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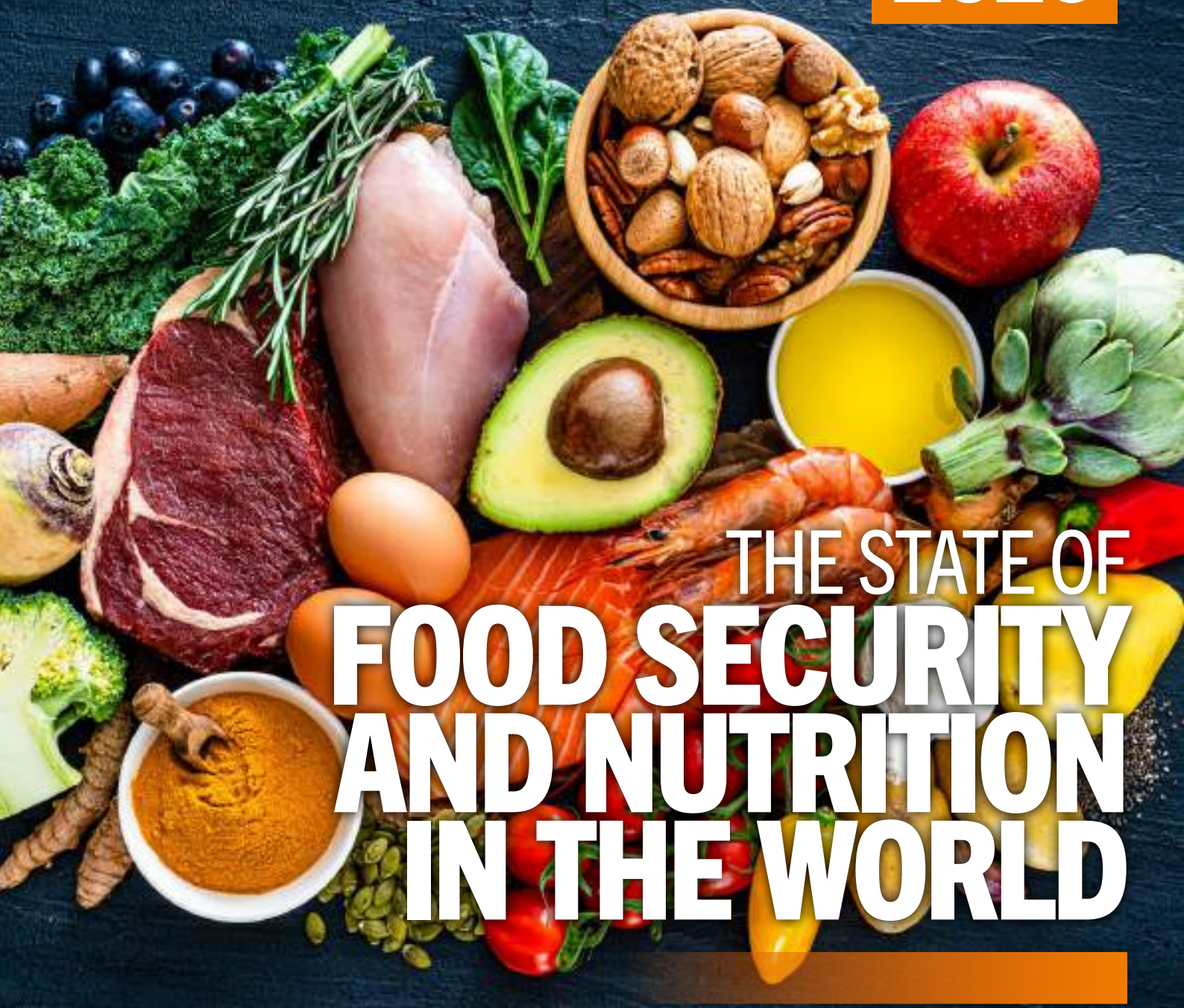

THE STATE OF FOOD SECURITY AND NUTRITION IN THE WORLD

UNDERSTANDING AND ADDRESSING THE HIGH COST OF A HEALTHY DIET

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COUNTRY NOT SPECIFIED. Diversity is essential for a healthy diet.

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UNDERSTANDING AND ADDRESSING THE HIGH COST OF A HEALTHY DIET

Food and Agriculture Organization of the United Nations
International Fund for Agricultural Development | United Nations Children's Fund
World Food Programme | World Health Organization

Rome, 2026

CONTENTS

FOREWORD v
METHODOLOGY vii
ACKNOWLEDGEMENTS viii
ABBREVIATIONS x
CORE MESSAGES xii
EXECUTIVE SUMMARY xv

CHAPTER 1
INTRODUCTION: UNDERSTANDING THE COST OF A HEALTHY DIET WORLDWIDE 1

CHAPTER 2
FOOD SECURITY AND NUTRITION AROUND THE WORLD 3
2.1 Food security indicators: latest updates and progress towards ending hunger and ensuring food security 4
2.2 Cost and affordability of a healthy diet 22
2.3 Diet quality: minimum dietary diversity in children and women 31
2.4 The state of nutrition: progress towards the global nutrition targets 38

CHAPTER 3
UNDERSTANDING THE DRIVERS OF THE COST OF A HEALTHY DIET AROUND THE WORLD 49
3.1 Measuring the cost of a healthy diet 53
3.2 Cost variation in healthy diets around the world 59
3.3 Understanding subnational and temporal variation in cost of a healthy diet estimates with national price data 70
3.4 Factors associated with the cost of a healthy diet 74

CHAPTER 4
HOW TO REDUCE THE COST OF A HEALTHY DIET: TARGETED AND COMPLEMENTARY INTERVENTIONS 83
4.1 Which interventions are efficient for bringing down the cost of expensive food groups? 84
4.2 Quantifying the effects of interventions aimed to reduce the cost of a healthy diet 100
4.3 Reducing the cost of a healthy diet: implications for deploying and scaling up reforms 111

CHAPTER 5
WAY FORWARD: ACCELERATING PROGRESS TOWARDS SUSTAINABLE DEVELOPMENT GOAL 2 THROUGH MORE AFFORDABLE HEALTHY DIETS 118

ANNEXES 123

ANNEX 1A
Statistical tables to Chapter 2 124

ANNEX 1B
Methodological notes for the food security and nutrition indicators 171

ANNEX 2
Glossary 194

NOTES 201

The supplementary material to *The State of Food Security and Nutrition in the World 2026* is available at: https://doi.org/10.4060/cd8306en-supplementary

TABLES

2.1 Prevalence of undernourishment, 2010–2025 7

2.2 Number of undernourished people, 2010–2025 8

2.3 Prevalence of food insecurity at severe level only, and at moderate or severe level, based on the Food Insecurity Experience Scale, 2015–2025 16

2.4 Number of people experiencing food insecurity at severe level only, and at moderate or severe level, based on the Food Insecurity Experience Scale, 2015–2025 17

2.5 Mean cost of a healthy diet in 2021 and projections over 2017–2025 25

2.6 Proportion of the population and number of people unable to afford a healthy diet, 2017–2025 28

2.7 Global and regional trends in prevalence for seven global nutrition indicators 41

2.8 Progress towards the 2030 global maternal, infant and young child nutrition targets by region 43

2.9 Process indicators and 2030 operational targets for the World Health Assembly global nutrition targets 45

3.1 Composition of a Healthy Diet Basket by food group 55

3.2 Share of countries by cost of a healthy diet by tercile and region, 2025 61

3.3 Share of countries by food group cost tercile and region, 2021 63

3.4 Description of variables 78

4.1 Constraints and interventions by value chain 97

4.2 Typology of modelled policy scenarios to reduce the cost of a healthy diet 103

A1.1 Progress towards the Sustainable Development Goals and global nutrition targets: prevalence of undernourishment, moderate or severe food insecurity, selected forms of malnutrition, exclusive breastfeeding, low birthweight and minimum dietary diversity 124

A1.2 Progress towards the Sustainable Development Goals and global nutrition targets: number of people who are affected by undernourishment, moderate or severe food insecurity and selected forms of malnutrition; number of infants exclusively breastfed; number of babies born with low birthweight; and number of children and women achieving minimum dietary diversity 138

A1.3 Prevalence of moderate or severe food insecurity, and severe food insecurity only, by degree of urbanization in 2025 153

A1.4 Prevalence of moderate or severe food insecurity, and severe food insecurity only, among adult men and women in 2025 154

A1.5 Cost of a healthy diet, 2017–2025 155

A1.6 Unaffordability of a healthy diet, 2017–2025 162

FIGURES

2.1 Updated global estimates point to a decrease in world hunger in recent years following the sharp increase from 2019 to 2021 6

2.2 Most subregions of Asia and Latin America and the Caribbean have shown steady progress in reducing hunger in recent years, and new estimates point to a halt to the prolonged upward trend in hunger in Africa 9

2.3 The share of the global number of people estimated to be facing hunger who live in Africa has grown since 2010, surpassing Asia in 2025 10

2.4 Eliminating hunger by 2030 remains an elusive target 13

2.5 Global food insecurity levels declined gradually from 2020 to 2025, with steady progress in Asia and Latin America and the Caribbean, and signs of recent improvement in Africa 15

2.6 Globally and in most regions, the prevalence of food insecurity has remained consistently higher in rural areas than in urban areas since 2022 19

2.7 The prevalence of food insecurity has remained consistently higher among women than among men, globally and in all regions, but the gap narrowed from 2024 to 2025 20

2.8 The proportion and number of people unable to afford a healthy diet in the world decreased from 2020 to 2025 27

2.9 The proportion of people unable to afford a healthy diet in the various regions has evolved differently from 2017 to 2025 29

2.10 The number of people unable to afford a healthy diet is on the rise in low-income countries and decreasing in other country income groups 29

2.11 Fewer than one in three children aged 6 to 23 months worldwide achieved minimum dietary diversity 33

2.12 Available minimum dietary diversity in children data represent nearly 80 percent of children aged 6 to 23 months globally, with lack of data affecting some regions more than others 34

CONTENTS

2.13 Less than two-thirds of women aged 15 to 49 years worldwide achieved minimum dietary diversity 35

2.14 Available minimum dietary diversity in women data represent almost 90 percent of women aged 15 to 49 years globally, with data gaps affecting some regions more than others 37

2.15 Despite improvements in global stunting, wasting and exclusive breastfeeding over the past decade, the world is not on track to achieve any of the seven global nutrition targets by 2030 40

2.16 Gap to 2030 global maternal, infant and young child nutrition targets by region 44

2.17 The 2030 global nutrition targets framework with interlinkages among the nutrition outcomes and the six process indicators 46

2.18 Globally from 2015 to 2025, less than two in five women consumed any form of iron-containing supplement during pregnancy, putting women at risk during pregnancy and resulting in adverse birth outcomes 46

3.1 Cost of a healthy diet in 2021 and 2025 60

3.2 Cost of food groups by region, 2021 61

3.3 Food groups in the Healthy Diet Basket, 2021 64

3.4 Cost of the common global basket vs cost of a healthy diet, 2021 66

3.5 Cost of the common global basket vs cost of a healthy diet by region and food group 67

3.6 Association between the cost of a healthy diet and overall food relative prices 69

3.7 Relative differences in food group costs by region, Ghana 71

3.8 Relative differences in food group costs by geopolitical zone, Nigeria 72

3.9 Relative differences in food group costs by province, Pakistan 73

3.10 Change over time in food group costs in Ghana, Nigeria and Pakistan 74

3.11 Association between the cost of a healthy diet and selected economic variables 79

4.1 Recorded policy actions to improve agricultural productivity by instrument, food group and region, 2010–2025 88

4.2 Recorded policy actions to support agricultural production by instrument, food group and region, 2010–2025 90

4.3 Recorded trade policy actions by instrument, food group and region, 2010–2025 91

4.4 Recorded policy actions to support value chain efficiency by instrument, food group and region, 2010–2025 94

4.5 Impacts of technological interventions on the cost of a healthy diet and the relative cost of a healthy diet compared to actual diets by food group and region for a 10 percent efficiency shock 106

4.6 Regions most impacted by technological interventions in relative terms 108

4.7 Reduction in the cost of a healthy diet by US dollar spent – Global scenarios 110

BOXES

2.1 Updates in the series of prevalence of undernourishment estimates 5

2.2 Deepening humanitarian crises increase acute food insecurity and threaten the right to adequate food in many places in the world 11

2.3 Computing the average cost of a healthy diet in a group of countries 23

2.4 Updates to the prevalence of unaffordability of a healthy diet 26

2.5 Ongoing improvements in the methodology for estimating the cost of a healthy diet and the proportion of the population unable to afford a healthy diet 30

2.6 Using minimum dietary diversity in women in evaluations of agrifood systems interventions 36

2.7 The 2030 global maternal, infant and young child nutrition targets 39

3.1 Preview of FAO's forthcoming report on healthy diets 52

3.2 Laying the foundation for country-led monitoring of the cost of a healthy diet 58

3.3 The cost of a healthy diet in Landlocked Developing Countries 62

3.4 Weather events, conflict and macroeconomic shocks also disrupt the cost of a healthy diet 76

4.1 What works in practice: Value chain investments to reduce the cost of a healthy diet 95

4.2 Modelling interventions at the global level: the MIRAGRODEP model 101

FOREWORD

Today's global challenges compel us to urgently address hunger, food insecurity and malnutrition as multiple crises increasingly disrupt global agrifood systems. Even where progress has been made, it remains extremely uneven across regions. With only a few years remaining to achieve the 2030 Agenda for Sustainable Development, the cost of inaction continues to grow, compounding the hidden social, economic and health costs borne due to productivity losses.

Crucial to reversing these trends is making nutritious foods affordable for the most vulnerable, given that a healthy diet is fundamental to human development. A healthy diet supports childhood growth, protects long-term health and well-being, and fosters productive and resilient communities. Yet, it is economically out of reach for one-third of people globally, thereby contributing to all forms of malnutrition. At the same time, the costs to society of diet-related non-communicable diseases continue to rise. Meanwhile, in 2024, obesity reached a new global high, affecting 16.2 percent of the adult population, and 5.5 percent of children under five years of age were overweight. Together, these trends continue to hinder progress towards the Sustainable Development Goals and related nutrition targets.

Earlier editions of *The State of Food Security and Nutrition in the World* introduced and reported on the cost of a healthy diet as a benchmark for the minimum cost at which such a diet can be obtained in each country. Last year's edition showed how food price inflation drove that cost upwards, placing healthy diets even further out of reach, particularly among low-income populations. In 2025, it reached 4.28 PPP (purchasing power parity) dollars per day, slightly above the poverty line for lower-middle-income countries. However, this global figure masks wide disparities across countries and regions, with costs varying as much as threefold between the least and most expensive countries. This year's edition examines the factors driving the cost of a healthy diet, identifies the actions needed across agrifood systems to reduce it, and calls for coordinated, evidence-based measures to make healthy diets more affordable for all.

As the cost of a healthy diet varies widely across regions, targeted and context-specific responses are required rather than uniform solutions. Reducing that cost demands integrated and coordinated actions across agrifood systems, and it requires sustained investment in building and strengthening resilience at the first mile of agrifood systems, supported by policies

FOREWORD

tailored to national contexts and grounded in high-quality data, robust analysis and rigorous evidence. Because such policies involve trade-offs and distributional effects, they must be implemented through inclusive processes, supported by appropriate transition support, and shaped by collaboration across public and private actors, with particular attention to vulnerable populations, including small-scale food producers, women and youth in low- and middle-income countries.

We remain committed in supporting countries to meet this challenge. Moving forwards, we will continue to uphold the right to adequate food and nutrition as a basic human right, and to work with governments, partners and communities to strengthen the evidence base, improve data systems, and advance policies and investments that lower the cost of a healthy diet and deliver socioeconomic returns across the food value chain. This work must be country-owned, country-led, equitable and inclusive, and deliver tangible results where they matter most.

By working together, we can make agrifood systems more efficient, more inclusive, more resilient and more sustainable, with healthy diets within reach for everyone, everywhere, fulfilling the fundamental human right to adequate food and nutrition.

Qu Dongyu
FAO Director-General

Alvaro Lario
IFAD President

Catherine Russell
UNICEF Executive Director

Carl Skau
WFP Acting Executive Director

Tedros Adhanom Ghebreyesus
WHO Director-General

METHODOLOGY

The State of Food Security and Nutrition in the World 2026 was prepared by the FAO Agrifood Economics and Policy Division in collaboration with the Statistics Division of the Economic and Social Development stream and a team of technical experts from the Food and Agriculture Organization of the United Nations (FAO), the International Fund for Agricultural Development (IFAD), the United Nations Children's Fund (UNICEF), the World Food Programme (WFP) and the World Health Organization (WHO).

A senior advisory team consisting of designated senior managers of the five United Nations publishing partners guided the production of the report. Led by FAO, this team decided on the outline of the report and defined its thematic focus. Further, it gave oversight to the technical writing team composed of experts from each of the five co-publishing agencies. Background technical papers were prepared to support the research and data analysis undertaken by the members of the writing team.

The writing team produced interim outputs, including an annotated outline, a first draft and a final draft of the report. These were reviewed, validated and cleared by the senior advisory team at each stage in the preparation process. The final report underwent a rigorous technical review by senior management and technical experts from different divisions and departments within each of the five United Nations agencies, both at headquarters and in Decentralized Offices. Finally, the report underwent executive review and clearance by the heads of agency of the five co-publishing partners.

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The publication was prepared under the overall guidance of Máximo Torero Cullen and the direction of David Laborde and José Rosero Moncayo from the Economic and Social Development stream at FAO.

The development of the report was guided by a Steering Committee consisting of agency representatives from the five co-publishing partners: Valerie Bizier (Chair/Secretariat), Máximo Torero Cullen (FAO), Carola Alvarez (IFAD), Joan Matji (UNICEF), Jean-Martin Bauer (WFP) and Luz Maria De Regil (WHO). Valuable comments and final approval of the report were provided by the executive heads and senior staff of the five co-authoring agencies.

The report was developed by a writing team led by David Laborde (FAO) and comprising Carlo Cafiero, Juan Feng, Anne Kepple, Eduardo Nakasone Uechi, Sravya Mamidanna, Lynnette Marie Neufeld, Kwame Akoto Osei, Sara Viviani and Trudy Wijnhoven (FAO), Leonardo Corral, Caterina Ruggeri Laderchi and Tisorn Songsermsawas (IFAD), Annalies Borrel, Mauro Brero, Joel Conkle, Chika Hayashi and Vrinda Mehra (UNICEF), Saskia Depee, Jo Jacobsen, Marianne Jensby and Siddharth Krishnaswamy (WFP) and Elaine Borghi, Kaia Engesveen, Richard Kumapley and Ann Mizumoto (WHO).

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Chapter 3 of the report was written by Eduardo Nakasone Uechi and Sravya Mamidanna (FAO). Carlo Cafiero, Anne Kepple and José Rosero Moncayo (FAO) contributed to **Section 3.1**, with input provided by Kyra Berasi (UNICEF). Yan Bai, Rui Costa, Marko Olavi Rissanen and Mizuki Yamanaka (World Bank) contributed to the analysis in **Section 3.2**. Leah Costlow and Samuel Yenesew (Michigan State University) and Rachel Gilbert, Elena Martínez, Nola Jenkins and William A. Masters (Tufts University) contributed to **Sections 3.3** and **3.4**. Box 3.1 was written by Elizabeth Rusaitis-Graham (FAO). Box 3.2 was written by Filippo Gheri (FAO). Box 3.3 was written by Tisorn Songsermsawas and Caterina Ruggeri Laderchi (IFAD) and Eduardo Nakasone Uechi (FAO). Box 3.4 was written by Sravya Mamidanna and Eduardo Nakasone Uechi (FAO).

