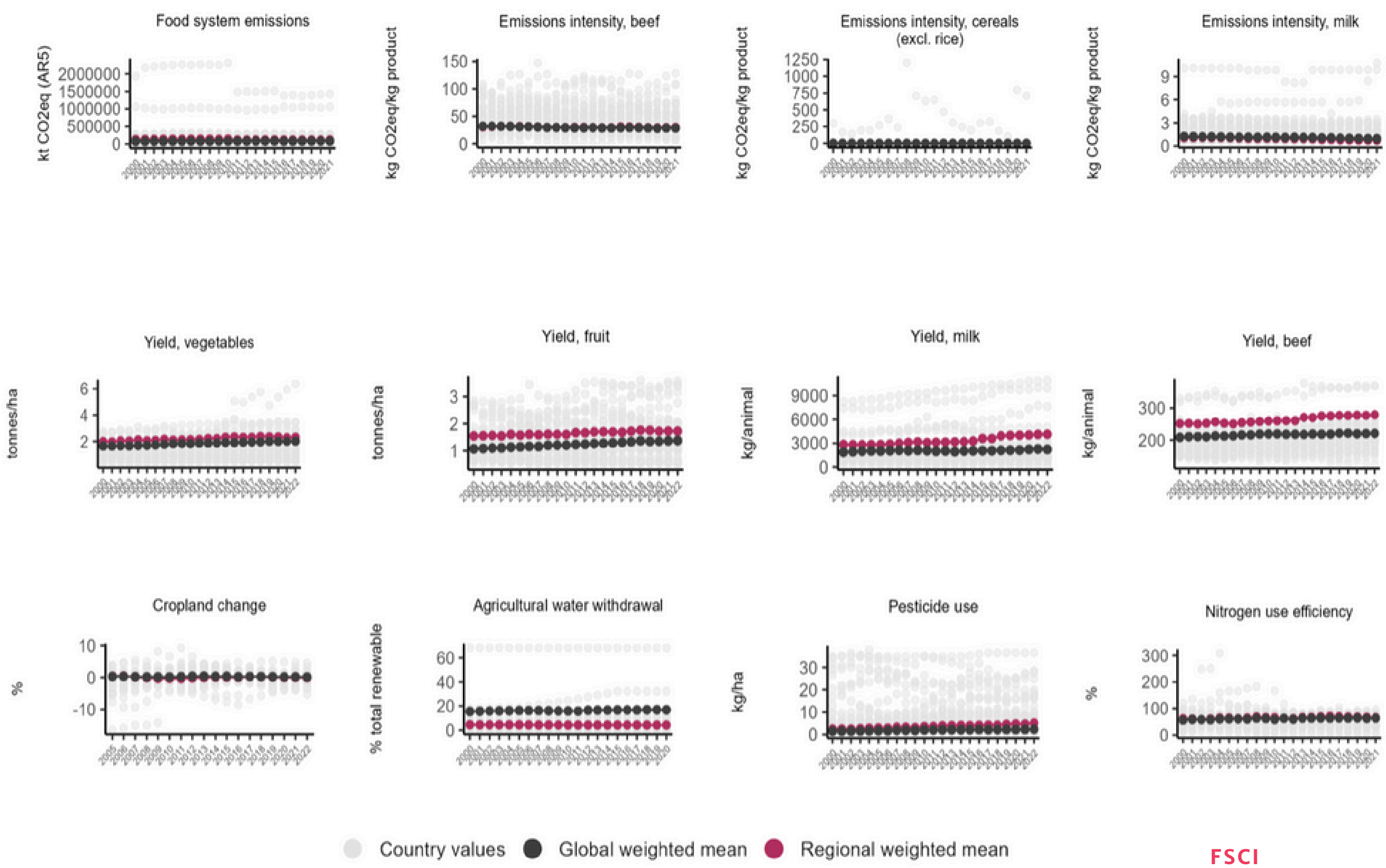
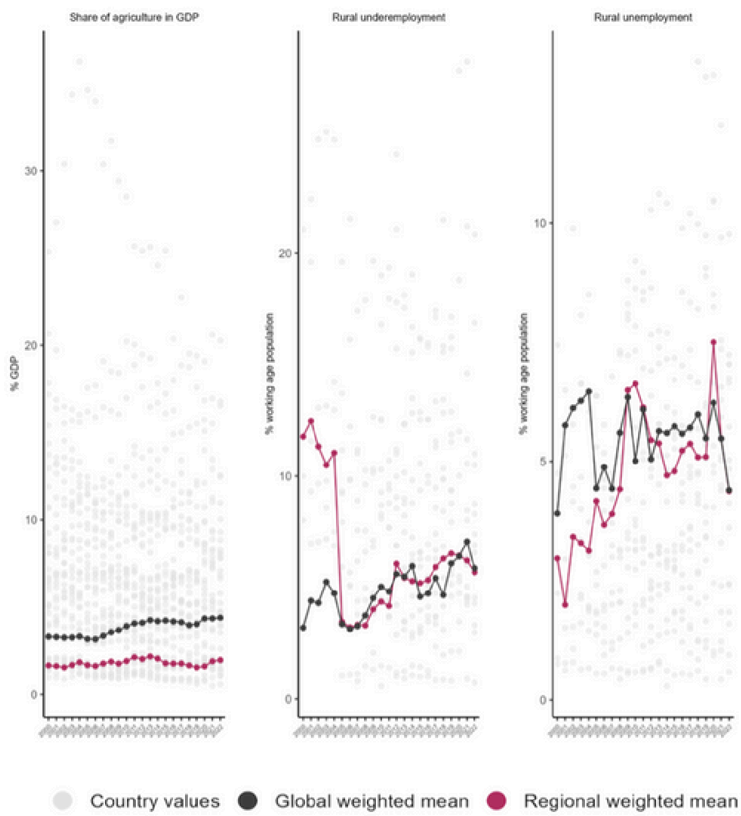


