



Brief #1: Food systems transformation using the Food Systems Dashboard

March 2023



### What is the Food Systems Dashboard?

The Food Systems Dashboard (FSD) combines data from multiple sources to give a complete view of food systems and is organized around three pillars: Describe, Diagnose, and Decide.





#### How the Food Systems Dashboard is organized?

- The FSD contains over 225 indicators that measure components, drivers, and outcomes of food systems at the country level.
- The indicators are organized by food system component, based on the framework shown here.



#### Drivers

Politics & Leadership Biophysical, Climate, & Environment **Globalization & Trade** Sociocultural Dynamics Population Growth, Migration, & Conflict Income Growth & Distribution Land Use & Urbanization

#### **Food Supply Chains**

Food Production Systems & Inputs Food Storage, Loss, Distribution, & Transport Food Processing & Packaging Retail, Markets, & Waste

#### **Food Environments** Food Availability

Food Affordability Product Properties Vendor Properties Food Messaging











#### Data are available in different formats - Let's look at the Global Data section





#### Data can be viewed in map format and across time points





#### Users can browse data by food system component





### Or search for a specific indicator





### Data can be visually manipulated in map format





#### View metadata for an in-depth explanation of indicators





### Or download data in CSV format for further analysis



### The graph view provides a snapshot in time for an indicator



Food Systems Dashboard

	population who cannot afford a healthy diet		Map Vie Graph View
Q Search for Indicator	Percent of the population who cannot afford a healthy diet $(\%)$		± Downloa
→ Drivers 23 ∨	Timeframe O		
ैंन्ह Food Supply Chains 48 🗸	2017 2018	2019	
Food Environments 58 ^	SATER BY FOOD SYSTEM TYPE		
Food availability 18 🗸	FILTER BY INCOME CLASSIFICATION		
Food affordability 21 ^	Low income Lower Middle income Upper Middle Income High Income		
Affordability of a healthy diet: Ratio of cost to food expenditures	tidd Country or Region Reset World X 🗮 Kenya X Eastern Africa X		
Affordability of an energy sufficient diet: Ratio of cost to food expenditures			
Cost of a healthy diet			Eastern Africa
Cost of a healthy diet relative to the cost of sufficient energy from starchy staples	2 3 World		75%
Cost of an energy sufficient diet	37%		
Cost of animal-sourced foods relative to the starchy staples in a least-cost healthy diet			
Cost of animal-source foods			
Cost of fruits			
Cost of fruits relative to the starchy staples in a least- cost healthy diet			
Cost of legumes, nuts, and seeds			
Cost of legumes, nuts, and seeds relative to the starchy staples in a least-cost healthy diet			
Cost of nutrient adequacy as a percent of household food expenditure			
Cost of nutrient adequacy at purchasing price parity prices for food			
Cost of nutrient adequacy in local currency units			
Cost of oils and fats			
Cost of oils and fats Cost of oils and fats relative to the starchy staples in a least-cost healthy diet			
Cost of oils and fats relative to the starchy staples in a			
Cost of oils and fats relative to the starchy staples in a least-cost healthy diet			



## Or trends over time if all years are selected

invironments > Food affordability > Percent of t	he population who cannot afford a healthy	diet			Map View Graph Vi	iew Table View
Search for Indicator	Percent of the po	pulation who cannot afford a h	ealthy diet (%)		± c	Download Data (CSV)
Drivers	Timeframe					
Food Supply Chains 48 🗸	2017	:	018	2019		2020
Food Environments 58	FILTER BY FOOD SYSTEM TYPE					
od availability 18 🗸	FILTER BY INCOME CLASSIFICA		ing & Formalizing Industrialized & Consolidated		Users	s can also selec
od affordability 21	Low Income Lower Mid	dle Income Upper Middle Income High Income			coup	tries or regions
Affordability of a healthy diet: Ratio of cost to food expenditures	Add Country or Region	Reset World X Kenya X Easter	n Africa 🗙			omparison.
Affordability of an energy sufficient diet: Ratio of cost to food expenditures						mpanson.
Cost of a healthy diet						KEN
Cost of a healthy diet relative to the cost of sufficient energy from starchy staples	80					Eastern Africa
Cost of an energy sufficient diet	70					
Cost of animal-sourced foods relative to the starchy staples in a least-cost healthy diet						
Cost of animal-source foods	60					
Cost of fruits						
Cost of fruits relative to the starchy staples in a least- cost healthy diet	50					
Cost of legumes, nuts, and seeds						
Cost of legumes, nuts, and seeds relative to the starchy staples in a least-cost healthy diet	40					
Cost of nutrient adequacy as a percent of household food expenditure	2017		2018	2019		
Cost of nutrient adequacy at purchasing price parity prices for food			gan ang sa			
Cost of nutrient adequacy in local currency units						
Cost of oils and fats						
Cost of oils and fats relative to the starchy staples in a least-cost healthy diet						
Cost of starchy staples						
Cost of vegetables						
Cost of vegetables relative to the starchy staples in a least-cost healthy diet						
Number of people who cannot afford a healthy diet						