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Data inputs

Adeeba Ishaq and Abdul Sattar (FAO) were responsible for preparing undernourishment data in **Section 2.1** and **Annex 1A**, with inputs from Vaishali Bansal, Filippo Gheri, Talent Manyani, Ana Moltedo and Sara Zakaryan (FAO). Supporting data were provided by the Crops, Livestock and Food Statistics team of the FAO Statistics Division and the Global Information and Early Warning System and Basic Foodstuffs teams of the FAO Markets and Trade Division. David Laborde (FAO) prepared the 2030 projections of undernourishment. Sara Viviani (FAO) was responsible for preparing the food security data in **Section 2.1** and **Annex 1A**, with inputs from Vaishali Bansal, Cristobal Fehrmann, Filippo Gheri, Adeeba Ishaq, Maxime Luciene, Abdul Sattar, Firas Yassin and Sara Zakaryan (FAO). Carlo Cafiero (FAO) was responsible for preparing the estimates of the cost and of the unaffordability of a healthy diet in **Section 2.2** and **Annex 1A**, with inputs from Valentina Conti, Anna Herforth, Alban Lika, Francesco Lomonaco and Michele Vollaro (FAO) and Yan Bai and Mizuki Yamanaka (World Bank). Kwame Akoto Osei (FAO) and Alessandro Catalini and Vrinda Mehra (UNICEF) were responsible for preparing the minimum dietary diversity data in **Section 2.3** and **Annex 1A**, with input from Renan Serenini Bernardes and Dorian Kalamvrezos Navarro (FAO). Richard Kumapley (WHO) and Vrinda Mehra (UNICEF) were responsible for the analyses in **Section 2.4** and for consolidating the nutrition data in **Annex 1A**, with inputs from the UNICEF-WHO-World Bank Joint Child Malnutrition (JME) Group and Monica Flores-Urrutia, Leanne Riley, Lisa Rogers and Gretchen Stevens (WHO). Eduardo Nakasone Uechi, David Laborde and Sravya Mamidanna were responsible for preparing the estimates in **Section 3.2**, with price data inputs provided by the International Comparison Program (ICP) managed by the World Bank.

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ABBREVIATIONS

ADER	average dietary energy requirement
BMI	body mass index
CFVA	Comprehensive Food Security and Vulnerability Assessments
CGE	computable general equilibrium
CoAHD	cost and affordability of a healthy diet
CoHD	cost of a healthy diet
CPI	consumer price index
CV	coefficient of variation
CV|r	CV due to energy requirements
CV|y	CV due to income
DEC	dietary energy consumption
DES	dietary energy supply
DHS	Demographic and Health Survey
FAPDA	Food and Agriculture Policy Decision Analysis Tool
FBS	food balance sheet
FIES	Food Insecurity Experience Scale
FIES-SM	Food Insecurity Experience Scale Survey Module
GDP	gross domestic product
GWP	Gallup© World Poll
HDB	Healthy Diet Basket
HDMI	Healthy Diets Monitoring Initiative
ICP	International Comparison Program
ICT	information and communications technology
IFAD	International Fund for Agricultural Development
IPC/CH	Integrated Food Security Phase Classification/Cadre Harmonisé
IQR	interquartile range
ITU	International Telecommunication Union
JME	Joint Child Malnutrition Estimates
LCU	local currency unit
LLDCs	Landlocked Developing Countries
LSMS	Living Standards Measurement Study
MCMC	Markov Chain Monte Carlo
MDD	minimum dietary diversity
MDD-C	Minimum Dietary Diversity for Children
MDD-W	Minimum Dietary Diversity for Women
MDER	minimum dietary energy requirement
MFP	multifactor productivity
MICS	Multiple Indicator Cluster Survey
MIYCN	maternal, infant and young child nutrition
NCD	non-communicable disease
NNS	National Nutrition Survey
NRP	nominal rate of protection
NUA	number of people unable to afford a healthy diet
OECD	Organisation for Economic Co-operation and Development
PAL	physical activity level
PIP	Poverty and Inequality Platform
PoU	prevalence of undernourishment
PPP	purchasing power parity
PUA	prevalence of unaffordability of a healthy diet

R&D	research and development
SD	standard deviation
SDGs	Sustainable Development Goals
SDI	sociodemographic index
SMART	Standardized Monitoring and Assessment of Relief and Transitions
SME	small and medium-sized enterprise
SPS	sanitary and phytosanitary measures
TFP	total factor productivity
UNICEF	United Nations Children's Fund
VMNIS	Vitamin and Mineral Nutrition Information System
WDI	World Development Indicators
WHA	World Health Assembly
WHO	World Health Organization

CORE MESSAGES

➔ **New global estimates of hunger confirm sustained, gradual improvement.** An estimated 7.8 percent of the global population faced hunger in 2025, down from 8.1 percent in 2024 and 8.6 percent in 2022. Asia and Latin America and the Caribbean have shown steady progress in recent years, and the prolonged upward trend in hunger in Africa has come to a halt.

➔ **Between 608 and 696 million people in the world, corresponding to 7.4 and 8.5 percent of the global population, respectively, faced hunger in 2025.** Considering the point estimate of 645 million in 2025, this indicates a decrease of about 14 million people compared to 2024 and 43 million compared to 2022. While the number is projected to continue to decrease, between 510 and 520 million people may still be facing hunger in 2030, of whom 56 percent will be in Africa.

➔ **For the first time, Africa hosts the largest number of people facing hunger.** In 2025, hunger affected 309 million people in Africa, 292 million in Asia and 32 million in Latin America and the Caribbean – 20.0, 6.0 and 4.8 percent of the population, respectively.

➔ **In 2025, an estimated 2.1 billion people – 25.8 percent of the global population – were moderately or severely food insecure, down from 28.7 percent in 2020.** Nearly 86 million fewer people experienced food insecurity in 2025 compared to 2024, and 135 million fewer compared to 2020. Steady progress has been seen in Asia and Latin America and the Caribbean since 2020, and there was improvement in Africa in 2025 for the first time since the 2030 Agenda for Sustainable Development was launched in 2015. The global prevalence of moderate or severe food insecurity was consistently higher in rural areas than in peri-urban areas, and lowest in urban areas; it was higher among women than among men, although the difference was smaller in 2025 compared to 2024.

➔ **Dietary diversity – one of the four core principles of healthy diets – remains inadequate globally for both children and women.** Only 30.8 percent of children aged 6 to 23 months, and 62.7 percent of women aged 15 to 49 years, consume a minimally diverse diet.

➔ **Global progress on maternal and child nutrition is far too slow – and in several areas it is reversing – leaving the world off track for all 2030 targets.** Stunting, wasting and overweight among children under five years of age, low birthweight, and exclusive breastfeeding are improving only marginally and not at the pace required, while anaemia in women aged 15 to 49 years is worsening.

➔ **New estimates of the prevalence of obesity in adults in the world show a steady increase from 12.1 percent in 2012 to 16.2 percent in 2024,** contrary to the target of halting the rise in obesity by 2025.

➔ **Progress towards the 2030 global nutrition targets is highly uneven across regions.** The prevalence of child stunting is decreasing markedly in Africa and is on track to reach the 2030 target in Asia, while exclusive breastfeeding is improving in all regions for which data are available. On the other hand, nearly all regions are seeing widening gaps between the projected and target prevalence for anaemia in women aged 15 to 49 years, and child overweight is rising sharply in Oceania. Without stronger multisectoral policies and sustained investment, there is a risk of missing key nutrition targets in every region.

➔ **Healthy diets are essential to achieving SDG 2, but remain economically out of reach for large segments of the global population.** In the context of persistent cost-of-living pressures, reducing the cost of a healthy diet (CoHD) is a necessary, but not sufficient, condition to enhance diet quality, and thus improve nutrition, health and development outcomes.

➔ **The CoHD rose globally to 4.28 PPP dollars in 2025 from 3.44 PPP dollars in 2021 and 2.94 PPP dollars in 2017,** with the highest cost in Latin America and the Caribbean (4.91 PPP dollars).

➔ **The global number of people unable to afford a healthy diet decreased from 2.97 billion (37.4 percent of the world population) in 2021 to 2.69 billion (32.7 percent) in 2025.** The improvement in affordability suggests that, on average, incomes available for food increased more relative to food prices. However, unaffordability of a healthy diet is increasing in Africa, where a healthy diet was out of reach for 66.6 percent of the population in 2025, more than double the levels estimated for Asia and Latin America and the Caribbean.

➔ **The CoHD indicator uses price data from the International Comparison Programme, a worldwide statistical initiative, which imposes limitations in terms of item coverage and update frequency.** As a complement to global monitoring, United Nations agencies are supporting national governments in producing their own CoHD estimates using national retail food price data.

➔ **Animal source foods, fruits and vegetables account for a large share of the total cost, while starchy staples contribute relatively little.** The relative cost of food groups varies across regions. Animal source foods are the highest-cost food group in Africa, while vegetables account for the largest share of diet costs in Latin America and the Caribbean.

➔ **Differences in both food basket composition and overall food prices explain cross-country variation in diet costs.** Flexibility in selecting locally available, low-cost foods substantially reduces the CoHD, particularly in regions with greater product diversity. At the same time, the CoHD is positively associated with overall food prices (relative to household expenditures). However, at any given level of relative food prices, substantial variation in the CoHD between countries remains. This underscores the distinct feature of the CoHD indicator, which establishes a cost floor for a healthy diet by focusing on the least-cost available items rather than on general food prices.

➔ **Within countries, the CoHD varies considerably across locations and seasons.** National annual averages can mask important temporal and geographical variation, underscoring the need for frequent, granular price data to support timely and well-targeted policies.

➔ **Structural characteristics of agrifood systems are associated with the CoHD.** Higher agricultural productivity and crop yields, sustained public investment in research and development, efficient logistics and transport (including better road quality), mobile connectivity, effective trade integration, and lower electricity and labour costs are all associated with a lower CoHD, pointing to key entry points.

➔ **Reducing the CoHD requires context-specific interventions rather than uniform approaches.** Policy options fall along two complementary axes: expanding the supply of nutritious foods through domestic production and trade, and lowering structural per unit costs across the agrifood value chain.

➔ **The most effective strategies combine investments along both axes,** including research and development, irrigation, infrastructure, cold chains and food loss reduction, alongside structural and policy reforms in subsidy design, trade facilitation and regulatory frameworks.

➔ **Long-term productivity gains are greatest when agricultural research and development is oriented towards fruits, vegetables and legumes.** Translating these gains into lower diet costs requires enabling systems, including seed delivery, water management, land tenure, finance and extension, that support technology adoption.

➔ **Post-farmgate activities account for 70 to 75 percent of what consumers pay, with up to 40 percent of value chain costs accumulating in midstream processing, logistics and wholesale.** Improving efficiency at these stages is essential for lowering the prices of perishable foods that compose healthy diets.

CORE MESSAGES

➔ **Integrated interventions across the value chain yield significantly larger cost reductions than do isolated measures.** Targeted technological and structural upgrades in perishable foods, especially fruits and vegetables, emerge as key levers for narrowing the affordability gap – for example, addressing cold chain deficits and high animal source food costs in Africa, improving transport and reducing vegetable costs in Latin America and the Caribbean, and strengthening post-harvest handling of fruits in Asia.

➔ **Public spending is most effective when directed towards the higher-cost food groups.** Broad fiscal support to already low-cost staples generates limited improvements in overall dietary affordability.

➔ **Implementing cost-reducing reforms presents governance challenges.** Efforts must ensure that cost reductions do not come at the expense of environmental sustainability, public health or decent rural livelihoods. Demand-side interventions should be carefully sequenced with supply expansion to avoid unintended price increases.

➔ **Because reforms are redistributive, they require transition support and inclusive public–private collaboration** to protect vulnerable consumers and enable smallholders, women and youth to benefit.

EXECUTIVE SUMMARY

INTRODUCTION: UNDERSTANDING THE COST OF A HEALTHY DIET WORLDWIDE

Despite signs of post-COVID-19 pandemic improvement in recent years, global levels of hunger and food insecurity remain far above those recorded when the 2030 Agenda for Sustainable Development was adopted in 2015. Achieving Sustainable Development Goal 2 (SDG 2) – ending hunger (SDG 2.1) and all forms of malnutrition (SDG 2.2) – requires not only that populations have access to sufficient food, but that the food consumed is nutritious. This imperative places diet quality, and the systemic barriers preventing access to it, at the centre of global policy.

A healthy diet is:

- **adequate** – supplying enough essential nutrients to meet requirements and prevent deficiencies;
- **balanced** – in energy and its three main sources (carbohydrates, proteins and fats) to support healthy weight and growth;
- **diverse** – comprising a variety of foods within and across distinct food groups; and
- **moderate** – with limited consumption of dietary components detrimental to health if consumed in excess.

While healthy diets are essential for population health, child development, and sustainable livelihoods, unhealthy dietary patterns persist globally. These patterns contribute massively to the global disease burden, imposing immense health, economic and social costs. Access to a healthy diet is influenced by household incomes, consumer preferences, food environments and, critically, the cost of foods. Amid recent high food price inflation, the cost barrier has intensified.

The cost of a healthy diet (CoHD), introduced as a benchmark indicator in 2020, allows for consistent and comparable monitoring of the minimum daily cost of purchasing locally available foods that constitute a healthy diet.

The 2026 edition of this report investigates the global patterns of the CoHD, its structural drivers, and the targeted policies and investments required to reduce these costs.

FOOD SECURITY AND NUTRITION AROUND THE WORLD

Food security indicators: latest updates and progress towards ending hunger and ensuring food security

The assessment of global hunger in 2025, based on the prevalence of undernourishment (PoU) (SDG Indicator 2.1.1), shows continued gradual progress for the third consecutive year. The proportion of the world population facing hunger decreased from 8.6 percent in 2022 to 8.1 percent in 2024 and 7.8 percent in 2025. It is estimated that hunger affected between 608 and 696 million people in the world in 2025. Considering the point estimate of 645 million, that is nearly 14 million fewer people in 2025 compared to 2024 and 43 million fewer than in 2022. However, the estimated number of people facing hunger is still above levels recorded in 2019, prior to the COVID-19 pandemic. Compared to 2015, when the 2030 Agenda for Sustainable Development was launched, the prevalence is lower (7.8 percent in 2025 compared to 8.0 percent in 2015), but the estimated number of people facing hunger has increased by about 50 million.

Stark regional differences persist. It is estimated that one out of five people in Africa, 20.0 percent, faced hunger in 2025, compared to 6.0 percent of the population in Asia, 4.8 percent in Latin America and the Caribbean, 8.0 percent in Oceania and less than 2.5 percent in Northern America and Europe. Asia and Latin America and the Caribbean have been showing steady recovery over several consecutive years. In contrast, the PoU in Africa had been on the rise since 2017 – until the most recent estimates, which point to signs of a turnaround in 2025.

In the next five years, the global number of undernourished people is expected to decrease by 20 percent, but it is still projected that between 510 and 520 million people will be facing hunger in 2030, of whom 56 percent will be in Africa. Recent events, including the 2026 Middle East conflict, are threatening to undermine progress towards SDG Target 2.1 through their impact on Africa and Asia.

New estimates of the global prevalence of moderate or severe food insecurity based on the Food Insecurity Experience Scale (SDG Indicator 2.1.2) show a continuous five-year downward trend following the sharp increase from 2019 to 2020, the year the COVID-19 pandemic swept the globe. The period from 2024 to 2025 saw an acceleration of this progress, driven by improvements in Africa, Asia and Latin America and the Caribbean. In 2025, an estimated 25.8 percent of the global population – 2.1 billion people – were moderately or severely food insecure, down from 27.1 percent in 2024 and 28.7 percent in 2020. That is the equivalent of nearly 86 million fewer people in 2025 compared to 2024, and 135 million fewer compared to 2020. However, the observed decrease was not enough to reach pre-pandemic levels.

Of the 2.1 billion people facing moderate or severe food insecurity in 2025, more than one-third were severely food insecure – 778.6 million people, or 9.5 percent of the global population. Compared to 2024, this is nearly 25 million fewer people facing severe food insecurity.

Cost and affordability of a healthy diet

Monitoring economic access to a healthy diet is essential for informing policies and programmes aimed at improving food security and nutritional outcomes, thereby contributing to the achievement of SDG Targets 2.1 and 2.2.

Inflation continued to raise food prices in 2025. Assuming that the prices of foods that contribute to a healthy diet have increased in line with the overall rise in food inflation, this will have pushed the global mean CoHD up to 4.28 purchasing power parity (PPP) dollars in 2025, from 3.44 PPP dollars in 2021 and 2.94 PPP dollars in 2017. The CoHD appears highest in Latin America and the Caribbean, where it reached 4.91 PPP dollars in 2025, compared to 4.35 PPP dollars in Africa, 4.33 PPP dollars in Asia, and 3.64 PPP dollars in Northern America and Europe.

Once the CoHD is estimated, it is possible to estimate how many people may not be able to afford a healthy diet. In 2021, which is the reference year for the prices of foods that contribute to a healthy diet, 2.97 billion people may have been unable to afford a healthy diet, corresponding to 37.4 percent of the world population. More importantly, the number of people unable to afford a healthy diet may have fallen globally – following a peak of 3.13 billion in 2020 – to about 2.69 billion (or 32.7 percent of the world population) in 2025. The overall decreasing trend implies that the CoHD, driven by the increase in food prices, may have risen less relative to total income.

The percentage of people who cannot afford a healthy diet (PUA) remains highest in Africa, where it is estimated to have reached 66.6 percent in 2025, more than double the levels currently estimated for Asia (28.9 percent) and Latin America and the Caribbean (25.7 percent). The differences have increased since 2021 due to diverging trends, with PUA increasing in Africa, but falling in Asia, Latin America and the Caribbean, and Northern America and Europe.

Diet quality: minimum dietary diversity in children and women

Unhealthy diets are a common cause of all forms of malnutrition. However, until last year, diets remained unmeasured as part of the SDG framework. In March 2025, the United Nations Statistical Commission approved Minimum Dietary Diversity for Children (MDD-C) and

Women (MDD-W) as new indicators for SDG 2 monitoring (SDG 2.2.4). These indicators provide a simple assessment of dietary diversity by counting the number of predefined food groups consumed during the previous 24 hours, at the population level. Minimum dietary diversity captures diversity and adequacy, which are two of the four principles of a healthy diet, together with balance and moderation.

Globally, less than one-third of children aged 6 to 23 months (30.8 percent) achieved minimum dietary diversity, based on pooled data from 2018 to 2024, a prevalence level that has remained largely unchanged over the past decade (prevalence was 29.4 percent between 2011 and 2017). This means that more than two-thirds of young children worldwide did not consume sufficiently diverse diets, potentially limiting their intake of essential vitamins, minerals and other nutrients critical for healthy growth and development.

In Africa, only one out of five children aged 6 to 23 months (20.5 percent) achieved minimum dietary diversity, compared to 34.9 percent of children in Asia in the same reporting period. Data scarcity, however, prevents the generation of reliable aggregated estimates for the other regions.

A large proportion of women, as well, lack minimally diverse diets, placing them at higher risk of not consuming sufficient essential micronutrients. Globally, only 62.7 percent of women aged 15 to 49 years achieved minimum dietary diversity between 2021 and 2025, meaning that about one in three did not. The lowest MDD-W prevalence was observed in Africa (43.0 percent), followed by Asia (65.0 percent) and Latin America and the Caribbean (77.5 percent), while the highest was recorded in Northern America and Europe (79.8 percent).

The state of nutrition: progress towards the global nutrition targets

WHO Member States at the Seventy-eighth World Health Assembly in May 2025 endorsed a resolution extending the six maternal, infant and young child nutrition targets – first adopted in 2012 for achievement in 2025 – by five years to align with the 2030 SDGs. The extended targets maintain existing goals for indicators still off track, but set more ambitious objectives for those nearing achievement.

Globally, the prevalence of **low birthweight** has shown limited improvement, with a relatively small decline from 15.0 percent in 2012 to 14.7 percent in 2020. Without significant acceleration, the 2030 target of 10.5 percent will not be achieved. **Exclusive breastfeeding** rose from 37.0 to 47.4 percent between 2012 and 2024; however, progress is not yet sufficient to meet the updated global ambition of 60 percent.