Figure 3: Select FSCI indicators in the environment, natural resources and production thematic area, Americas



Looking at the livelihoods, poverty and equity theme (Figure 4), the Americas show distinct economic characteristics. Agriculture contributes just 2.0% to regional GDP, less than half the global average of 4.4%, though this figure varies substantially across countries – from highly industrialized economies to those more dependent on agriculture. Rural labor markets closely track global patterns, with the region's rural underemployment rate of 5.7% matching the global mean (5.9%) and unemployment at 4.4% aligning with the global average (4.4%). However, these regional averages mask significant country-level variations, particularly between North and South America, suggesting different structural challenges across the region's rural economies.

Figure 4: Select FSCI indicators in the livelihoods, poverty, and equity thematic area, Americas



Analysis of the governance theme (Figure 5) shows mixed institutional progress. The region maintains a moderate level of food system pathway adoption at 0.6 (global: 0.6), with this level remaining stable between 2022 and 2024. Food safety capacity stands as a particular strength, scoring 90.4 compared to the global average of 69.5, and has shown consistent improvement. While the region has experienced recent declines in government effectiveness (0.2 vs global 0.0), it maintains stronger performance in government accountability (1.2 vs global 0.2) and civil society participation (0.8 vs global 0.6). The Americas also lead globally in urban food policy engagement, with 31.2% of urban populations covered by the Milan Urban Food Policy Pact compared to 10.9% globally.

Regarding resilience (Figure 6), the Americas demonstrate stability in key metrics while showing progress in biodiversity conservation. Food system stability indicators align with global averages, with food supply variability at 29.7 kcal/day (global: 29.3) and price volatility at 0.6 (global: 0.7). The region leads in plant genetic resource conservation with 218,813.3 accessions (global: 166,534.7), while animal genetic resources (3.6) remain below the global mean (5.1). Notably, minimum species diversity in agricultural land has reached 21.2%, showing steady improvement over two decades but remaining slightly below the global average of 24.5%. This progress reflects growing regional commitment to agricultural biodiversity despite remaining challenges.