## The table view provides data by country over available time points

Food Systems Dashboard

Food Systems Dashboard						
od Environments > Food affordability	Percent of the p	pulation who cannot afford a healthy diet			Map View Graph View	Table View
<b>Q</b> Search for Indicator		Percent of the population who cannot afford a healthy diet $(\%)$			± Down	nload Data (CSV)
→ Drivers	23 🗸	Timeframe O	-			
🗟 Food Supply Chains	48 🗸	2017 2018	2019			2020
Food Environments			2017	2018	2019	2020
	58 ^	Albania	37.8	27.9	19.8	20.1
Food availability (18) ~	19 2	Algeria	35.2	33.9	31.8	30.2
	10 .	Angola	92.9	93.4	93.9	94.3
Food affordability	21 🗸	Argentina	11	-	-	-
		Armenia	40.9	41.7	43.6	42.9
Product properties	8 🗸	Australia	0.7	0.7	0.7	0.7
Vendor properties 8 ~	8 ¥	Austria	0.6	0.8	0.8	0.8
		Azerbaijan	0	Θ	Θ	Θ
Food messaging 3 V	3 ~	Bangladesh	77.4	74.6	73.5	73.5
		Belarus	0.8	0.5	0.3	0.2
Individual Factors 17 v	17 🗸	Belgium	0.3	0.2	0.2	0.2
		Belize	39.4	37.4	37	36.4
[→ Outcomes 80 ∨	80 ~	Benin	90.7	87.1	82.9	82.9
		Bhutan	57.6	52.2	50	53
Filter Regions 🗸		Bolivia (Plurinational State of)	30.2	28.6	25.4	24.7
	~	Bosnia and Herzegovina	4.6	4	3.6	3.7
		Botswana	63.8	61.5	60.8	61.4



#### Data is also available in Country Profiles for a focus on one country at a time





### Explore Country Profiles organized by subregion





#### Country Profiles provide a curated subset of indicators





Through the Country Profiles, FSD users can view an assessment of a country's food system performance. This summarizes the areas of a country's food system that are unlikely challenge areas, potential challenge areas, or likely challenge areas. This can serve as a quick reference on how a country's food system is functioning today.

This is shown here for Kenya.



#### DIAGNOSE AND DECIDE SCORECARD

#### 💾 🛛 Food Environments

- Affordability of a healthy diet: Ratio of cost to food expenditures
- Cost of a healthy diet
- Cost of an energy sufficient diet
- Cost of legumes, nuts, and seeds relative to the starchy staples in a least-cost healthy diet
- Dietary energy in food supply
- Share of dietary energy from cereals, roots, and tubers
- Supply of fruit
- Supply of pulses
- Supply of vegetables
- Retail value of ultra-processed food sales per capita

#### 🗟 Food Supply Chains

- Average crop species richness
- Cereal losses
- Fruit losses
- Pulse losses
- Vegetable losses
- Outcomes
- Agricultural land change during the last 10 years
- Average proportion of natural vegetation embedded in agricultural lands
- Average threats soil biodiversity
- Per capita biodiversity impact of food consumption
- Per capita eutrophication of food consumption
- Per capita greenhouse gas emissions of food consumption
- Per capita water use linked to food consumption
- Total ecological footprint of consumption per person
- Total ecological footprint of production per person
- Prevalence of moderate or severe food
- Unlikely Challenge Area
- Potential Challenge Area
- Likely Challenge Area
- Missing Data



# Potential actions to consider are provided in the Polices and Actions section



# Data sources, methodology, and other important background information is also available

Food Systems Dashboard





### The Food Systems Dashboard is open access

All data, maps, and other visualizations can be used freely with proper citation:

The Food Systems Dashboard. Global Alliance for Improved Nutrition (GAIN) and Johns Hopkins University. 2020. Geneva, Switzerland.

https://www.foodsystemsdashboard.org. DOI: https://doi.org/10.36072/db.





#### Key Messages and Recommendations

#### Key Messages

- The FSD is an open access platform that brings together data for over 225 indicators from over 40 sources to give a complete view of food systems.
- It is organized around three main pillars: Describe, Diagnose, and Decide.
- In the Global Data section, data can be viewed as maps, graphs, or tables.
- In the Country Profiles, a curated set of indicators are visualized, and food systems performance is assessed, with potential and likely challenge areas identified for each country.
- Potential actions to improve nutrition, health, and environmental outcomes are provided in the Polices and Actions section.

#### Recommendations

• The FSD can be used to describe food systems, diagnose potential and likely challenge areas, and identify decision actions to improve outcomes.