Stunting among children under five years of age fell from 26.4 percent (180.4 million) in 2012 to 23.2 percent (150.2 million) in 2024, but progress is insufficient to reach 16.8 percent (108.3 million) by 2030. Childhood **overweight** increased slightly from 5.3 to 5.5 percent over the same period, with projections indicating that the 2030 target of remaining below 5 percent will not be met. The prevalence of **wasting** among children under five years of age declined from 7.4 percent in 2012 to 6.6 percent in 2024, yet not at the pace required to reach 5 percent by 2030.

Anaemia among women aged 15 to 49 years rose from 27.6 percent in 2012 to 30.7 percent in 2023 and is projected to reach 32.6 percent by 2030, departing significantly from the trajectory required to meet the 2030 target of a 50 percent reduction.

Adult obesity (≥18 years) continues to rise, increasing from 12.1 percent in 2012 to 16.2 percent in 2024, with projections of 18.6 percent by 2030 – far from the target of halting its increase.

An assessment of progress towards the 2030 global maternal, infant and young child nutrition targets by region shows that Africa is on track to achieve the child overweight and wasting targets and Asia is on track to achieve the targets for child stunting and overweight. Latin America and the Caribbean is on track to meet the wasting target by 2030 and has made meaningful progress towards the exclusive breastfeeding target.

UNDERSTANDING THE DRIVERS OF THE COST OF A HEALTHY DIET AROUND THE WORLD

Healthy diets are central to achieving SDG 2 (Zero Hunger), which comprises two targets: ensuring access to safe and nutritious food (SDG 2.1) and ending all forms of malnutrition (SDG 2.2). Unhealthy dietary patterns hinder the world's ability to meet these targets and impose significant health consequences and socioeconomic costs globally. The hidden costs pertaining to increased risk of diseases related to unhealthy dietary patterns around the world amount to USD 8.1 trillion annually.

Economic and non-economic drivers determine the consumption of healthy diets, including the cost of the items that shape such diets. Agrifood systems and food environments shape the availability of the food items that make up a healthy diet. This report focuses on the average CoHD and the food groups that compose it, exploring how they differ across the world.

Several dimensions of healthy diets fall outside the scope of this report. By focusing strictly on the national average cost of a Healthy Diet Basket (HDB), it excludes income distributions and demand-side factors influencing food choices, such as consumer preferences, education and food environment interventions. Additionally, the report relies on market valuations rather than a true-cost accounting framework that captures broader environmental and social externalities. FAO's forthcoming report on healthy diets will address these complementary areas.

Measuring the cost of a healthy diet

A healthy diet promotes optimal health, growth and development; supports active lifestyles; prevents nutrient deficiencies and excesses, non-communicable diseases and foodborne illness; and promotes a population's overall well-being. While the exact composition of a healthy diet varies across people, cultural contexts and communities, and depends on, *inter alia*, an individual's age and activity level, preferences and beliefs, traditions, religion and income, as well as on the availability and affordability of foods, FAO and the World Health Organization in 2024 identified four core principles that are universal in their application, based on human biology and underpinned by evidence. Healthy diets are thus: adequate, balanced, diverse and moderate.

Analysts have developed methods to estimate the average cost of specific diets at national and subnational levels for different intended uses. An established element of these efforts is food price monitoring, but the actual food consumption basket used for these purposes may not be appropriate to cost a normatively defined "healthy" diet. The HDB – the benchmark for calculating the CoHD indicator discussed in this report – is a combination of locally available foods that meet energy and most nutrient requirements. It is calibrated so that the food items from various food groups provide a dietary energy intake of 2 330 kilocalories (kcal). More specifically, the HDB comprises 11 food items spread across six food groups, each contributing a determined share. Starchy staples contribute the largest share (1 160 kcal), followed by animal source foods, legumes, nuts and seeds, and oils and fats at 300 kcal each. Fruits contribute 160 kcal and vegetables 110 kcal.

The CoHD is estimated using retail food price data from the International Comparison Program (ICP), coordinated by the World Bank, which is based on a dataset of comparable items across countries; for global comparability, the CoHD is reported in PPP dollars.

The CoHD is a cost benchmark. It captures the average minimum budget required to purchase a healthy diet composed of locally available foods in each country. As such, the CoHD indicator does not measure, nor is it meant to reflect, the following: what people actually eat and spend on food; specific food preferences, cultural norms or dietary restrictions; the full cost of preparing and consuming a healthy diet at the household level; whether the diet meets full nutrient adequacy for every individual; and non-market food access, such as intra-household food production.

As with any indicator designed for cross-country monitoring, the CoHD involves limitations arising from its underlying data sources. ICP food price data were not designed for measuring diet costs; consequently, potentially relevant country-specific food items that are not globally or regionally important might be omitted and ICP data report only one national average price per item, which limits the indicator's ability to reflect price variation within countries. Finally, the temporal coverage of the ICP data is also limited, as prices are collected only every few years (most recently in 2017 and 2021).

Cost variation in healthy diets around the world

The global average CoHD based on the most recent data is not affordable for almost one-third of the world's people. In 2025, the global average CoHD (4.28 PPP dollars) was roughly 40 percent higher than the international extreme poverty line of 3 PPP dollars. Latin America and the Caribbean had the highest CoHD, while Northern America, Europe and Oceania had the lowest. Differences in the CoHD across regions are generally driven by broad geographical patterns rather than by individual outlier countries.

There is considerable heterogeneity in the costs of the food groups that make up the CoHD, across both groups and regions. Differences in the relative costs of food groups also seem to be driven by regional patterns rather than by individual outlier countries. The analysis of costs across food groups relies on ICP data from 2021. Animal source foods are, on average, the most expensive group (especially in Africa), but this is not the case in Latin America and the Caribbean, where vegetables are the highest-cost group.

There is variation in the relationship between food groups' contribution of food energy to the HDB and their shares of the CoHD. Animal source foods, fruits and vegetables contribute disproportionately to the CoHD, accounting for nearly 70 percent of the total cost. In contrast, starchy staples contribute only one-sixth of the total cost despite providing half the calories in the HDB.

Differences in the CoHD across countries reflect both the composition of national HDBs and overall food price levels. Allowing each country to draw on its own least-cost items, rather than a fixed common basket of widely available foods, lowers the CoHD by 34 percent on average, with the greatest effect in Africa, where diverse, locally abundant fruits and vegetables drive much of the gap. Overall food prices also matter: a 10 percent increase in the price of food relative to other goods and services is associated, on average, with about a 6 percent higher CoHD, helping explain why regions where food is relatively cheaper have a lower CoHD. Yet the CoHD remains distinct from general food prices because it captures the cost floor of the cheapest available items, so countries with similar relative food prices can still exhibit a markedly different CoHD.

Understanding subnational and temporal variation in cost of a healthy diet estimates with national price data

Global CoHD estimates enable cross-country comparisons, while national price data complement this information and provide additional detail for national policymaking.

Using national price data to estimate the costs for country-specific HDBs can allow for examination of temporal and geographical patterns. Using three country case studies (Ghana, Nigeria and Pakistan), this analysis highlights how national data can aid the design of more effective and targeted strategies to improve access to a healthy diet, ensuring seasonal and geographical relevance.

Geographical variation in food group costs is less pronounced for oils and fats than for other food groups, and most significant among fruits and vegetables. Temporal variation appears driven by different processes (sustained inflation periods, seasonality in food prices) in each country.

Factors associated with the cost of a healthy diet

The cost of a healthy diet varies significantly across countries. Understanding this cross-country variation can help identify policy entry points to ensure access. Analysis of global data reveals critical associations between the CoHD and structural features of agrifood systems:

- **Economic development:** Gross domestic product per capita has a weak association with the overall CoHD, but shows strong divergences across food groups. In higher-income countries, animal source foods and starchy staples are generally cheaper, while fruits and vegetables are substantially more expensive.
- **Agricultural productivity:** Higher crop yields and sustained public investment in agricultural research and development are consistently associated with lower costs for vegetables, fruits, starchy staples, and oils and fats.
- **Value chain efficiency:** High logistics performance, superior road quality, and lower costs for information and communications technologies are strongly associated with a lower CoHD, particularly for highly perishable vegetables.
- **Input costs:** Higher costs of inputs, such as electricity and agricultural labour, correlate with higher prices for several food groups. Vegetables, which rely heavily on energy-intensive cold chains and labour-intensive harvesting, are particularly sensitive to these input costs.

HOW TO REDUCE THE COST OF A HEALTHY DIET: TARGETED AND COMPLEMENTARY INTERVENTIONS

Reducing the CoHD requires context-specific policies rather than uniform solutions. Interventions fall along two complementary axes: expanding aggregate supply (the "extensive" effect) and structurally reducing per unit costs across the value chain (the "intensive" effect). These must integrate physical "hardware" upgrades – such as cold chain facilities, modern irrigation, and research and development – with regulatory "software" frameworks, including subsidy repurposing and trade facilitation. While the required interventions are diverse, they must be meticulously aligned with specific regional priorities and structural situations.

Ex ante impact assessments using advanced simulation modelling demonstrate that the efficiency of these measures in reducing the CoHD varies significantly across different geographies and value chains. Furthermore, successful implementation requires the careful consideration of additional systemic factors, including the non-monetary costs of production, the political economy of agricultural reforms, and the overarching governance of these interventions.

Finally, supply-side efforts must be strategically aligned with complementary policies, particularly demand-side actions, which are essential to stimulate and increase the actual consumption of healthy diets without triggering unintended price spikes.

Which interventions are efficient for bringing down the cost of expensive food groups?

A first axis of intervention relies on expanding the aggregate supply of targeted food groups to exert downward pressure on market prices, assuming constant input structures and demand. This is achieved through enhancing domestic production – by expanding the production frontier or reallocating production towards specific food groups – and improving international trade integration:

- Pushing the production frontier through long-term agricultural productivity, in particular by shifting research and development investment towards food groups that drive healthy diet costs, such as vegetables, legumes and fruits. Productivity gains must be supported by functioning seed and input delivery systems, reliable water supply, and secure land tenure to be effectively adopted at the farm level.
- Deploying productivity gains along the entire agrifood value chain, rather than remaining confined to primary production. A major systemic intervention to increase global food supply is the reduction in food loss and waste.
- Reallocating production and realigning incentives. Production subsidies, procurement, and price support fundamentally shape which foods farmers find profitable to produce. Seventy percent of global agricultural support to producers is tied predominantly to the production of grains, sugar, dairy, beef and oil crops.
- Improving trade integration and trade policy reforms. Trade liberalization is associated with overall lower food prices.

A second axis of intervention aims to achieve lower per unit expenses across the agrifood value chain. Because post-farmgate activities account for 70 to 75 percent of consumer food expenditures, targeted investments in transport, processing, and cold chains are essential.

- Reducing input costs, such as energy, fertilizer and labour, for producers. The costs of inputs and labour fall unevenly across food groups. Fruits, vegetables, legumes and animal source foods are inherently more labour-intensive to produce than cereals, and mechanization offers limited solutions for most perishable crops.
- Reducing costs along the value chain. Post-farmgate activities account for 70 to 75 percent of consumer food expenditures globally. Transport infrastructure reduces prices of perishable foods by lowering delivery times, minimizing spoilage, and narrowing price differences between regions. Post-harvest losses remain high for perishable foods in low-income countries, directly leading to higher consumer prices by increasing costs for traders and processors. Beyond physical infrastructure, information gaps affect food costs.

A review of existing agricultural policies using the Food and Agriculture Policy Decision Analysis Tool (FAPDA) database reveals a significant structural mismatch between current government support and the interventions needed to lower the CoHD. Policy actions exhibit an excessive focus on primary production as the main intervention entry point, often neglecting the midstream value chain inefficiencies – such as transport, storage and processing – where the majority of consumer food costs accumulate. Furthermore, in terms of food group coverage, these policies overwhelmingly target starchy staples. This historical concentration of policy focus systematically neglects the nutrient-dense foods, such as fruits, vegetables and legumes, that disproportionately drive up the overall CoHD.

A uniform policy or investment approach is fundamentally insufficient. Interventions must be precisely calibrated to the specific biological, logistical and economic constraints governing individual food groups, while addressing distinct regional priorities. Based on the existing structure of the CoHD, a first set of priorities could be identified:

- **Africa:** It is essential to prioritize the structural transformation of the animal source food sector, which represents the most expensive food group in the region, with 69 percent of African countries falling into the highest-cost tercile globally.
- **Asia:** The strategic priority must be to strengthen rural–urban linkages and invest in post-harvest handling to bring down the cost of fruits, which stand out as one of the highest-cost food groups due to supply chain inefficiencies.
- **Latin America and the Caribbean:** With the highest average CoHD globally at 4.89 PPP dollars, the primary policy objective must be to alleviate logistical frictions and transport costs that disproportionately inflate the price of vegetables.
- **Northern America, Europe and Oceania:** Interventions should focus on managing high labour costs through technological innovation to maintain the affordability of fruits and vegetables, as the horticultural sector remains highly sensitive to macroeconomic factor costs.

Quantifying the effects of interventions aimed to reduce the cost of a healthy diet

To rigorously evaluate the impact of targeted agrifood interventions, the MIRAGRODEP computable general equilibrium model assesses how supply-side interventions propagate through the global agrifood system. This framework accounts for cross-border spillovers, international trade, and indirect economy-wide impacts on critical inputs like labour, energy and transport. Expanding supply and reducing structural costs are fundamentally intertwined; with cost reduction, endogenous consumer demand rebounds and increasing marginal costs naturally moderate the final price decreases. By modelling policies simultaneously, the framework captures the powerful structural synergies where combined interventions generate cost-reduction outcomes far greater than the sum of their individual parts.

To assess the impact of technological interventions, a comprehensive 10 percent efficiency shock was analysed through economic modelling: it significantly reduces the absolute CoHD, driven overwhelmingly by structural improvements in all agrifood sectors. Globally, interventions in fruits and vegetables act as a decisive catalyst, driving a massive 7.54 percent reduction in the relative CoHD compared to actual consumption patterns. Enhancements in primary factor productivity deliver the biggest relative advantages in Asia, while midstream distribution and domestic logistics yield greater benefits in Latin America and the Caribbean.

Reducing costs through subsidies

When using subsidies to reduce the cost of production, subsidizing primary production costs provides the greatest reduction in the CoHD, dwarfing the effects of subsidizing downstream logistics. A 10 percent production subsidy reduces the CoHD by 8.06 percent in Latin America and the Caribbean, and by 7.5 percent in Northern America, Europe and Oceania, compared to muted reductions of 4.4 percent in Africa and 4.7 percent in Asia. Applying comprehensive fiscal subsidies to already low-cost commodity groups like starchy staples yields negligible CoHD benefits and can trigger slight increases in the total CoHD by diverting production factors away from other value chains. The fiscal efficiency of subsidies varies enormously. Northern America, Europe and Oceania demonstrate the lowest fiscal returns, achieving a reduction of only USD 0.2–0.6 in the CoHD for every US dollar spent.

Reducing the cost of a healthy diet: implications for deploying and scaling up reforms

The practical implementation of the proposed reforms introduces complex governance challenges that must be firmly anchored in sustainability. The final price paid by consumers, captured by the CoHD, does not necessarily reflect the true societal cost of producing food. The "true cost accounting" framework quantifies hidden costs – such as degraded natural capital or rural poverty – that are borne by society. Pursuing lower food prices without mitigating these hidden externalities risks creating systemic vulnerabilities. Furthermore, the transition towards healthier agrifood systems requires creating markets for diverse, nutritious foods, while carefully sequencing demand-side interventions with supply-side actions to avoid unmitigated price spikes.

Reducing the CoHD is inherently redistributive; small-scale producers, particularly women and youth in low- and middle-income countries, can benefit from these reforms, provided accompanying interventions address persistent gaps in land tenure, credit access and technology adoption. Ultimately, lowering the CoHD at scale demands complementary functions: public action establishes the enabling environment and fiscal incentives, while private investment expands processing and logistics and improves resource efficiency. Collaborative mechanisms, including public–private partnerships and multistakeholder platforms, deliver results when design principles align incentives, allocate risks transparently, and protect the inclusion of smallholders.

WAY FORWARD: ACCELERATING PROGRESS TOWARDS SUSTAINABLE DEVELOPMENT GOAL 2 THROUGH MORE AFFORDABLE HEALTHY DIETS

While access to a healthy diet is essential for food security, it remains unaffordable for a massive share of the global population. This crisis is most acute in Africa, where rapid population growth, climate extremes like El Niño, and vulnerability to geopolitical energy shocks severely strain agrifood systems and limit access to adequate nutrition. This year, the conflict in the Middle East may exacerbate this situation. Higher prices of energy disproportionately inflate the costs of nutrient-dense foods, which are more sensitive to energy prices, due to their stronger reliance on cold chains, processing and transportation.

To accelerate progress towards SDG 2, a comprehensive agenda to transform agrifood systems is needed. Policymakers must implement targeted interventions, including boosting the supply of nutrient-dense foods through research and development, and strengthening value chain efficiency via investments in rural infrastructure. Furthermore, integrating international trade markets, expanding nutrition-sensitive social protection programmes, and repurposing public agricultural subsidies away from staple crops towards diverse foods are critical steps.

Underpinning all these efforts is the urgent need for enhanced, granular data collection at national and subnational levels. By utilizing precise data to target interventions and align agricultural, health and climate policies, the global community can structurally lower hidden costs and ensure affordable, healthy diets for all.

PERU
A trader with a range of different fruits on a market.
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CHAPTER 1 INTRODUCTION: UNDERSTANDING THE COST OF A HEALTHY DIET WORLDWIDE

Despite signs of improvement in recent years following the COVID-19 pandemic, global levels of hunger and food insecurity remain far above those recorded when the 2030 Agenda for Sustainable Development was adopted in 2015. Achieving Sustainable Development Goal 2, ending hunger (SDG 2.1) and all forms of malnutrition (SDG 2.2), requires not only that people have enough food to eat, but that the food eaten is nutritious. This makes the quality of diets – and the barriers that prevent populations from accessing higher-quality diets – a central concern for policy.

Healthy diets[1] are those that meet four core principles that are universal in their application, based on human biology and underpinned by evidence. They should be *diverse* (composed of a variety of nutritious foods across and within food groups), *adequate* (in essential nutrients and bioactive compounds without excess), *balanced* (in dietary energy and its main sources, i.e. fats, carbohydrates, proteins) and *moderate* (in dietary components that are detrimental to health if consumed in excess). There is strong evidence that such diets are essential for the health of populations, the growth and development of children, and enhanced livelihoods worldwide. Yet unhealthy dietary patterns persist worldwide, contributing to a large share of the global disease burden and imposing significant health, economic and social costs on societies.

Several factors promote the consumption of healthy diets among populations, including household incomes, consumer preferences, the structure of agrifood systems and food environments, and the cost of the foods that make up those diets. Affordability of a healthy diet is a major barrier, and it has become more pressing in recent years amid rising food prices. For many households, particularly low-income ones, the cost of nutritious foods places healthy diets out of reach. Understanding how these costs vary and what drives them is essential for designing policies and programmes that can improve access to a healthy diet.

The cost of a healthy diet (CoHD), introduced as a benchmark indicator in *The State of Food Security and Nutrition in the World 2020*,[2] is part of the standard set of food security and nutrition indicators in this report and allows the cost of a healthy diet to be monitored consistently and comparably across countries. The CoHD estimates the minimum daily cost of purchasing locally available foods that constitute a healthy diet. It is built on the Healthy Diet Basket (HDB) based on an energy target of 2 330 kilocalories per day per capita, distributed across six food groups: starchy staples; animal source foods; legumes, nuts and seeds; vegetables; fruits; and oils and fats. For each country, the least-cost items in each food group are identified to calculate a benchmark of the theoretical cost floor at which households can purchase HDBs.