Figure 5: Select FSCI indicators in the governance thematic area, Americas

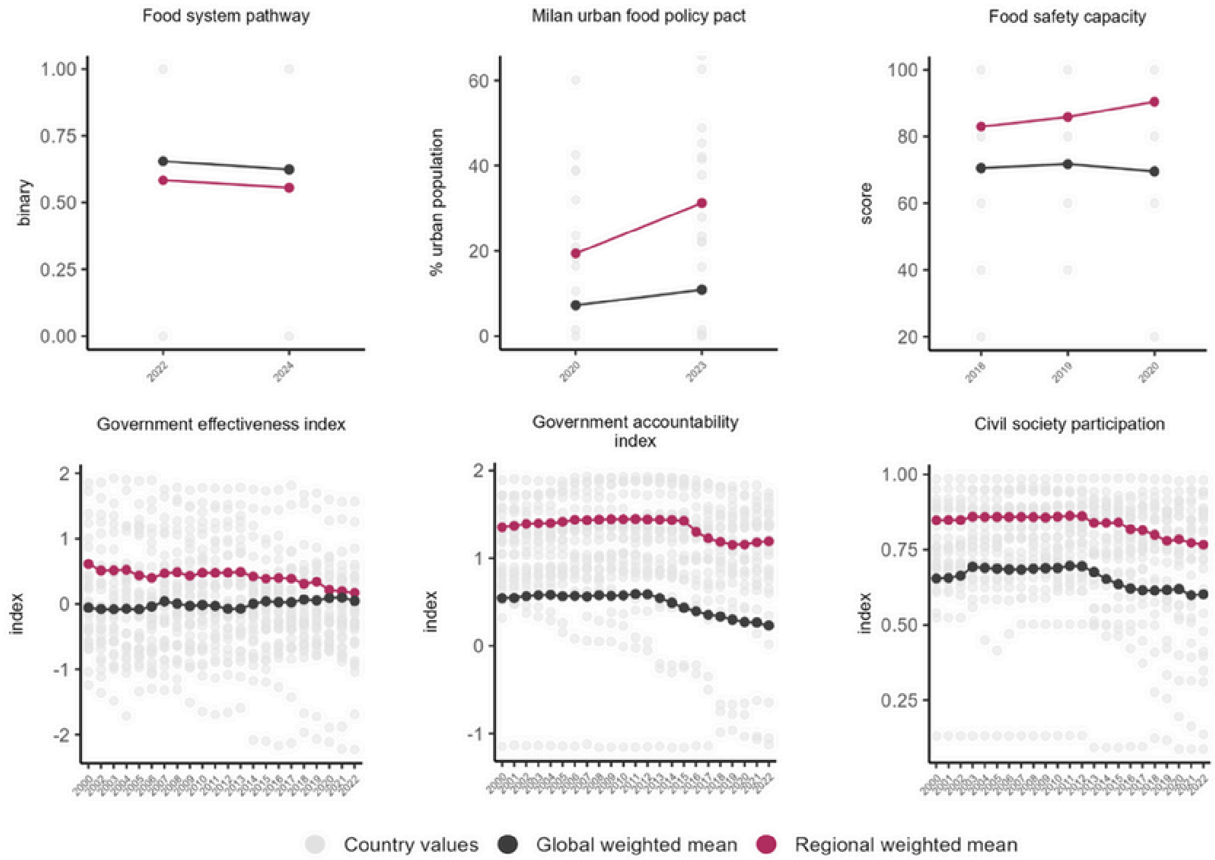
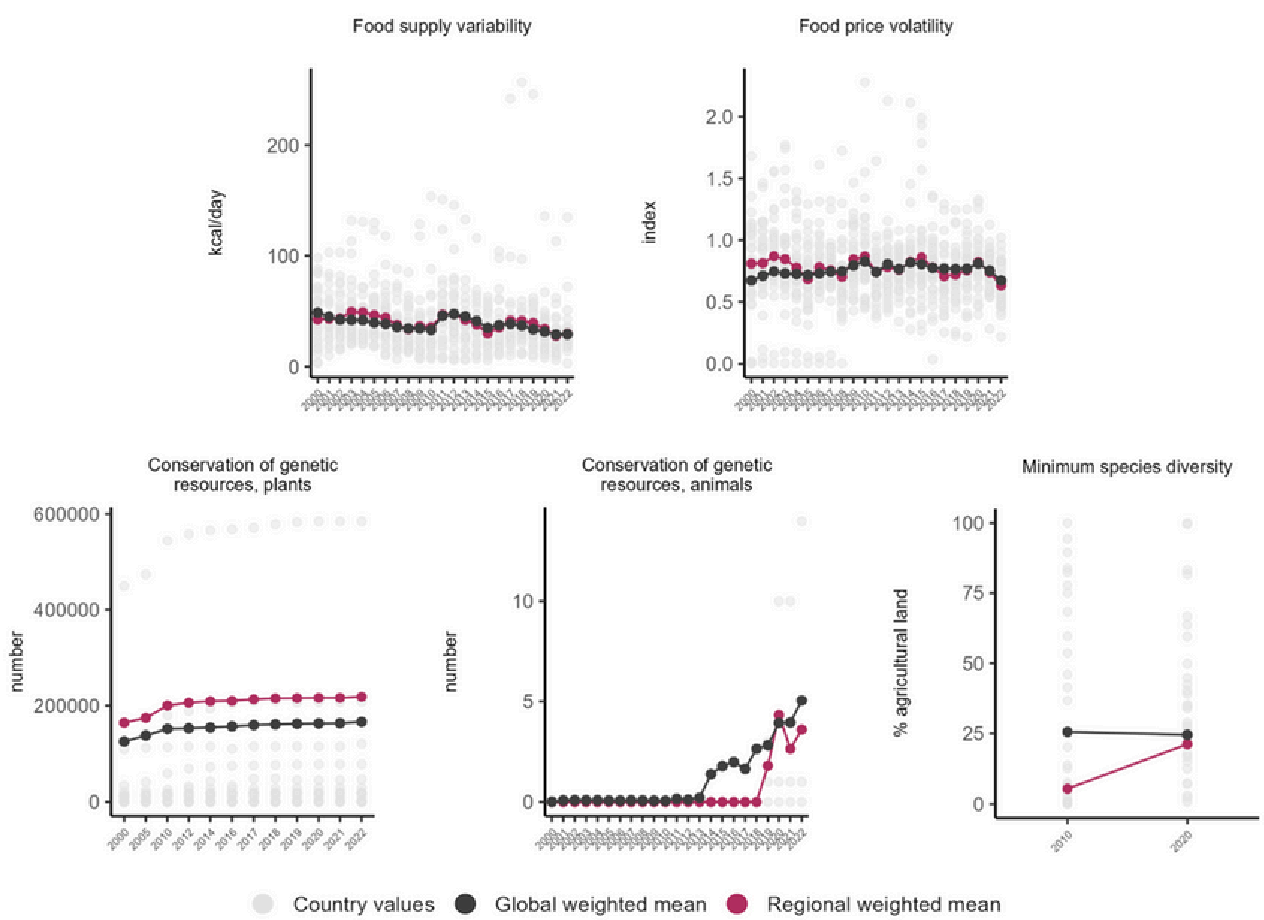


Figure 6: Select FSCI indicators in the resilience thematic area, Americas



Summary

Food systems transformation is urgently needed to support sustainable development and human well-being. The FSCI baseline data demonstrate several key conclusions for the Americas region:

- The Americas present a complex nutritional landscape despite progress in reducing hunger. While undernutrition rates are low at 3.6%, over 133 million people cannot afford nutritious diets. This burden is unevenly distributed, with 57% of the Caribbean population lacking access to healthy diets, compared to 22.2% in Mesoamerica and 20.6% in South America. The region faces a concerning "double burden" of malnutrition, combining 11% child stunting with 24% adult obesity. Most alarming is the rise in ultra-processed food sales (534.7 PPP dollar/year), more than triple the global average.

- Environmental metrics reveal significant challenges. While emission intensities for individual agricultural products align with global averages, total food system emissions remain high at 118,064 kt CO_2eq, substantially exceeding the global mean of 83,275 kt CO_2eq. This is largely driven by intensive agricultural systems in North America and Brazil. Pesticide use has intensified to more than double the global average, though water use efficiency remains strong.

- The region shows mature institutional development but faces ongoing challenges. While agriculture's contribution to GDP is low at 2.0%, the region leads in food safety capacity (90.4) and urban food policy engagement (31.2%). However, recent declines in governance indicators suggest the need for renewed focus on institutional strengthening.

- To address these challenges, transformation must focus on four key areas: improving dietary quality while ensuring affordability, balancing agricultural productivity with environmental sustainability, strengthening regional cooperation to reduce inequities, and enhancing biodiversity conservation while maintaining food system stability.

Going forward, the FSCI aims to support stakeholders in assessing and improving their food systems through evidence-based decision making. By leveraging these data, the Americas can focus support to transform food systems as an urgent priority. Such progress can yield more equitable food systems that enable sustainable human and planetary health and well-being.

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Annex: Table 1 of Indicator values across regions and global mean

Theme	Indicator	Unit	Mean weighted by	Latest year	Regional weighted mean: Asia	Europe	Africa	Americas	Oceania	Global weighted mean
Diets, Nutrition, and Health	Cost of healthy diet	PPP dollar per day	Population	2022	3.8	3.3	3.7	3.6	3.0	3.7
	Fruit availability	g/day	Unweighted	2022	218.6	312.2	192.6	400.7	245.1	267.9
	Vegetable availability	g/day	Unweighted	2022	384.5	450.6	177.0	235.0	225.8	299.8
	Ultra-processed food sales	current PPP US$/year	Population	2021	28.7	666.4	7.8	534.7	577.3	153.6
	Access to safe water	% population	Population	2022	71.5	91.4	25.1	74.7	96.2	67.9
	Experience food insecurity	%	Population	2021	24.8	7.5	56.6	21.9	23.1	29.9
	Cannot afford healthy diet	%	Population	2022	35.4	5.7	64.4	18.2	5.1	35.7
	Prevalence of undernourishment	%	Population	2021	12.1	4.7	19.9	7.0	23.9	13.5
Environment, natural resources, and production	Emissions intensity, beef	kg CO2eq/kg product	Total production	2021	21.7	17.1	57.1	29.9	25.1	28.3
	Emissions intensity, cereals (excl. rice)	kg CO2eq/kg product	Total production	2021	0.2	0.1	0.2	0.2	0.2	0.2
	Emissions intensity, milk	kg CO2eq/kg product	Total production	2021	1.1	0.6	3.0	0.7	0.8	1.0
	Emissions intensity, rice	kg CO2eq/kg product	Total production	2021	1.0	3.6	1.4	1.0	1.1	1.1
	Food system emissions	kt CO2eq (AR5)	Unweighted	2021	144,217.4	46,369.0	52,756.8	118,064.8	20,297.4	83,275.5
	Yield, beef	kg/animal	Producing animals	2022	161.6	267.3	161.9	279.3	242.9	221.0
	Yield, cereals	tonnes/ha	Area harvested	2022	0.4	0.4	0.2	0.6	0.3	0.4