The 2026 edition of this report aims to understand the patterns in the CoHD estimates around the world, what drives differences in these costs, and what policies and investments can help reduce them. Globally, three food groups – animal source foods, vegetables and fruits – together account for nearly 70 percent of the CoHD. Additionally, the CoHD varies widely across regions, with the highest values in Latin America and the Caribbean and the lowest in Northern America and Europe. This report aims to better understand these patterns by examining the association between higher costs (both overall and by food group) and agricultural productivity, value chain characteristics, infrastructure, trade conditions and broader economic factors. Based on these findings, the report provides policy and investment recommendations to help policymakers identify specific interventions along agrifood value chains that can promote economic access to nutritious foods. ■

MALAWI
Women mashing cassava flour in a wooden pod.
© istock.com/Nikada

CHAPTER 2
FOOD SECURITY AND NUTRITION AROUND THE WORLD

As events unfold in 2026, provoking enormous uncertainty, this report presents a snapshot of the state of food security and nutrition in the world in 2025. The 2026 conflict in the Middle East, the increase in frequency and intensity of weather extremes, as well as the reductions in official development assistance and humanitarian funding, are threatening to undermine the progress made in recent years. As the impacts of this evolving situation on the global food supply chain and people's access to food become manifest in 2026 and beyond, the importance of having a record of the state of food security and nutrition in 2025, and of continuing to collect data to monitor changes, cannot be overstated.

Chapter 2 presents an updated global assessment of food security and nutrition and a report on progress towards meeting the Sustainable Development Goal (SDG) Targets 2.1 and 2.2: ending hunger and ensuring access to safe, nutritious and sufficient food for all people all year round; and eradicating all forms of malnutrition.

The assessment of the state of food security in 2025 and of progress towards achieving the hunger and food insecurity target (SDG 2.1) is presented in **Section 2.1**. It includes global, regional and subregional estimates of the two SDG Target 2.1 indicators: the prevalence of undernourishment (PoU) and the prevalence of moderate or severe food insecurity based on the Food Insecurity Experience Scale (FIES). Projections of the trends in hunger to 2030 are presented, considering the changes in future macroeconomic conditions and the implications of the 2026 conflict in the Middle East. **Section 2.2** provides estimates of the cost and affordability of a healthy diet updated to 2025, contributing evidence on economic access to diverse, nutritious foods globally. **Section 2.3** presents, for the first time, a complete analysis on the state of the newest indicator for monitoring progress towards the SDG 2.2 target of ending all forms of malnutrition by 2030: minimum dietary diversity, measured for two nutritionally vulnerable populations – children aged 6 to 23 months and women aged 15 to 49 years. Analyses of the state of nutrition and progress towards the global nutrition targets defined by the World Health Assembly (WHA) in 2012 and the 2030 Agenda for Sustainable Development (SDG 2.2) are presented in **Section 2.4**. New estimates of adult obesity are presented, as well as revised global 2030 targets for the six maternal and child nutrition indicators and new process indicators aimed at increasing momentum towards achievement of the targets in the next five critical years. ■

2.1 FOOD SECURITY INDICATORS: LATEST UPDATES AND PROGRESS TOWARDS ENDING HUNGER AND ENSURING FOOD SECURITY

KEY MESSAGES

➔ New global estimates of hunger for 2025 confirm sustained, gradual improvement since 2022 following the significant worsening in the wake of the COVID-19 pandemic. An estimated 7.8 percent of the global population faced hunger in 2025, down from 8.1 percent in 2024 and 8.6 percent in 2022.

➔ It is estimated that between 608 and 696 million people in the world, corresponding to 7.4 and 8.5 percent of the global population, respectively, faced hunger in 2025. Considering the point estimate of 645 million in 2025, this indicates a decrease of about 14 million people compared to 2024 and 43 million compared to 2022.

➔ In 2025, hunger affected 309 million people in Africa, 292 million in Asia and 32 million in Latin America and the Caribbean – 20.0, 6.0 and 4.8 percent of the population, respectively. Asia and Latin America and the Caribbean have shown steady progress in recent years in decreasing the percentage, as well as the number, of people facing hunger.

➔ New estimates for Africa point to a halt in a prolonged upward trend in hunger. The share of the population facing hunger decreased from 20.3 percent in 2024 to 20.0 percent in 2025, although the marginal improvement in percentage did not translate into a decrease in the absolute number of people due to the growing population.

➔ In the next five years, the global number of undernourished people is expected to decrease by 20 percent, but it is still projected that between 510 and 520 million people will be facing hunger in 2030, of whom 56 percent will be in Africa. Recent events, including the 2026 Middle East conflict, are threatening to undermine progress towards SDG Target 2.1 through their impact on Africa and Asia.

➔ In 2025, an estimated 25.8 percent of the global population – 2.1 billion people – were moderately or severely food insecure, down from 27.1 percent in 2024 and 28.7 percent in 2020. That is the equivalent of nearly 86 million fewer people experiencing food insecurity in 2025 compared to 2024, and 135 million fewer compared to 2020.

➔ In 2025, more than half the population of Africa (56.6 percent) was moderately or severely food insecure, compared to 20.3 percent in Asia, 22.9 percent in Latin America and the Caribbean, and 8.7 percent in Northern America and Europe. Steady progress has been seen in Asia and Latin America and the Caribbean since 2020, and there was improvement in Africa in 2025 for the first time since the 2030 Agenda for Sustainable Development was launched in 2015.

➔ The global prevalence of moderate or severe food insecurity was consistently higher in rural areas than in peri-urban areas, and lowest in urban areas, from 2022 to 2025. New global estimates also point to persisting higher levels of food insecurity among women than among men, although the difference was smaller in 2025 compared to 2024.

SDG Indicator 2.1.1
Prevalence of undernourishment

The prevalence of undernourishment (PoU), SDG Indicator 2.1.1, has been used by FAO to monitor hunger in the world for more than 50 years. Derived from aggregated country-level data, the PoU is an estimate of the proportion of the population lacking access to enough dietary energy for a healthy, active life (see **Annex 1B** for a description of the methodology and Box 2.1 for details on the key data updates).

BOX 2.1 UPDATES IN THE SERIES OF PREVALENCE OF UNDERNOURISHMENT ESTIMATES

As in every new edition of *The State of Food Security and Nutrition in the World*, the series of estimates of the prevalence of undernourishment (PoU) have been updated. The new, complete series are available through FAOSTAT, FAO's corporate statistical database.[1] Apart from the data point added for 2025, the new series may differ from those published previously due to data revisions that involve past years. For this reason, readers are urged to avoid comparing figures published in different editions of the report.

New data on food supply

As with every cycle of data revisions in preparation for the new edition of this report, an important adjustment consists in updating the average per capita dietary energy supply (DES) used to compute the PoU. Countries provide updated data on production, trade and utilization of food commodities for the previous few years, which are used to compile the food balance sheets (FBS). The annual Production and Utilization Questionnaire is the primary instrument used by FAO for obtaining these data from countries. The adjustment affects all years for which new and/or updated data are received and is especially relevant for the years for which the values of DES were computed as "nowcasts", based on projections of the food supply from major commodities rather than on a full compilation of the FBS. In last year's edition of this report, the DES values for 2023 and 2024 for many countries were nowcasts. In this edition, the DES values for 2023 for all monitored countries, as well as those for 2024 for the 78 countries that contribute the most to the estimated global number of undernourished people in the world, are no longer nowcasted and are derived instead from the newly compiled FBS. As usual, all values for 2025 are nowcasted (see **Annex 1B** for a full description of the methodology).

New data on population estimates

This edition of the report reflects new data on the population of Togo as included in an interim update of *World Population Prospects 2024*, released on 19 January 2026.[2] This implies a revision of the population of Togo and of regional and country groups' aggregates that include Togo.

New data from food consumption surveys

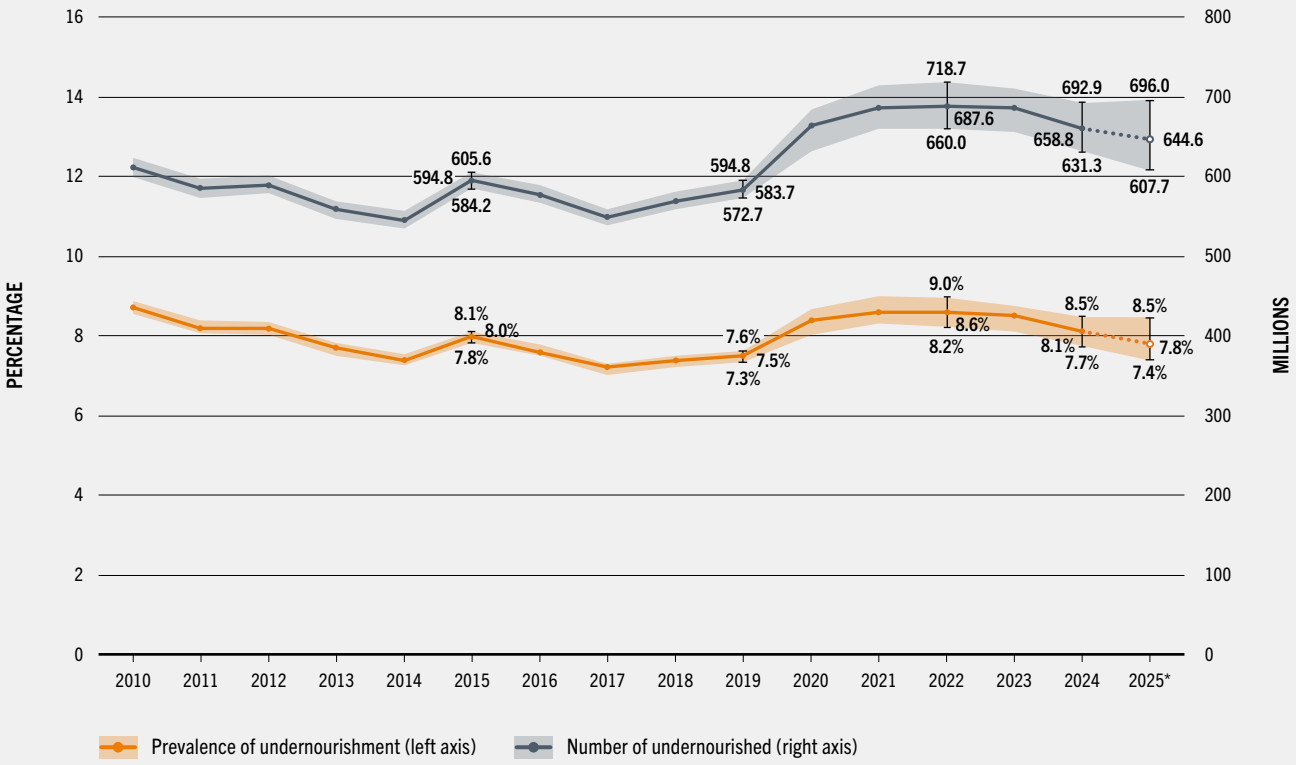
Another set of revisions was induced by new data on food consumption from large-scale household surveys and supporting information that became available to FAO after the closing of the previous edition of this report. The analysis of these data led to new values of the coefficient of variation of dietary energy consumption in the population for several countries. This revision involved the analysis of the information contained in 16 surveys from 15 countries covering years in the period between 2017 and 2024.*

NOTE: * The revisions cover the following countries and years: Bangladesh (2021), Bolivia (Plurinational State of) (2019 and 2021), Chile (2022), Dominican Republic (2018), Eswatini (2017), Ethiopia (2022), Guatemala (2023), Iraq (2023), Kazakhstan (2024), Kyrgyzstan (2023), Mexico (2024), Mongolia (2024), Nigeria (2023), Pakistan (2024) and Peru (2024).

The assessment of global hunger in 2025, based on the PoU, shows continued gradual progress for the third consecutive year. The proportion of the world population facing hunger decreased from 8.6 percent in 2022 to 8.1 percent in 2024 and 7.8 percent in 2025 (Figure 2.1). It is estimated that hunger affected between 608 and 696 million people in the world in 2025. Considering the point estimate of 645 million, that is nearly 14 million fewer people in 2025 compared to 2024 and 43 million fewer than in 2022 (Figure 2.1). However, the estimated number of people facing hunger is still above levels recorded in 2019, prior to the sharp increase in the wake of the COVID-19 pandemic. Compared to 2015, when the 2030 SDG Agenda was launched, the prevalence is lower (7.8 percent in 2025 compared to 8.0 percent in 2015), but the estimated number of people facing hunger has increased by about 50 million.

Stark regional differences persist. It is estimated that one out of five people in Africa, 20.0 percent, faced hunger in 2025, compared to 6.0 percent of the population in Asia, 4.8 percent in

FIGURE 2.1 UPDATED GLOBAL ESTIMATES POINT TO A DECREASE IN WORLD HUNGER IN RECENT YEARS FOLLOWING THE SHARP INCREASE FROM 2019 TO 2021



NOTES: Shaded areas and bars show lower and upper bounds of the estimated ranges. The full ranges of the values for the years 2020 to 2025 can be found in the Supplementary material to Chapter 2. * Projections based on nowcasts for 2025 are illustrated by dotted lines.

SOURCE: FAO. 2026. FAOSTAT: Suite of Food Security Indicators. [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/FS.
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https://doi.org/10.4060/cd8306en-fig2.1

Latin America and the Caribbean, 8.0 percent in Oceania, and less than 2.5 percent in Northern America and Europe. Asia and Latin America and the Caribbean have been showing steady recovery over several consecutive years since the spike in hunger following the COVID-19 pandemic. In contrast, the PoU in Africa had been on the rise since 2017 – until the most recent estimates, which point to signs of a turnaround in 2025 (Table 2.1, Table 2.2 and Figure 2.2).

The PoU in **Africa** decreased from a peak of 20.3 percent in 2024 to 20.0 percent in 2025, still nearly 4 percentage points higher than in 2015 when the SDG Agenda was launched. However, this marginal improvement in prevalence from 2024 to 2025 did not translate into a decrease in the absolute number of people facing hunger, due to the growing size of the population in Africa. About 309 million people faced hunger in 2025, based on the PoU. Improvements from 2024 to 2025 in Eastern Africa, Middle Africa and Western Africa contributed to the slight overall decline in the PoU in the region, enough to offset a marginal increase in Southern Africa. There was no change in Northern Africa, which had the lowest PoU in the region in 2025 – 9.8 percent, compared to 12.3 percent in Southern Africa, 16.9 percent in Western Africa, 25.6 percent in Eastern Africa, and 28.9 percent in Middle Africa.

TABLE 2.1 PREVALENCE OF UNDERNOURISHMENT, 2010–2025

	Prevalence of undernourishment								
	2010	2015	2019	2020	2021	2022	2023	2024	2025*
					(%)				
WORLD	**8.7**	**8.0**	**7.5**	**8.4**	**8.6**	**8.6**	**8.5**	**8.1**	**7.8**
AFRICA	**15.9**	**16.1**	**17.5**	**18.3**	**18.8**	**19.1**	**20.1**	**20.3**	**20.0**
Northern Africa	5.6	5.8	6.0	6.6	7.5	7.8	10.3	9.8	9.8
Sub-Saharan Africa	18.5	18.5	20.2	21.0	21.4	21.6	22.2	22.6	22.2
Eastern Africa	24.8	24.1	27.4	27.0	27.5	26.1	25.5	26.3	25.6
Middle Africa	23.5	24.5	26.2	26.8	26.2	29.0	29.8	29.3	28.9
Southern Africa	6.4	7.6	7.9	9.7	11.3	10.4	11.3	12.1	12.3
Western Africa	11.7	11.7	11.7	13.8	14.1	15.2	16.9	17.1	16.9
ASIA	**9.3**	**8.0**	**6.5**	**7.7**	**7.9**	**7.7**	**7.2**	**6.4**	**6.0**
Central Asia	7.7	4.8	3.3	4.0	3.9	3.3	3.0	2.8	2.8
Eastern Asia	2.6	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
South-eastern Asia	11.6	8.0	5.8	5.9	5.6	5.4	5.5	5.4	5.1
Southern Asia	15.1	13.8	10.9	13.5	13.9	13.4	12.2	10.2	9.3
Western Asia	6.2	9.3	10.7	11.1	11.5	11.6	12.1	12.4	13.0
LATIN AMERICA AND THE CARIBBEAN	**6.0**	**5.1**	**5.4**	**6.1**	**5.9**	**5.7**	**5.5**	**5.0**	**4.8**
Caribbean	14.2	12.7	13.4	14.5	14.4	17.2	17.0	16.5	16.6
Latin America	5.4	4.5	4.8	5.5	5.3	4.9	4.7	4.2	4.0
Central America	6.4	6.3	5.4	5.5	5.5	5.6	5.7	5.3	5.1
South America	5.0	3.8	4.6	5.5	5.2	4.6	4.2	3.7	3.5
OCEANIA	**7.4**	**7.2**	**7.4**	**7.0**	**7.8**	**7.5**	**8.4**	**8.1**	**8.0**
NORTHERN AMERICA AND EUROPE	**<2.5**	**<2.5**	**<2.5**	**<2.5**	**<2.5**	**<2.5**	**<2.5**	**<2.5**	**<2.5**

NOTES: For country compositions of each regional/subregional aggregate, see Notes on geographic regions in statistical tables at the end of the report. Values are based on the point estimates; the full ranges of the values for the years 2020 to 2025 can be found in the Supplementary material to Chapter 2.
* Projections based on nowcasts.

SOURCE: FAO. 2026. FAOSTAT: Suite of Food Security Indicators. [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/FS.
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In **Asia**, steady progress has been made on reducing hunger since 2021, based on the PoU trend. The estimated proportion of the population facing hunger in Asia decreased from 7.9 percent in 2021 to 6.0 percent in 2025 – a decrease of more than 80 million people. The estimated number of people facing hunger in Asia in 2025 was about 292 million. The PoU in Eastern Asia has remained below the 2.5 percent threshold since the launch of the 2030 Agenda, and Central Asia has been close to achieving this goal since 2024, at 2.8 percent. The reduction in hunger in the region has been driven by improvements in South-eastern Asia and Southern Asia. The PoU in South-eastern Asia decreased from 5.6 percent in 2021 to 5.1 percent in 2025, and from 13.9 to 9.3 percent in Southern Asia in the same period. The prevalence is highest – and still increasing – in Western Asia, where it reached 13.0 percent in 2025, up from 9.3 percent in 2015 when the 2030 Agenda was launched. Asia is the region that has shown the most progress since the launch of the 2030 Agenda, with a PoU that was 25 percent lower in 2025 than in 2015. Additionally, the downward trend observed since 2021 represents a full recovery from the peak reached in the wake of the COVID-19 pandemic.

TABLE 2.2 NUMBER OF UNDERNOURISHED PEOPLE, 2010–2025

	Number of undernourished								
	2010	2015	2019	2020	2021	2022	2023	2024	2025*
	(millions)								
WORLD	**611.2**	**594.8**	**583.7**	**663.3**	**686.1**	**687.6**	**686.4**	**658.8**	**644.6**
AFRICA	**170.8**	**195.8**	**236.1**	**252.7**	**265.8**	**276.1**	**297.2**	**307.3**	**309.2**
Northern Africa	11.9	13.5	15.0	16.9	19.5	20.6	27.8	26.7	27.0
Sub-Saharan Africa	159.0	182.3	221.1	235.9	246.3	255.5	269.4	280.6	282.3
Eastern Africa	85.6	95.3	120.4	121.6	127.6	123.9	124.5	131.6	131.3
Middle Africa	32.0	39.2	47.8	50.3	50.8	57.8	61.5	62.3	63.4
Southern Africa	3.8	4.9	5.4	6.7	7.9	7.4	8.1	8.9	9.1
Western Africa	37.6	42.8	47.6	57.3	60.0	66.3	75.2	77.8	78.4
ASIA	**395.6**	**359.0**	**304.3**	**361.6**	**372.2**	**364.3**	**342.7**	**307.6**	**291.8**
Central Asia	4.9	3.4	2.5	3.0	3.0	2.6	2.4	2.3	2.3
Eastern Asia	41.2	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
South-eastern Asia	70.1	51.3	38.6	39.8	38.4	36.8	38.1	37.7	35.4
Southern Asia	264.9	258.2	214.4	267.0	278.3	272.0	248.3	211.0	194.7
Western Asia	14.5	24.6	30.4	31.9	33.4	34.6	36.9	38.5	41.0
LATIN AMERICA AND THE CARIBBEAN	**35.3**	**31.4**	**34.9**	**39.6**	**38.3**	**37.4**	**36.1**	**33.3**	**32.1**
Caribbean	5.9	5.4	5.9	6.3	6.3	7.6	7.5	7.3	7.4
Latin America	29.4	26.0	29.0	33.3	32.0	29.9	28.6	26.0	24.7
Central America	10.0	10.5	9.5	9.8	9.9	10.0	10.3	9.8	9.4
South America	19.4	15.4	19.6	23.5	22.2	19.8	18.3	16.2	15.4
OCEANIA	**2.8**	**2.9**	**3.2**	**3.1**	**3.5**	**3.4**	**3.8**	**3.7**	**3.7**
NORTHERN AMERICA AND EUROPE	**n.r.**	**n.r.**	**n.r.**	**n.r.**	**n.r.**	**n.r.**	**n.r.**	**n.r.**	**n.r.**

NOTES: n.r. = not reported, as the prevalence is less than 2.5 percent. Regional totals may differ from the sum of subregions, due to rounding and non-reported values. For country compositions of each regional/subregional aggregate, see Notes on geographic regions in statistical tables at the end of the report. Values are based on the point estimates; the full ranges of the values for the years 2020 to 2025 can be found in the Supplementary material to Chapter 2. * Projections based on nowcasts.

SOURCE: FAO. 2026. FAOSTAT: Suite of Food Security Indicators. [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/FS.
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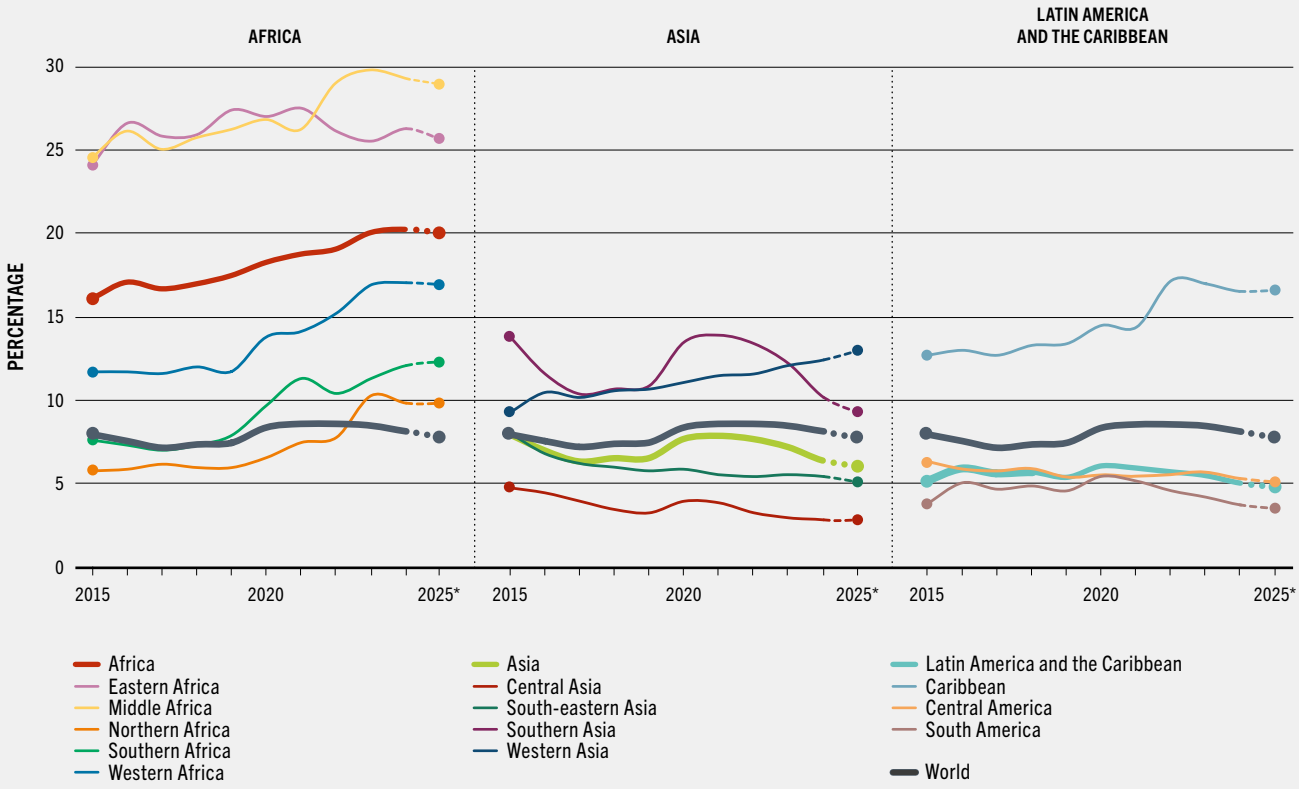
Steady progress has also occurred in **Latin America and the Caribbean**, with a decrease in the PoU from 6.1 percent in 2020 to 4.8 percent in 2025, which is below pre-COVID-19 pandemic levels. The latest estimate is slightly lower than in 2015, at the outset of the 2030 Agenda, when the PoU for the region was 5.1 percent. About 32 million people were estimated to be facing hunger in 2025 based on the PoU, down by more than 1 million from 2024, and by 7.5 million from 2020. The subregion with the lowest PoU, and with the most marked improvement, is South America, where the PoU decreased from a peak of 5.5 percent in 2020 to 3.5 percent in 2025. Modest progress has also been made in Central America in recent years, with a decrease in the PoU from 5.7 percent in 2023 to 5.1 percent in 2025. The Caribbean is the most affected subregion, with an estimated 16.6 percent of the population facing hunger in 2025. While some improvement was seen in the Caribbean from 2022 to 2024, the new estimate points to a stagnation in progress between 2024 and 2025.

It is estimated that 8.0 percent of the population of **Oceania** may have faced hunger in 2025 based on

FIGURE 2.2 MOST SUBREGIONS OF ASIA AND LATIN AMERICA AND THE CARIBBEAN HAVE SHOWN STEADY PROGRESS IN REDUCING HUNGER IN RECENT YEARS, AND NEW ESTIMATES POINT TO A HALT TO THE PROLONGED UPWARD TREND IN HUNGER IN AFRICA



NOTES: Only regions for which data were available for all the subregions and the prevalence of undernourishment (PoU) was greater than 2.5 percent are shown. Eastern Asia is not shown because the PoU has been consistently below 2.5 percent since 2011. Values are based on the point estimates; the full ranges of the values for the years 2020 to 2025 can be found in the Supplementary material to Chapter 2. * Projections based on nowcasts for 2025 are illustrated by dotted lines.

SOURCE: FAO. 2026. FAOSTAT: Suite of Food Security Indicators. [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/FS.
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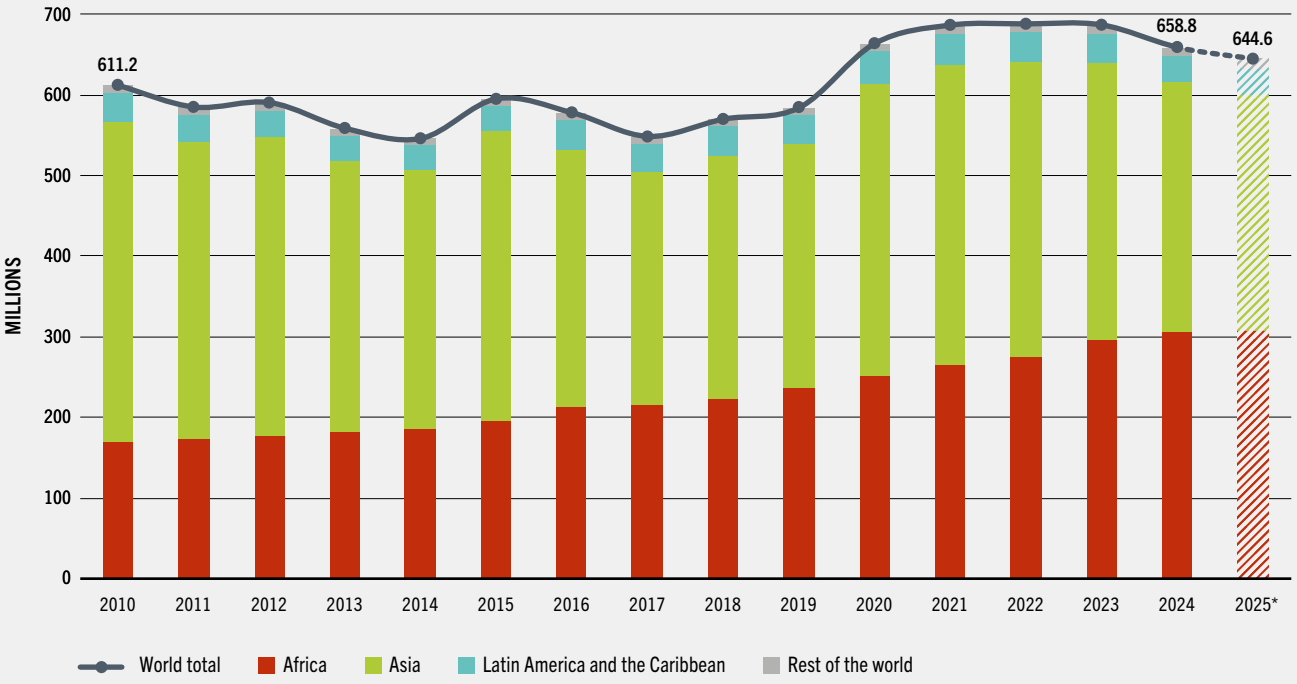
https://doi.org/10.4060/cd8306en-fig2.2

the PoU, a slight improvement compared to a peak of 8.4 percent in 2023, but relatively unchanged compared to 2024.

Focusing on the number of people estimated to be facing hunger in each region, the number rose in Africa from 171 to 309 million between 2010 and 2025 and decreased in Asia from 396 to 292 million in the same period, resulting in a substantial change in the share of the global number of people facing hunger in each region (Table 2.2 and Figure 2.3). The share living in Africa increased from 28 percent in 2010 to 48 percent in 2025, while the share in Asia decreased from 65 to 45 percent. The share living in Latin America and the Caribbean has remained relatively constant over the 15-year period at around 5 percent.

The global and regional estimates presented above depict the situation of hunger based on the PoU up to 2025. However, the estimate for 2025, which is a nowcast, may not fully reflect the deteriorating food insecurity situation in countries affected by evolving humanitarian

FIGURE 2.3 THE SHARE OF THE GLOBAL NUMBER OF PEOPLE ESTIMATED TO BE FACING HUNGER WHO LIVE IN AFRICA HAS GROWN SINCE 2010, SURPASSING ASIA IN 2025



NOTES: Only regions for which data were available for all the subregions and the prevalence of undernourishment (PoU) was greater than 2.5 percent are shown. Values are based on the point estimates; the full ranges of the values for the years 2020 to 2025 can be found in the Supplementary material to Chapter 2. * Projections based on nowcasts.

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https://doi.org/10.4060/cd8306en-fig2.3

crises. For more details about acute food insecurity in countries affected by food crises, see Box 2.2.

Towards ending hunger (SDG Target 2.1): projections to 2030

As in previous editions of this report, an exercise was conducted to project how many people may be facing hunger in 2030 based on what can be inferred from available forecasts of fundamental demographics, agricultural productivity and economic variables, in particular macroeconomic forecasts. The projections were obtained by jointly projecting each of the parameters that inform the model used to estimate the PoU (see Supplementary material to Chapter 2).

As the first months of 2026 have been affected by the conflict in the Middle East, and with the long-term implications not yet known, different trajectories were considered. The starting point is *pre-conflict* projections, based on assumptions for the period 2025–2030, made prior to the 2026 Middle East conflict. They are based on the October 2025 edition of the International Monetary Fund (IMF) database.[7] In this case, the number of undernourished people was expected to continue its decreasing trend and reach 503 million by 2030 (Figure 2.4).

The second set of estimates considers the impact of the crisis on energy and fertilizer markets observed during the first quarter and the macroeconomic implications as estimated by »

BOX 2.2 DEEPENING HUMANITARIAN CRISES INCREASE ACUTE FOOD INSECURITY AND THREATEN THE RIGHT TO ADEQUATE FOOD IN MANY PLACES IN THE WORLD

During the preparation of this edition of *The State of Food Security and Nutrition in the World*, deepening humanitarian crises continued to seriously erode food security and the realization of the right to adequate food in many countries. To inform decision-makers about this evolving situation, the *2026 Global Report on Food Crises*[3] details the acute food insecurity in a set of countries that are currently exposed to food crisis situations. Both *The State of Food Security and Nutrition in the World* and the *Global Report on Food Crises*[4] are multipartnership efforts that provide complementary international analyses of food security, but readers should be aware of their different objectives and geographical scope, as well as their reliance on distinctly different data and methodologies for their analyses.

The focus of the *Global Report on Food Crises* is *acute food insecurity*, which refers to any manifestation of food insecurity at a specific point in time that is of a severity that threatens lives, livelihoods or both, regardless of the causes, context or duration. Analyses of acute food insecurity reported in the *Global Report on Food Crises* are based mainly on the Integrated Food Security Phase Classification/Cadre Harmonisé (IPC/CH). Since timeliness is of the essence in crisis situations, IPC/CH analyses are conducted by local teams of analysts through a consultative process among the main food security partners in the country, including government counterparts. The process is aimed at finding convergence among all pieces of sometimes partial available evidence, including data from official and non-official sources commonly collected and used by the international humanitarian community. The data differ considerably from those that inform the Sustainable Development Goal (SDG) indicators.[5]

The State of Food Security and Nutrition in the World, on the other hand, has the broad objective of monitoring *chronic food insecurity* – defined as food insecurity that persists over time, largely due to structural causes – in all countries, on a regular basis, as needed for SDG monitoring. Chronic food insecurity also includes less severe forms of food insecurity that do not necessarily threaten lives or livelihoods, but that persist over time and can negatively affect people's well-being and the long-term development of communities and countries. The chronic inability to access food is monitored using indicators such as the prevalence of undernourishment and those based on the Food Insecurity Experience Scale, which are derived from data collected through nationally representative surveys and designed to ensure global comparability over time.

The geographical scope of the two reports is also different. While *The State of Food Security and Nutrition in the World* provides a global overview of chronic food insecurity trends, covering all countries and regions of the world, the *Global Report on Food Crises* is crisis-focused and context-specific. In 2026, the *Global Report on Food Crises* covered 47 countries and territories experiencing food crises, where acute food insecurity is most severe and widespread and where external assistance is required to cope with the impacts of shocks on food security. As such, while *The State of Food Security and Nutrition in the World* presents a global picture, the *Global Report on Food Crises* provides a targeted analysis of acute food insecurity in the world's most food crisis-affected contexts.

Jointly, these two reports highlight the key message that, despite the modest recovery which global indicators seem to suggest, many countries remain engulfed in emergencies where acute food insecurity continues to deepen and where humanitarian response is urgently needed. These are also countries where recent data of the kind typically used to inform SDG indicators are missing and for which the estimates of current trends of chronic food insecurity may be less reliable. Understanding the different objectives, scopes and data coverage of the two reports is essential for interpreting the data and using both reports effectively to guide long-term development strategies and short-term humanitarian response.

According to the *Global Report on Food Crises 2026*, acute food insecurity remained widespread in countries/territories with food crises in 2025. Overall, 22.9 percent – corresponding to 266 million people – of the analysed population in 47 countries/territories faced high levels of acute food insecurity.* This marks a marginal increase from

BOX 2.2 (Continued)

22.7 percent in 2024, with the share of the analysed population facing high levels of acute food insecurity almost twice that in 2016. It has remained over 20 percent every year since 2020. Of the 266 million people facing high levels of acute food insecurity in 2025, nearly 39.1 million were in IPC/CH Phase 4 (Emergency) in 32 countries and territories, and around 1.4 million in IPC/CH Phase 5 (Catastrophe) in six countries and territories.** Famine (IPC Phase 5) was confirmed in two countries/territories in 2025 – in parts of the Gaza Strip (Palestine) and the Sudan – a first since IPC reporting began. The five countries with the largest numbers of people facing high levels of acute food insecurity were, in descending order, Nigeria, the Democratic Republic of the Congo, the Sudan, Yemen and Afghanistan, while the countries and territories with the largest share of the analysed population facing high levels of acute food insecurity were Palestine (Gaza Strip), South Sudan, Yemen, the Sudan and Haiti. One hundred percent of the analysed population of the Gaza Strip faced high levels of acute food insecurity, as did more than half of the people living in South Sudan, Yemen, the Sudan and Haiti.

These humanitarian situations represent some of the most severe acute food crises in the world and underscore the urgent need for sustained international engagement to protect access to food for all affected populations.

NOTES: * The figure of 266 million mainly reflects a reduction in the number of countries with data covered in 2025 compared to 2024 and should not be interpreted as a decrease in acute food insecurity requiring urgent action. High levels of acute food insecurity are those that correspond to IPC/CH Phase 3 (Crisis) or worse. See the IPC Manual for further details.[6] The *Global Report on Food Crises* defines a food crisis as a situation where acute food insecurity requires urgent action to protect and save lives and livelihoods at local or national level and exceeds the national resources and capacities to respond. ** Haiti, Mali, Palestine (Gaza Strip), South Sudan, Sudan and Yemen.