Theme	Indicator	Unit	Mean weighted by	Latest year	Regional weighted mean: Asia	Europe	Africa	Americas	Oceania	Global weighted mean
	Yield, fruit	tonnes/ha	Area harvested	2022	1.5	1.2	0.9	1.7	1.3	1.4
	Yield, milk	kg/animal	Producing animals	2022	2,216.8	6,306.2	652.8	4,136.2	4,827.6	2,209.3
	Yield, vegetables	tonnes/ha	Area harvested	2022	2.2	2.7	0.9	2.3	2.0	2.0
	Cropland change	%	Total cropland	2022	0.0	0.0	0.8	-0.1	0.4	0.1
	Agricultural water withdrawal	% total renewable	Total cropland	2020	32.5	2.2	18.1	4.2	1.7	16.8
	Fisheries health index	score	Population	2021	19.2	30.2	10.4	34.7	27.2	21.2
	Functional integrity	% agricultural land	Agricultural land (source: ESA)	2015	0.3	0.4	0.5	0.5	0.5	0.4
	Pesticide use	kg/ha	Total cropland	2022	1.9	1.6	0.7	5.1	2.0	2.4
	Nitrogen use efficiency	%	Total cropland	2021	50.6	66.2	78.6	65.8	80.5	63.1
Livelihoods, Poverty, and Equity	Share of agriculture in GDP	% GDP	GDP	2022	7.4	1.9	15.8	2.0	3.1	4.4
	Rural underemployment	% working age population	Population	2022	5.7	3.6	8.8	5.7	6.3	5.9
	Rural unemployment	% working age population	Population	2022	3.5	5.3	6.3	4.4	3.1	4.4
Governance	Civil society participation	index	Population	2022	0.5	0.7	0.7	0.8	0.8	0.6
	Food system pathway	binary	Unweighted	2024	0.7	0.4	0.7	0.6	0.9	0.6
	Milan urban food policy pact	% urban population	Urban population	2023	6.4	18.1	14.2	31.2	1.6	10.9
	Food safety capacity	score	Population	2020	67.9	83.4	51.6	90.4	94.5	69.5

Theme	Indicator	Unit	Mean weighted by	Latest year	Regional weighted mean					Global weighted mean
					Asia	Europe	Africa	Americas	Oceania	
	Government effectiveness index	index	Population	2022	0.2	0.5	-0.8	0.2	0.9	0.0
	Access to information	binary	Unweighted	2023	1.0	1.0	1.0	1.0	1.0	1.0
	Government accountability index	index	Population	2022	-0.1	1.0	0.3	1.2	1.5	0.2
	Open budget index	index	Population	2021	36.1	68.7	35.8	65.2	71.9	43.0
Resilience	Disaster damages share of GDP	ratio	GDP	2022	0.0	0.0	0.0	0.0	0.0	0.0
	Conservation of genetic resources, plants	number	Total land area	2022	127,859.1	168,404.9	14,023.7	218,813.3	272,872.4	166,534.7
	Conservation of genetic resources, animals	number	Total land area	2022	12.9	9.0	0.8	3.6	0.0	5.1
	Minimum species diversity	% agricultural land	Agricultural land (source: FAO)	2020	39.6	12.3	36.6	21.2	11.8	24.5
	Dietary sourcing flexibility	index	Population	2019	0.7	0.8	0.7	0.7	0.7	0.7
	Mobile phones per 100 people	Number per 100 people	Unweighted	2022	131.9	123.6	98.8	116.5	90.3	115.7
	Social capital index	index	Population	2021	0.5	0.5	0.4	0.4	0.6	0.5
	Food supply variability	kcal/day	Unweighted	2022	30.0	30.7	28.7	29.7	20.2	29.3
	Food price volatility	index	Unweighted	2022	0.7	0.6	0.7	0.6	0.8	0.7

The Food Systems Countdown Initiative: Monitoring food system transformation to 2030 and beyond.

The FSCI is a collaborative effort to monitor global food systems. It brings together indicators that span food systems and provides annual analysis to inform policy, business, and NGO priorities and actions. It supports the transformation of food systems, so they become equitable, sustainable, and resilient and positively contribute to achieving the 2030 SDGs and other global goals.

The Food Systems Countdown Initiative is led by Jessica Fanzo of Columbia University, Lawrence Haddad of the Global Alliance for Improved Nutrition (GAIN), Jose Rosero Moncayo of the Food and Agriculture Organization of the United Nations (FAO), and Mario Herrero of Cornell University. Kate Schneider leads the data team and coordination together with several Johns Hopkins graduate students.

The Initiative involves dozens of collaborators from nearly as many organizations from almost all continents. For more information, see www.foodcountdown.org.

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The data and analysis presented here draws on a multitude of other collaborators and contributors. For more information, see www.foodcountdown.org.