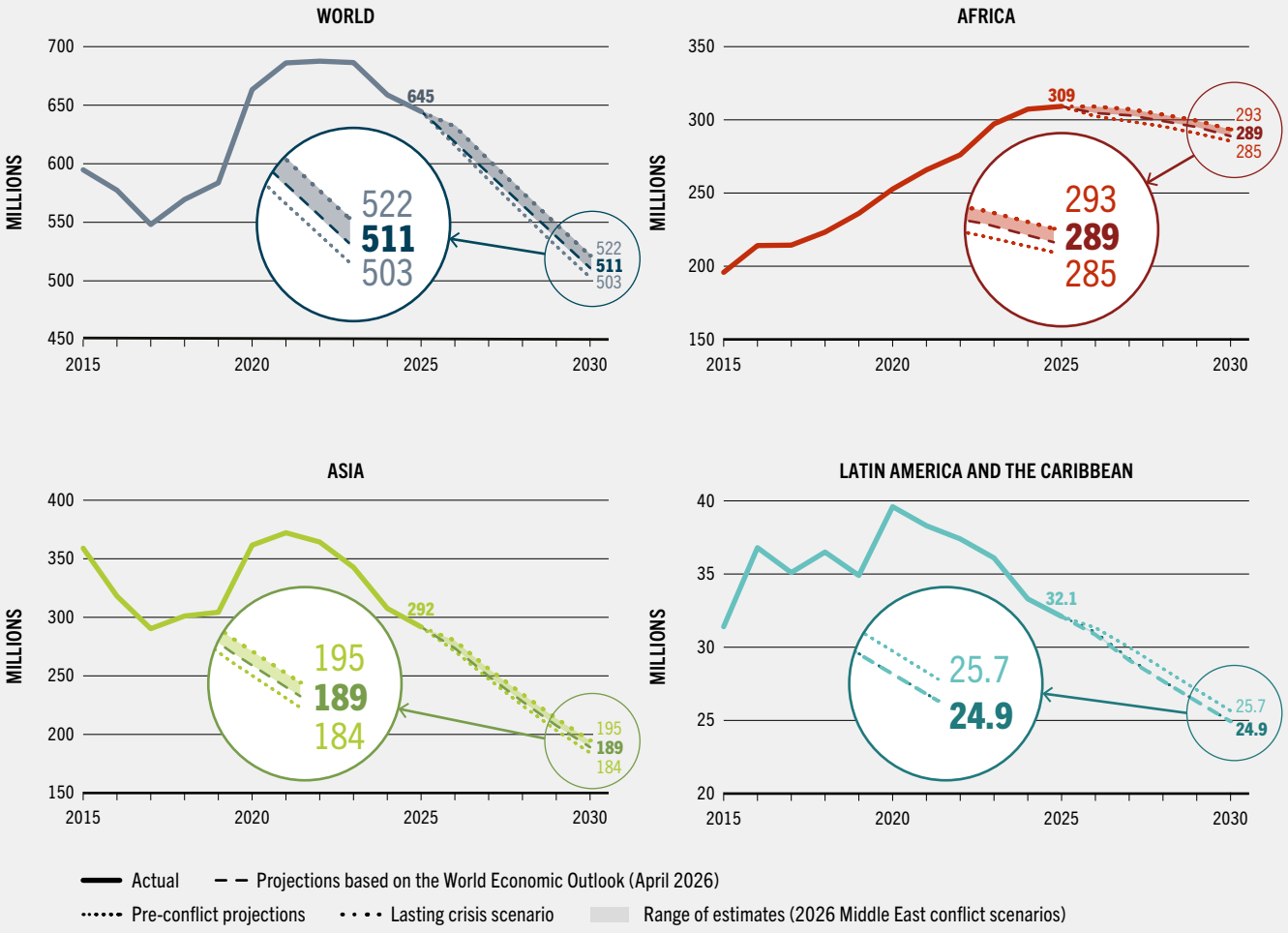
» the IMF in its April 2026 *World Economic Outlook* database.[8] The impact is still limited: the IMF projects world real GDP growth of 3.1 percent in 2026, close to previous estimates, but a slowdown for low- and middle-income countries (3.9 percent instead of 4.0 percent). In this scenario, the energy and fertilizer markets recover quickly and fully in the second half of the year. For this reason, it can be considered a lower-bound estimate of the consequences of the conflict. According to this projection, 511 million people, or 6 percent of the global population, may be chronically undernourished in 2030.

The third scenario (see details in Supplementary material to Chapter 2) assumes that the crisis will have more lasting impacts, including higher prices for oil, natural gas and fertilizer in the second half of 2026, and that damage to infrastructure in the oil-exporting countries of the Persian Gulf will lead to a delayed recovery of energy and fertilizer markets, requiring several years – until 2030 – to return to normal conditions. In this case, the number of undernourished people may reach 522 million, driven in the long term by lower economic growth and slower poverty reduction. Other disruptors, including weather extremes, such as El Niño in 2026 and 2027, are not included in these estimates and could compound these negative effects.

Thus, based on the second and third scenarios, the global number of undernourished people is expected to decrease by 20 percent over the next five years, but it is still projected that between 510 and 520 million people will be facing hunger in 2030.

While improvements are expected in all regions over the next five years, significant differences remain (Figure 2.4). By 2030, an estimated 56 percent of the undernourished people in the world will be in Africa, or nearly 17 percent of the region's population. In Asia, as well as in Latin America and the Caribbean, the PoU is projected to fall below 5 percent. The 2026 conflict in the Middle East is projected to have heterogeneous impacts across continents and

FIGURE 2.4 ELIMINATING HUNGER BY 2030 REMAINS AN ELUSIVE TARGET



NOTE: The World Economic Outlook (April 2026) database is available at https://www.imf.org/en/publications/weo/issues/2026/04/14/world-economic-outlook-april-2026

SOURCE: Authors' (FAO) own elaboration.

https://doi.org/10.4060/cd8306en-fig2.4

countries, largely driven by their status in terms of net energy trade.[9] In particular, Asia is the region with the largest negative impact, followed by Africa, with about 10 million more people projected to be facing hunger in 2030 in Asia and 8 million more in Africa under the *lasting crisis* scenario compared to the *pre-conflict* scenario. Latin America and the Caribbean, a net energy exporter, will benefit from higher energy prices, and some countries in the region that still have high levels of hunger, but strong oil or natural gas exports, are projected to experience accelerated growth.

Importantly, these estimates focus on structural changes based on annual averages of market conditions, and they do not reflect the more extreme impacts in terms of acute food insecurity that could occur in specific territories or over the course of a few weeks.

SDG Indicator 2.1.2
Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale

FAO has been disseminating estimates of the proportion of the population and the number of people lacking access to sufficient food, based on the Food Insecurity Experience Scale (FIES), for the past ten years. The indicator captures a range of food insecurity severity based on people's responses to survey questions about experiences and behaviours that reflect increasingly severe constraints on access to food. People experiencing moderate food insecurity are uncertain about their ability to obtain adequate food and have been forced to decrease the quality and/or quantity of food they consume. Those facing severe food insecurity have typically run out of food at times during the year and, at worst, have gone an entire day or more without eating. Both the prevalence of severe food insecurity and the PoU are indicators of severe constraints on access to food, but they are obtained using very different methodologies and sources of data.

The prevalence of moderate or severe food insecurity in the population, based on the FIES, was included in the SDG global monitoring framework at the outset of the 2030 Agenda as SDG Indicator 2.1.2; this indicator tracks progress towards the broader goal outlined in SDG Target 2.1: ensure access for all people to safe, nutritious and sufficient food all year round. Improvement in this indicator can be considered a sign of progress towards the realization of the right to food.

Global trends in food insecurity

New estimates of the global prevalence of moderate or severe food insecurity based on the FIES show a continuous five-year downward trend following the sharp increase from 2019 to 2020, the year the COVID-19 pandemic swept the globe (Figure 2.5 and Table 2.3). The period from 2024 to 2025 saw an acceleration of this progress, driven by improvements in Africa, Asia and Latin America and the Caribbean. In 2025, an estimated 25.8 percent of the global population – 2.1 billion people – were moderately or severely food insecure, down from 27.1 percent in 2024 and 28.7 percent in 2020. That is the equivalent of nearly 86 million fewer people in 2025 compared to 2024, and 135 million fewer compared to 2020 (Table 2.4). However, the observed decrease was not enough to reach pre-pandemic levels.

Of the 2.1 billion people facing moderate or severe food insecurity in 2025, more than one-third were severely food insecure – 778.6 million people, or 9.5 percent of the global population. Compared to 2024, this is nearly 25 million fewer people facing severe food insecurity (Figure 2.5, Table 2.3 and Table 2.4).

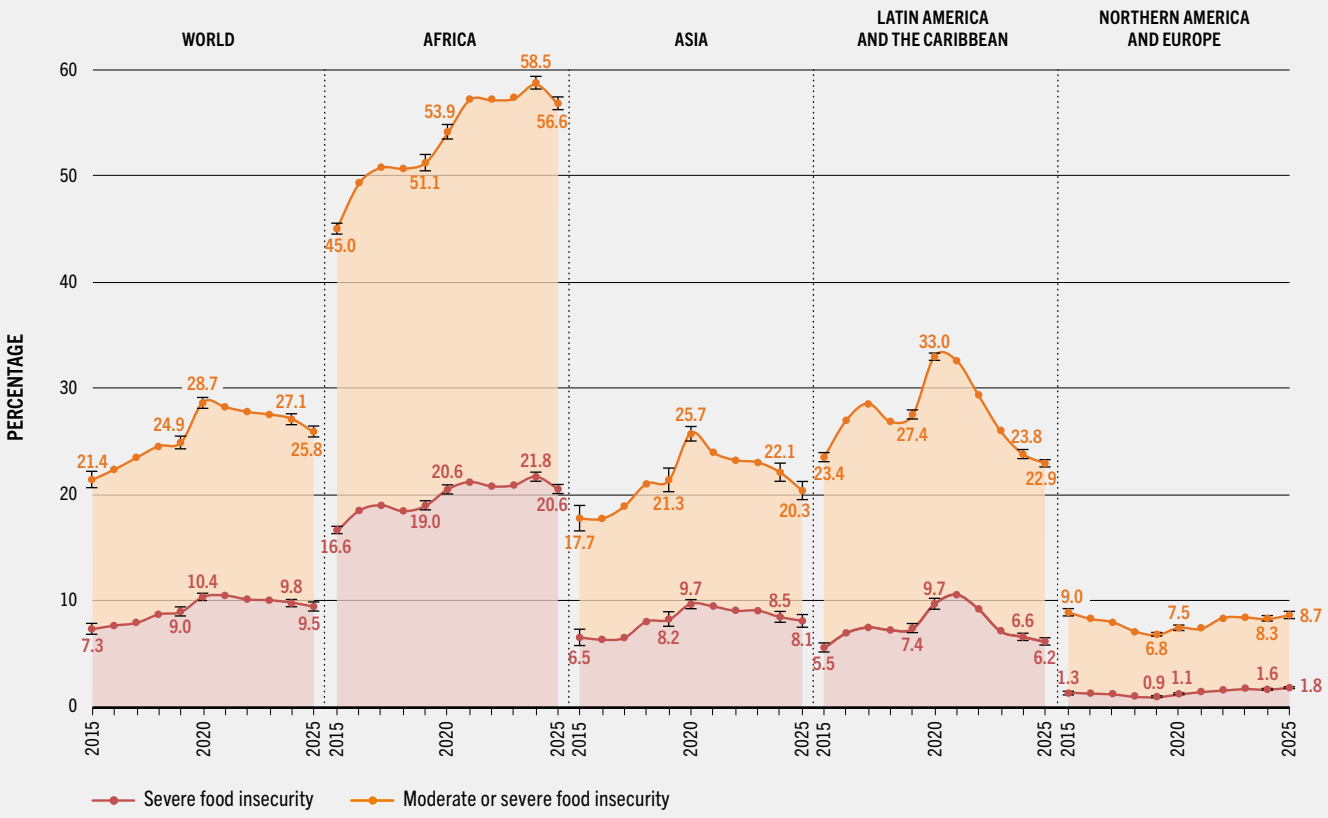
Such progress would normally be grounds for optimism, but the impacts of the conflict unfolding in the Middle East in 2026 and the potential consequences of global cuts in official development assistance raise concerns regarding the prospects for continued improvement in global food security.

Regional trends in food insecurity

The level of food insecurity varies widely from region to region, highlighting stark regional disparities. In 2025, more than half the population of Africa (56.6 percent) faced moderate or severe food insecurity based on the FIES, compared to 20.3 percent in Asia, 22.9 percent in Latin America and the Caribbean, and 8.7 percent in Northern America and Europe. While there has been steady progress in Asia and Latin America and the Caribbean since 2020, this is the first year that improvement has been seen in Africa since the 2030 Agenda for Sustainable Development was launched in 2015.

The prevalence of moderate or severe food insecurity in **Africa** decreased significantly from 58.5 percent in 2024 to 56.6 percent in 2025 – a decrease equivalent to 8.6 million fewer people (Figure 2.5, Table 2.3 and Table 2.4). There was also a decrease in severe food insecurity in Africa in the same period, from 21.8 to 20.6 percent. Improvements were seen in all subregions of Africa, with significant progress in Northern Africa, where the prevalence of moderate or severe food insecurity decreased from 35.1 percent in 2024 to 31.4 percent in 2025. The lowest prevalence in 2025 was in Southern Africa (24.4 percent) and the highest in Middle Africa (75.9 percent), while the prevalence was around 62 percent in both Eastern Africa and

FIGURE 2.5 GLOBAL FOOD INSECURITY LEVELS DECLINED GRADUALLY FROM 2020 TO 2025, WITH STEADY PROGRESS IN ASIA AND LATIN AMERICA AND THE CARIBBEAN, AND SIGNS OF RECENT IMPROVEMENT IN AFRICA



NOTES: Bars show the margins of error. Oceania is not shown due to insufficient population coverage for Micronesia and Polynesia.

SOURCE: FAO. 2026. FAOSTAT: Suite of Food Security Indicators. [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/FS.
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https://doi.org/10.4060/cd8306en-fig2.5

Western Africa (Table 2.3). The prevalence of moderate or severe food insecurity fell below pre-pandemic levels in 2025 in Eastern Africa; on the other hand, it remained 13 percentage points above 2019 levels in Western Africa, and a few percentage points higher compared to pre-pandemic levels in Northern Africa and Southern Africa.

Since the 2030 Agenda was launched in 2015, moderate or severe food insecurity has increased by more than 25 percent in Africa (11.6 percentage points), with an especially notable 57 percent increase in Western Africa (22.4 percentage points). The recent progress seen across all the subregions of Africa from 2024 to 2025 is encouraging, putting the region back on course towards narrowing the gap to achieving SDG Target 2.1.

Progress was also seen in **Asia**, where the prevalence of moderate or severe food insecurity has been decreasing steadily since 2020, according to the latest estimates. The prevalence decreased from 22.1 percent in 2024 to 20.3 percent in 2025, equivalent to nearly 77 million fewer people »

TABLE 2.3 PREVALENCE OF FOOD INSECURITY AT SEVERE LEVEL ONLY, AND AT MODERATE OR SEVERE LEVEL, BASED ON THE FOOD INSECURITY EXPERIENCE SCALE, 2015–2025

	Prevalence of severe food insecurity									Prevalence of moderate or severe food insecurity								
	2015	…	2019	2020	2021	2022	2023	2024	2025	2015	…	2019	2020	2021	2022	2023	2024	2025
	(%)									(%)								
WORLD	**7.3**	**…**	**9.0**	**10.4**	**10.5**	**10.1**	**10.1**	**9.8**	**9.5**	**21.4**	**…**	**24.9**	**28.7**	**28.2**	**27.7**	**27.5**	**27.1**	**25.8**
AFRICA	**16.6**	**…**	**19.0**	**20.6**	**21.3**	**20.9**	**21.0**	**21.8**	**20.6**	**45.0**	**…**	**51.1**	**53.9**	**57.0**	**57.0**	**57.1**	**58.5**	**56.6**
Northern Africa	9.0	…	8.8	9.5	11.3	12.0	11.9	12.4	11.0	26.3	…	29.0	30.3	34.1	32.6	33.9	35.1	31.4
Sub-Saharan Africa	18.4	…	21.4	23.1	23.5	22.8	23.0	23.8	22.7	49.4	…	56.2	59.3	62.2	62.5	62.3	63.6	62.1
Eastern Africa	20.8	…	23.5	26.3	26.3	24.7	23.6	24.6	21.9	56.3	…	62.8	65.1	63.9	64.7	62.6	64.1	62.1
Middle Africa	n.a.	…	n.a.	34.7	35.5	34.7	34.6	34.2	34.9	n.a.	…	n.a.	69.7	75.4	76.5	76.1	76.6	75.9
Southern Africa	9.1	…	9.2	10.7	10.7	10.6	10.8	10.3	10.2	21.5	…	21.9	24.4	24.4	22.7	26.4	25.2	24.4
Western Africa	11.0	…	14.5	16.4	17.2	17.3	18.8	20.2	19.8	39.2	…	48.6	54.1	60.7	60.1	61.4	63.2	61.6
ASIA	**6.5**	**…**	**8.2**	**9.7**	**9.5**	**9.1**	**9.1**	**8.5**	**8.1**	**17.7**	**…**	**21.3**	**25.7**	**23.9**	**23.2**	**23.0**	**22.1**	**20.3**
Central Asia	1.4	…	2.3	4.7	4.9	4.5	3.4	2.7	2.9	9.1	…	13.4	17.7	20.0	17.3	16.4	16.0	16.0
Eastern Asia	0.8	…	1.3	2.0	1.0	1.0	1.0	1.0	1.0	5.9	…	7.4	7.8	6.1	6.2	6.3	6.2	6.3
South-eastern Asia	1.6	…	1.6	1.8	1.7	1.8	2.2	1.9	1.6	14.4	…	14.3	15.3	14.8	14.8	14.5	14.0	12.8
Southern Asia	13.0	…	16.2	18.8	18.8	17.6	17.4	15.9	15.1	27.5	…	34.1	43.0	39.4	38.0	37.5	35.5	31.9
Western Asia	9.7	…	10.9	12.2	13.2	14.4	14.2	14.9	14.9	32.1	…	32.4	37.5	41.1	38.3	37.5	37.4	35.1
LATIN AMERICA AND THE CARIBBEAN	**5.5**	**…**	**7.4**	**9.7**	**10.6**	**9.3**	**7.2**	**6.6**	**6.2**	**23.4**	**…**	**27.4**	**33.0**	**32.6**	**29.3**	**25.9**	**23.8**	**22.9**
Caribbean	n.a.	…	n.a.	29.2	23.3	25.5	25.1	23.8	24.5	n.a.	…	n.a.	61.2	54.3	55.5	53.5	52.2	52.0
Latin America	3.9	…	6.0	8.3	9.7	8.1	5.9	5.4	4.9	21.1	…	25.4	30.9	31.0	27.4	23.9	21.7	20.8
Central America	6.3	…	7.1	7.3	7.3	6.9	7.1	6.8	6.4	28.9	…	29.8	34.1	30.8	26.2	26.3	22.9	22.2
South America	2.9	…	5.5	8.7	10.7	8.6	5.4	4.8	4.2	17.9	…	23.6	29.6	31.1	27.9	23.0	21.3	20.3
OCEANIA	**8.5**	**…**	**9.5**	**8.6**	**10.1**	**9.3**	**10.4**	**9.6**	**10.7**	**21.3**	**…**	**24.4**	**23.2**	**24.1**	**24.2**	**26.9**	**26.3**	**26.9**
NORTHERN AMERICA AND EUROPE	**1.3**	**…**	**0.9**	**1.1**	**1.4**	**1.5**	**1.6**	**1.6**	**1.8**	**9.0**	**…**	**6.8**	**7.5**	**7.4**	**8.4**	**8.5**	**8.3**	**8.7**
Europe	1.5	…	0.9	1.3	1.7	1.8	1.9	1.8	2.1	8.3	…	6.4	7.2	7.3	7.8	7.5	7.0	7.7
Eastern Europe	1.5	…	0.8	1.4	1.7	1.9	1.8	1.3	1.6	11.4	…	8.1	10.0	10.3	10.4	9.0	8.4	8.5
Northern Europe	1.8	…	0.9	1.2	1.8	2.0	3.0	3.6	3.6	6.8	…	5.1	4.2	4.5	6.6	7.7	7.5	8.1
Southern Europe	1.4	…	1.3	2.0	1.7	1.4	1.3	1.1	1.5	7.4	…	6.8	8.0	6.9	6.4	6.2	5.1	6.1
Western Europe	1.4	…	0.7	0.8	1.7	1.8	2.0	1.9	2.6	5.0	…	4.3	3.9	4.9	5.7	6.1	6.2	7.4
Northern America	1.0	…	0.8	0.7	0.7	0.9	1.1	1.2	1.1	10.3	…	7.6	8.3	7.5	9.7	10.4	10.9	10.7

NOTES: n.a. = not available, as data are available only for a limited number of countries, representing less than 50 percent of the population in the region. The estimates for Latin America and the Caribbean from 2014 to 2019 include Caribbean countries whose combined populations represent only 30 percent of the population of that subregion, while the estimates from 2020 onwards include Caribbean countries whose combined populations represent between 60 and 65 percent of the subregional population. The countries included between 2020 and 2025 for the Caribbean subregion are: Antigua and Barbuda, Bahamas, Barbados, Dominica, Dominican Republic, Grenada, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, and Trinidad and Tobago. Due to the high level of conflict that has impeded data collection, the estimates for Northern Africa do not reflect updates for the Sudan in 2024 and 2025, and the estimates for Western Asia do not reflect updates for Palestine between 2023 and 2025.

SOURCE: FAO. 2026. FAOSTAT: Suite of Food Security Indicators. [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/FS. Licence: CC-BY-4.0.

TABLE 2.4 NUMBER OF PEOPLE EXPERIENCING FOOD INSECURITY AT SEVERE LEVEL ONLY, AND AT MODERATE OR SEVERE LEVEL, BASED ON THE FOOD INSECURITY EXPERIENCE SCALE, 2015–2025

	Number of severely food-insecure people									Number of moderately or severely food-insecure people								
	2015	…	2019	2020	2021	2022	2023	2024	2025	2015	…	2019	2020	2021	2022	2023	2024	2025
	(millions)									(millions)								
WORLD	**547.7**	**…**	**699.1**	**819.4**	**836.9**	**813.6**	**815.0**	**803.3**	**778.6**	**1 596.8**	**…**	**1 941.9**	**2 259.4**	**2 240.1**	**2 223.1**	**2 223.1**	**2 209.8**	**2 124.1**
AFRICA	**202.3**	**…**	**255.9**	**283.7**	**300.5**	**301.7**	**310.1**	**329.7**	**319.0**	**548.2**	**…**	**688.8**	**744.1**	**805.9**	**824.3**	**845.6**	**885.6**	**877.0**
Northern Africa	20.9	…	22.1	24.4	29.4	31.8	32.0	33.8	30.5	61.2	…	73.0	77.7	88.9	86.3	91.2	95.5	86.9
Sub-Saharan Africa	181.4	…	233.8	259.3	271.2	269.9	278.0	295.9	288.5	487.0	…	615.8	666.4	717.1	738.0	754.4	790.1	790.1
Eastern Africa	82.1	…	103.4	118.5	122.0	117.6	115.2	123.4	112.3	222.4	…	275.8	293.7	295.9	307.7	305.4	321.1	318.9
Middle Africa	n.a.	…	n.a.	65.2	68.7	69.3	71.3	72.8	76.7	n.a.	…	n.a.	131.0	146.1	152.8	156.9	163.1	166.5
Southern Africa	5.9	…	6.3	7.4	7.5	7.6	7.8	7.5	7.6	13.9	…	14.9	16.9	17.1	16.2	19.1	18.4	18.0
Western Africa	40.4	…	59.0	68.2	72.9	75.4	83.7	92.2	92.0	143.7	…	197.4	224.8	258.0	261.4	273.0	287.5	286.6
ASIA	**293.0**	**…**	**381.8**	**456.3**	**447.4**	**430.2**	**434.4**	**407.2**	**393.1**	**795.5**	**…**	**989.8**	**1 207.0**	**1 128.1**	**1 101.2**	**1 098.8**	**1 060.1**	**983.2**
Central Asia	1.0	…	1.7	3.6	3.8	3.6	2.7	2.3	2.4	6.3	…	10.1	13.5	15.6	13.7	13.2	13.1	13.4
Eastern Asia	12.4	…	21.4	33.4	17.1	16.1	17.2	16.8	17.3	95.9	…	123.2	129.2	102.3	103.4	105.0	102.5	104.5
South-eastern Asia	10.5	…	10.8	12.3	11.3	12.6	15.0	13.2	11.4	92.8	…	95.8	103.5	100.9	101.5	99.8	97.1	89.5
Southern Asia	243.5	…	316.9	372.0	376.7	355.2	356.4	329.0	315.2	515.5	…	669.0	853.0	789.2	768.5	766.8	731.8	665.4
Western Asia	25.7	…	31.0	35.0	38.6	42.8	43.1	46.0	46.8	85.1	…	91.7	107.8	120.1	114.0	113.9	115.6	110.4
LATIN AMERICA AND THE CARIBBEAN	**34.4**	**…**	**47.4**	**62.9**	**69.1**	**60.6**	**47.2**	**44.1**	**41.3**	**145.3**	**…**	**176.0**	**213.2**	**211.8**	**191.6**	**170.8**	**157.8**	**153.1**
Caribbean	n.a.	…	n.a.	12.8	10.2	11.2	11.1	10.6	10.9	n.a.	…	n.a.	26.8	23.8	24.4	23.7	23.2	23.2
Latin America	22.5	…	35.8	50.1	58.9	49.3	36.1	33.5	30.3	121.7	…	152.1	186.4	188.0	167.1	147.2	134.6	129.9
Central America	10.6	…	12.5	12.8	12.9	12.5	12.9	12.5	11.9	48.4	…	52.2	60.3	54.9	47.1	47.8	41.9	41.0
South America	11.9	…	23.3	37.3	46.0	36.9	23.2	21.0	18.4	73.3	…	99.9	126.1	133.0	120.0	99.4	92.7	88.8
OCEANIA	**3.4**	**…**	**4.1**	**3.8**	**4.5**	**4.2**	**4.8**	**4.4**	**5.0**	**8.7**	**…**	**10.6**	**10.2**	**10.7**	**10.9**	**12.2**	**12.1**	**12.6**
NORTHERN AMERICA AND EUROPE	**14.6**	**…**	**9.8**	**12.7**	**15.3**	**16.9**	**18.6**	**17.9**	**20.2**	**99.1**	**…**	**76.7**	**84.8**	**83.5**	**95.2**	**95.7**	**94.2**	**98.3**
Europe	11.1	…	6.8	9.9	12.6	13.3	14.4	13.2	15.9	61.7	…	48.0	53.6	55.0	58.2	55.7	52.0	57.0
Eastern Europe	4.4	…	2.3	4.0	4.8	5.5	5.2	3.7	4.4	33.7	…	23.8	29.3	30.0	30.1	25.8	23.8	24.2
Northern Europe	1.9	…	1.0	1.3	1.9	2.1	3.3	4.0	4.0	7.0	…	5.4	4.4	4.7	7.1	8.4	8.2	8.8
Southern Europe	2.1	…	2.0	3.0	2.6	2.1	1.9	1.7	2.2	11.3	…	10.5	12.2	10.5	9.7	9.4	7.7	9.2
Western Europe	2.7	…	1.4	1.6	3.3	3.6	4.0	3.8	5.3	9.7	…	8.4	7.8	9.8	11.4	12.2	12.3	14.8
Northern America	3.5	…	3.1	2.8	2.7	3.5	4.2	4.7	4.3	37.4	…	28.6	31.2	28.6	36.9	39.9	42.1	41.3

NOTES: n.a. = not available, as data are available only for a limited number of countries, representing less than 50 percent of the population in the region. The estimates for Latin America and the Caribbean from 2014 to 2019 include Caribbean countries whose combined populations represent only 30 percent of the population of that subregion, while the estimates from 2020 onwards include Caribbean countries whose combined populations represent between 60 and 65 percent of the subregional population. The countries included between 2020 and 2025 for the Caribbean subregion are: Antigua and Barbuda, Bahamas, Barbados, Dominica, Dominican Republic, Grenada, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, and Trinidad and Tobago. Due to the high level of conflict that has impeded data collection, the estimates for Northern Africa do not reflect updates for the Sudan in 2024 and 2025, and the estimates for Western Asia do not reflect updates for Palestine between 2023 and 2025.

SOURCE: FAO. 2026. FAOSTAT: Suite of Food Security Indicators. [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/FS. Licence: CC-BY-4.0.

» facing moderate or severe food insecurity in Asia. The proportion of the population facing severe food insecurity also decreased, from 8.5 percent in 2024 to 8.1 percent in 2025. The subregion with the lowest prevalence of moderate or severe food insecurity in 2025 was Eastern Asia – 6.3 percent, compared to 12.8 percent in South-eastern Asia, 16.0 percent in Central Asia, 31.9 percent in Southern Asia and 35.1 percent in Western Asia. The trend in recent years is relatively unchanged in Central Asia, Eastern Asia and Western Asia, while it is improving in South-eastern Asia and Southern Asia.

In 2025, the prevalence of moderate or severe food insecurity in Asia fell below the level estimated for 2019, before the COVID-19 pandemic, but is still a few percentage points higher than in 2015 when the 2030 Agenda was launched. If the current momentum can be maintained or accelerated, significant progress will be made towards the achievement of SDG Target 2.1.

Steady progress is also being made in **Latin America and the Caribbean**, where the proportion of the population facing moderate or severe food insecurity decreased for the fifth consecutive year, from 23.8 percent in 2024 to 22.9 percent in 2025. About one-third of the population was moderately or severely food insecure in 2020, at the peak of the COVID-19 pandemic, and in 2025, the proportion fell to less than one-quarter, which is even below the 2015 level at the outset of the 2030 Agenda. However, most of the progress has been in South America, where the trend started to improve in 2021. The prevalence of moderate or severe food insecurity has fallen by 35 percent (nearly 11 percentage points) in South America since 2021. In 2025, the prevalence in South America was 20.3 percent, down from 21.3 percent in 2024 and from its peak of 31.1 percent in 2021 (Table 2.3). Improvement has also been seen in recent years in Central America, where the prevalence of moderate or severe food insecurity peaked at 34.1 percent in 2020 and decreased by nearly 12 percentage points to 22.2 percent in 2025. The prevalence is highest in the Caribbean, where more than half the population (52.0 percent) was estimated to be moderately or severely food insecure in 2025, and half of this share (24.5 percent of the population) was facing food insecurity at severe levels – a situation which has persisted for several years with little change.

Oceania did not show any progress in 2025 compared to 2024, with the prevalence of moderate or severe food insecurity remaining above 26 percent in both years, and far above the prevalence of 21.3 percent in 2015 when the 2030 Agenda was launched.

Levels of food insecurity are lowest in **Northern America and Europe**, with little change in the past several years. The prevalence of moderate or severe food insecurity was 8.7 percent in 2025, higher than the prevalence of 6.8 percent in 2019, before the COVID-19 pandemic. The prevalence in Europe was 7.7 percent in 2025, compared to 10.7 percent in Northern America. Within Europe, levels ranged from 6.1 percent in Southern Europe to 8.5 percent in Eastern Europe.

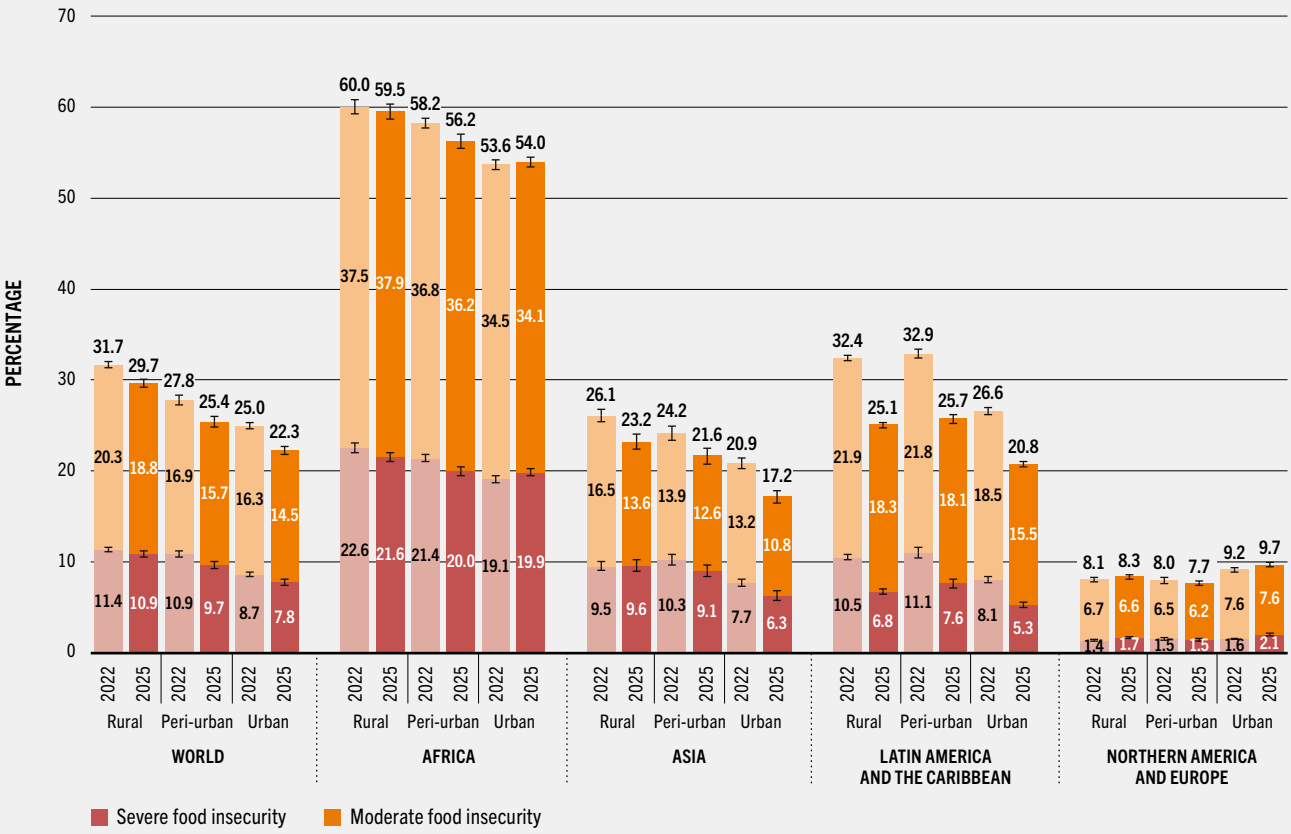
Some population groups are more affected by food insecurity than others: differences across rural, peri-urban and urban areas and between men and women

One of the challenges of SDG monitoring is producing disaggregated statistics for different population groups in order to address one of the key guiding principles of the 2030 Agenda: leave no one behind. Evidence on the food insecurity of specific subpopulations helps us to understand what policies are needed to address the specific needs of groups that are more affected by food insecurity than others. Since data collected by FAO to produce the FIES-based estimates of food insecurity refer to individual respondents and are georeferenced, it is possible to examine differences in food insecurity severity between men and women and among rural, peri-urban and urban populations.[a]

With respect to **differences across degrees of urbanization**, at the global level, from 2022 to 2025, the prevalence of moderate or severe food insecurity was consistently higher in rural areas than in peri-urban areas, and lowest in urban

a See Supplementary Material to Chapter 2 for details on the methods and data sources used to obtain disaggregated estimates for rural, peri-urban and urban populations and for men and women.

FIGURE 2.6 GLOBALLY AND IN MOST REGIONS, THE PREVALENCE OF FOOD INSECURITY HAS REMAINED CONSISTENTLY HIGHER IN RURAL AREAS THAN IN URBAN AREAS SINCE 2022



NOTES: Differences in totals are due to rounding of figures to the nearest decimal point. Oceania is not shown due to insufficient population coverage.

SOURCE: FAO. 2026. FAOSTAT: Suite of Food Security Indicators. [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/FS.
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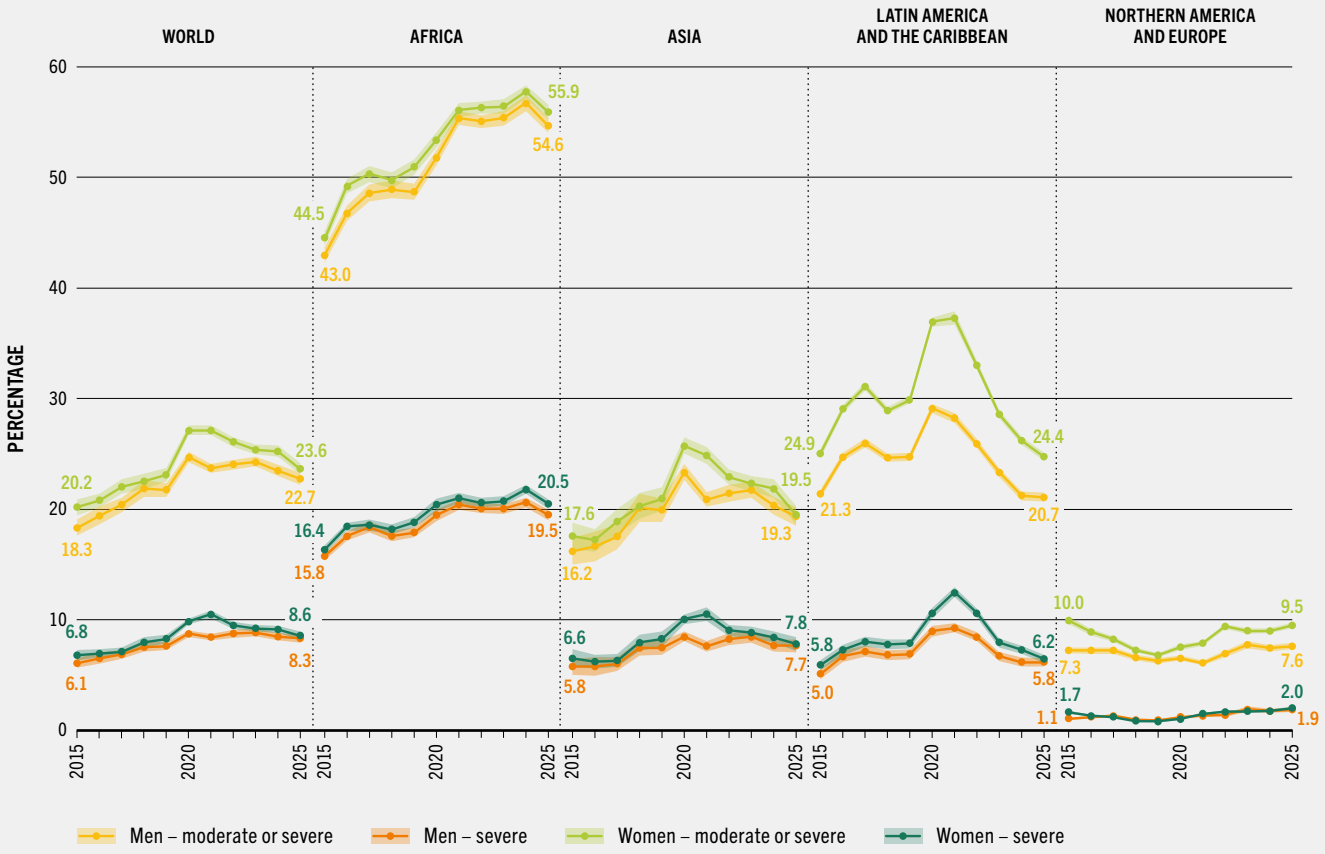
https://doi.org/10.4060/cd8306en-fig2.6

areas (Figure 2.6).[b] The comparative differences in prevalence rates among rural, peri-urban and urban populations in 2025 were similar to those in 2022, when FAO began disseminating the estimates by degree of urbanization, with a gap of nearly 4 percentage points between rural and peri-urban, and about 3 percentage points between peri-urban and urban. However, in a direct comparison of rural and urban areas, the gap was larger in 2025; in 2022, the prevalence of moderate or severe food insecurity was 6.7 percentage points higher in rural areas than in urban areas, and this gap rose to 7.4 percentage points in 2025. Improvement was evident at

b FAO uses the Degree of Urbanization (DEGURBA) classification,[10] an international standard developed by the Statistical Office of the European Union (EUROSTAT), FAO, the International Labour Organization (ILO), the Organisation for Economic Co-operation and Development (OECD), the United Nations Human Settlements Programme (UN-Habitat) and the World Bank, to distinguish among populations living in: i) rural areas; ii) towns and semi-dense areas (peri-urban areas); and iii) cities (urban areas), based on population density and size, in a globally comparable way.

FIGURE 2.7 THE PREVALENCE OF FOOD INSECURITY HAS REMAINED CONSISTENTLY HIGHER AMONG WOMEN THAN AMONG MEN, GLOBALLY AND IN ALL REGIONS, BUT THE GAP NARROWED FROM 2024 TO 2025



NOTES: Shaded areas show margins of error. Only regions for which data were available for all the subregions are shown.

SOURCE: FAO. 2026. FAOSTAT: Suite of Food Security Indicators. [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/FS.
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https://doi.org/10.4060/cd8306en-fig2.7

the global level in all areas from 2022 to 2025, although the decrease in the prevalence of moderate or severe food insecurity was slightly larger in urban areas (2.7 percentage points) compared to rural areas (2.0 percentage points).[c]

For severe food insecurity, the gap between rural and peri-urban appears to have widened somewhat at the global level, increasing from 0.5 percentage points in 2022 to 1.2 percentage points in 2025. A comparison between rural and urban areas shows that, as for moderate or severe food insecurity, the prevalence of severe food insecurity is also higher in rural areas. The rural–urban difference for severe food insecurity was 2.7 percentage points in 2022 and widened slightly to 3.1 percentage points in 2025.

The prevalence of moderate or severe food insecurity was lower in urban areas than in

c See Table A1.3 in **Annex 1A** for the prevalence of moderate or severe food insecurity, and severe food insecurity only, by degree of urbanization in 2025 by region and subregion.

peri-urban and rural areas in every region except Northern America and Europe, where people living in urban areas were the most affected.

In Africa, food insecurity, at both levels of severity, improved slightly in rural areas and more significantly in peri-urban areas between 2022 and 2025, but worsened slightly in urban areas in the same period. In 2025, the prevalence of moderate or severe food insecurity was 5.5 percentage points higher in rural areas than in urban areas.

In Asia, the prevalence of moderate or severe food insecurity was consistently lower in urban areas than in both peri-urban and rural areas from 2022 to 2025. There is a clear pattern of decreasing prevalence of moderate or severe food insecurity with increasing urbanization, and improvements were seen in all groups from 2022 to 2025. However, the pattern differs for severe food insecurity in two ways: first, the prevalence did not decrease in rural areas from 2022 to 2025; second, peri-urban populations were the most affected by severe food insecurity in 2022, but in 2025, levels converged with those in rural populations. The prevalence of severe food insecurity improved steadily in urban populations from 2022 to 2025.

In Latin America and the Caribbean, food insecurity at both levels of severity was similar in rural and peri-urban areas in 2022 and decreased notably in both, and by approximately the same magnitude, between 2022 and 2025. Food insecurity is far less prevalent in urban areas. In 2025, the prevalence of moderate or severe food insecurity was about 5 percentage points lower in urban areas compared to peri-urban areas, and about 4 percentage points lower compared to rural areas.

The only region where food insecurity appears to be higher in urban areas than in rural areas is Northern America and Europe. Food insecurity at both levels of severity increased slightly in rural and urban areas between 2022 and 2025, while showing marginal improvement or no change in peri-urban areas.

New estimates of the global prevalence of moderate or severe food insecurity among men and women aged 15 years or older show persistent inequalities; but they also point to a smaller gap in 2025, driven mostly by Asia (Figure 2.7).[d] In 2025, 23.6 percent of women in the world were moderately or severely food insecure, compared to 22.7 percent of men – a difference of less than 1 percentage point, compared to a gap of 1.7 percentage points in 2024. At severe level, the difference between men and women was also reduced by half between 2024 and 2025 (from 0.7 to 0.3 percentage points). In 2025, the difference in moderate or severe food insecurity between men and women was largest in Latin America and the Caribbean – 3.7 percentage points, compared to 1.3 percentage points in Africa, 1.9 percentage points in Northern America and Europe, and a negligible difference in Asia.

The estimates presented in this section of the percentage and number of people facing moderate or severe food insecurity refer to the combined total of those who are experiencing severe food insecurity and those who may be experiencing food insecurity at more moderate levels, meaning they are uncertain about their ability to obtain adequate food and have been forced to decrease the quality and/or quantity of food they consume. Increasing constraints on resources to obtain food often obligate people to purchase less expensive and, oftentimes, less nutritious food. The next section focuses specifically on indicators of economic access to a healthy diet. ■

d See Table A1.4 in **Annex 1A** for prevalence of moderate or severe food insecurity, and severe food insecurity only, by sex in 2025 by region and subregion, and Supplementary Material to Chapter 2 for details on the methods used to obtain disaggregated estimates.

2.2 COST AND AFFORDABILITY OF A HEALTHY DIET

KEY MESSAGES

➔ Assuming that the prices of foods that contribute to a healthy diet have increased in line with the overall rise in food inflation in 2025, the cost of a healthy diet rose globally to 4.28 PPP dollars in 2025 from 3.44 PPP dollars in 2021 and 2.94 PPP dollars in 2017.

➔ The cost of a healthy diet in 2025 was highest in Latin America and the Caribbean at 4.91 PPP dollars compared to 4.35 PPP dollars in Africa, 4.33 PPP dollars in Asia, and 3.64 PPP dollars in Northern America and Europe, with important differences at the subregional level.

➔ Updated estimates point to a decrease in the global number of people unable to afford a healthy diet, from 2.97 billion (37.4 percent of the world population) in 2021 to 2.69 billion (32.7 percent) in 2025. The improvement in affordability suggests that, on average, incomes available for food increased more relative to food prices.

➔ The estimated prevalence of people unable to afford a healthy diet remains highest in Africa, where it reached 66.6 percent in 2025, more than double the levels estimated for Asia (28.9 percent) and Latin America and the Caribbean (25.7 percent). Compared to 2021, the prevalence is increasing in Africa and falling in Asia, Latin America and the Caribbean, and Northern America and Europe.

Monitoring economic access to a healthy diet is essential for informing policies and programmes aimed at improving food security and nutritional outcomes, thereby contributing to the achievement of SDG Targets 2.1 and 2.2. While cost and affordability are far from being the only determinants of whether people consume a healthy diet, they shape the choices available to them in important ways. Diet quality is often the first thing to be sacrificed when people's budgets tighten.

As described in greater detail in **Chapter 3** of this report, while the foods that compose a healthy diet can vary widely across individuals, communities and countries, there are four key principles that define any healthy diet: adequacy, balance, diversity and moderation.[11] Eating a healthy diet throughout the life cycle is critical for health, growth and development, helping to prevent all forms of malnutrition and reduce the risk of non-communicable diseases (NCDs), and above all, contributing to overall well-being. Monitoring the cost and affordability of a healthy diet at the global, regional and country levels contributes crucial information that can shed light on the actions needed in different contexts to improve economic access to nutritious foods.

The cost of a healthy diet

FAO and the World Bank estimate the **cost of a healthy diet (CoHD)** as an indicator of the minimum amount of money that a person would have to pay if they were to acquire a reference **Healthy Diet Basket (HDB)**, defined by the quantities of 11 locally available foods belonging to six different food groups, composed to meet all their daily energy requirements and most of their nutrient requirements (see Box 2.5 and **Chapter 3**).

The values of the CoHD are calculated using food item prices and purchasing power parity (PPP) from the 2021 round of the International Comparison Program (ICP) managed by the World Bank.[12] A reference value is computed for each country in 2021, and expressed in local currency units (LCU). This is then projected backwards and forwards in time, using – as a deflator – the country's consumer price index for food (food CPI), produced by FAO.[13] In this way, the reported series covering the period from 2017 to 2025, still expressed in current LCU, are generated. To make them comparable across countries and to allow meaningful computation of mean values at regional and global level, as well as for special groups of countries, estimates are further converted into current PPP dollars using PPP conversion factors published by the ICP or the International Monetary Fund or modelled by FAO. In this edition of the report, mean values of the CoHD by geographic region or by income group are weighted by the population size of each country (see Box 2.3).

BOX 2.3 COMPUTING THE AVERAGE COST OF A HEALTHY DIET IN A GROUP OF COUNTRIES

Until the 2025 edition of *The State of Food Security and Nutrition in the World*, the mean value for each group of countries was presented as a simple average of the values for the countries belonging to the group. While the simple averages are still disseminated on FAOSTAT, they are not discussed in this edition, as it is explicitly recognized that: a) the cost of a healthy diet (CoHD) differs widely across countries that compose a given group; and b) countries included in a group can vary widely in population size. For these reasons, a simple average of the values for the countries that form a group may not adequately reflect the cost that the "average" resident of the region or group of countries would face. To better represent the differences that exist *between* groups or regions, mean values are now reported as weighted averages, using countries' total populations as weights.

In general, this revision implies a 0.6 percent upward adjustment for Africa and downward adjustments of the series published in previous editions of the report, ranging from a 0.3 percent reduction for low-income countries to a 10.9 percent reduction for upper-middle-income countries, and to a rather large 21 percent reduction for Northern America, reflecting the extent to which a simple average is conditioned by the heterogeneity in CoHD values and population sizes within geographical and income-based groups (Table A).

TABLE A MEAN COST OF A HEALTHY DIET BY COUNTRY INCOME GROUP AND REGION, 2021

	Population size in 2021	Mean cost of a healthy diet in 2021		
		Unweighted	Population-weighted	Extent of adjustment
	(millions)	(PPP dollars)	(PPP dollars)	(%)
WORLD	**7 954**	**3.63**	**3.44**	**–5.2**
Low-income countries	575	3.50	3.46	–1.1
Lower-middle-income countries	3 007	3.76	3.53	–6.1
Upper-middle-income countries	2 837	3.88	3.45	–11.1
High-income countries	1 380	3.41	3.20	–6.2
Africa	1 414	3.56	3.54	–0.6
Asia	4 718	3.76	3.54	–5.9
Latin America and the Caribbean	650	4.21	3.76	–10.7
Europe	749	3.14	2.91	–7.3
Northern America	379	3.14	2.48	–21.0

SOURCES: FAO. 2026. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 21July 2026]. https://www.fao.org/faostat/en/#data/CAHD. Licence: CC-BY-4.0; FAO. 2026. FAOSTAT: Annual population. [Accessed on 1 May 2026]. https://www.fao.org/faostat/en/#data/OA. Licence: CC-BY-4.0.

Inflation has continued to raise food prices in 2025. Assuming that the prices of foods that contribute to a healthy diet have increased in line with the overall rise in food inflation, this will have pushed the global mean cost of a healthy diet up to 4.28 PPP dollars in 2025, from 3.44 PPP dollars in 2021 and 2.94 PPP dollars in 2017 (Table 2.5). **Chapter 3** of this report is dedicated to a more detailed analysis of the CoHD.

Looking more carefully at the estimated values across regions and subregions, large disparities in the CoHD – that are masked in the global series – become apparent. Among the main regions of the world, the CoHD appears highest in Latin America and the Caribbean, where it is estimated to have reached 4.91 PPP dollars in 2025, compared to 4.35 PPP dollars in Africa, 4.33 PPP dollars in Asia, and 3.64 PPP dollars »

BOX 2.3 (Continued)

In interpreting the mean values at group level, it is important to keep in mind that they mask rather large differences among the countries included in the same group (Table B). Considering Eastern Asia, for example, the differences between Japan and mainland China are very noticeable, with the estimated value for Japan (5.98 PPP dollars) being nearly twice the CoHD estimated for mainland China (3.13 PPP dollars). Similarly, in South America, the value for Guyana (5.90 PPP dollars) is almost double the estimated value for Ecuador (2.91 PPP dollars), both quite far from the subregional mean value of 3.83 PPP dollars. Similar considerations apply when countries are grouped by income. The downward adjustments induced by taking population-weighted averages are particularly relevant for upper-middle-income countries (–10.9 percent), but the ranges of values are quite wide in all groups (Table B).

TABLE B MEAN VALUES OF THE COST OF A HEALTHY DIET IN A SUBREGION OR INCOME GROUP CAN HIDE WIDE DIFFERENCES ACROSS COUNTRIES

Region/ income group	Country	Population in 2021	Cost of a healthy diet in 2021			
			Country's value	Group's mean		Extent of adjustment
				Unweighted	Population-weighted	
		(millions)	(PPP dollars)	(PPP dollars)		(%)
Eastern Asia	China, mainland	1 426.4	Min 3.13	4.89	3.46	–29.2
	Japan	125.7	Max 5.98			
South America	Ecuador	17.7	Min 2.91	4.03	3.83	–5.0
	Guyana	0.8	Max 5.90			
Northern America	United States of America	340.2	Min 2.36	3.14	2.48	–21.0
	Bermuda	0.1	Max 3.55			
Low-income countries	Uganda	45.9	Min 2.95	3.47	3.46	–0.3
	Syrian Arab Republic	21.6	Max 5.01			
Lower-middle-income countries	Palestine	5.2	Min 2.72	3.69	3.53	–4.3
	Bhutan	0.8	Max 5.14			
Upper-middle-income countries	Kazakhstan	19.7	Min 2.59	3.87	3.45	–10.9
	Mongolia	3.3	Max 5.55			
High-income countries	United Kingdom of Great Britain and Northern Ireland	67.7	Min 1.90	3.41	3.20	–6.2
	Japan	125.7	Max 5.98			

SOURCES: FAO. 2026. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/CAHD. Licence: CC-BY-4.0. FAOSTAT: Annual population. [Accessed on 1 May 2026]. https://www.fao.org/faostat/en/#data/OA. Licence: CC-BY-4.0.

TABLE 2.5 MEAN COST OF A HEALTHY DIET IN 2021 AND PROJECTIONS OVER 2017–2025

	Cost of a healthy diet								
	2017	2018	2019	2020	2021	2022	2023	2024	2025
	(PPP dollars)								
WORLD	**2.94**	**3.00**	**3.13**	**3.32**	**3.44**	**3.81**	**4.07**	**4.20**	**4.28**
AFRICA	**3.09**	**3.12**	**3.22**	**3.33**	**3.54**	**3.99**	**4.26**	**4.38**	**4.35**
Northern Africa	3.52	3.68	3.70	3.66	**3.83**	4.73	5.30	5.35	5.24
Sub-Saharan Africa	2.99	2.99	3.11	3.25	**3.48**	3.83	4.03	4.16	4.16
Eastern Africa	2.84	2.89	3.03	3.20	**3.43**	3.82	4.05	4.19	4.34
Middle Africa	3.6	3.23	3.36	3.40	**3.53**	3.73	3.74	3.63	3.65
Southern Africa	3.03	2.98	3.00	3.07	**3.22**	3.54	3.85	3.99	4.14
Western Africa	2.87	2.98	3.10	3.27	**3.55**	3.92	4.17	4.42	4.21
ASIA	**3.00**	**3.07**	**3.22**	**3.44**	**3.54**	**3.87**	**4.09**	**4.24**	**4.33**
Central Asia	3.37	3.31	3.39	3.52	**3.64**	4.02	4.22	4.14	4.15
Eastern Asia	2.94	2.97	3.16	3.46	**3.46**	3.78	3.97	4.07	4.15
South-eastern Asia	3.58	3.70	3.78	3.96	**4.05**	4.38	4.68	4.91	5.19
Southern Asia	2.85	2.93	3.06	3.26	**3.44**	3.75	3.97	4.13	4.18
Western Asia	2.97	3.09	3.22	3.32	**3.47**	3.98	4.27	4.44	4.47
LATIN AMERICA AND THE CARIBBEAN	**3.16**	**3.21**	**3.33**	**3.54**	**3.76**	**4.23**	**4.57**	**4.75**	**4.91**
Caribbean	3.8	3.89	4.09	4.36	**4.65**	5.11	5.41	5.80	6.04
Latin America	3.13	3.18	3.29	3.50	**3.71**	4.19	4.52	4.70	4.85
Central America	3.02	3.10	3.14	3.24	**3.43**	3.92	4.39	4.54	4.66
South America	3.17	3.22	3.36	3.61	**3.83**	4.30	4.58	4.77	4.94
OCEANIA	**2.41**	**2.42**	**2.48**	**2.59**	**2.68**	**3.04**	**3.29**	**3.32**	**3.43**
Australia and New Zealand	2.38	2.36	2.40	2.51	**2.61**	2.96	3.19	3.23	3.33
Oceania excluding Australia and New Zealand	n.a.	n.a.	n.a.	n.a.	**n.a.**	n.a	n.a.	n.a.	n.a.
NORTHERN AMERICA AND EUROPE	**2.43**	**2.47**	**2.57**	**2.66**	**2.76**	**3.13**	**3.46**	**3.53**	**3.64**
Europe	2.51	2.58	2.72	2.81	**2.91**	3.33	3.76	3.84	3.97
Eastern Europe	2.54	2.58	2.76	2.87	**3.00**	3.37	3.64	3.72	3.85
Northern Europe	2.06	2.11	2.20	2.23	**2.29**	2.65	3.08	3.13	3.25
Southern Europe	2.79	2.86	3.01	3.07	**3.20**	3.73	4.36	4.47	4.62
Western Europe	2.51	2.60	2.73	2.83	**2.90**	3.33	3.83	3.91	4.03
Northern America	2.26	2.28	2.30	2.38	**2.48**	2.76	2.91	2.94	3.02
COUNTRY INCOME GROUP									
Low-income countries	3.25	3.13	3.20	3.30	**3.46**	3.99	4.10	4.01	4.05
Lower-middle-income countries	2.95	3.04	3.16	3.36	**3.53**	3.86	4.14	4.33	4.36
Upper-middle-income countries	2.95	2.99	3.16	3.38	**3.45**	3.82	4.03	4.14	4.25
High-income countries	2.84	2.91	2.98	3.09	**3.20**	3.59	3.96	4.06	4.20

NOTES: The cost of a healthy diet (CoHD) is expressed in current purchasing power parity (PPP) dollars per person per day. It is reported as the population-weighted mean of the CoHD for the countries in the groups reported above, only for the groups for which 50 percent or more of the population is covered by the countries for which there is an estimate. The 2021 figures are presented in bold to reflect the fact that those values are estimated directly using food item prices from the 2021 round of the International Comparison Program. The values for other years are projections, computed by using the countries' consumer price indices for food. Oceania is included because there is more than 50 percent population coverage, but the aggregate includes only Australia and Fiji. The aggregate for Australia and New Zealand includes data only for Australia.

SOURCE: FAO. 2026. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 21July 2026]. https://www.fao.org/faostat/en/#data/CAHD. Licence: CC-BY-4.0.

BOX 2.4 UPDATES TO THE PREVALENCE OF UNAFFORDABILITY OF A HEALTHY DIET

Estimates of the prevalence of unaffordability of a healthy diet (PUA) and number of people unable to afford a healthy diet (NUA), are calculated for each country for which the CoHD is computed and for which the Poverty and Inequality Platform (PIP)[14] of the World Bank publishes estimated welfare distributions.

To obtain a measure of the PUA, the cost of a healthy diet for a specific country and year is augmented by the cost of essential non-food goods and services and compared to the welfare distribution coming from the PIP to obtain a headcount index. The cost of essential non-food goods and services is approximated by using the global poverty line considered more appropriate for the specific income group, among those published by the World Bank,[15] and assuming non-food spending shares for each income group. Once the PUA value is obtained, the NUA is calculated by multiplying the PUA by the country's total population, as estimated by the *World Population Prospects 2024*[16] (see **Annex 1B** for further details on the PUA methodology).

For this edition of the report, the PUA values published for the whole time series have been updated and thus differ from those published in last year's edition of this report. First, the most recent updates of the welfare distribution for all countries as released by the World Bank have been used for the analysis.[17] Second, new poverty lines released by the World Bank in 2025, and expressed in 2021 PPP dollars, are now applied to the estimation of the cost of essential non-food goods and services.[15] Third, and finally, in determining the cost of essential non-food goods and services to be added to the income threshold used for assessing affordability, countries are now assigned to the income group they belong to, following the most recent World Bank classification (updated in July 2025), rather than referring to the classification that was in place in 2021, as in previous editions of the report. This update improves the relevance and comparability of affordability estimates by aligning the non-food cost adjustment with countries' current income classification status (see Supplementary material to Chapter 2 for further details on the differences induced by each of these revisions).

» in Northern America and Europe. However, the regional values also mask important differences at the subregional level. The average CoHD in Latin America and the Caribbean is highest in the Caribbean, where it may have reached 6.04 PPP dollars in 2025, and lowest in Central America (4.66 PPP dollars). Among the subregions that compose Northern America and Europe, Southern Europe had the highest average CoHD in 2025 (4.62 PPP dollars) while the lowest was seen in Northern America (3.02 PPP dollars). Comparing all subregions, it is worth noting that in 2025, the average CoHD in the Caribbean was double the estimated value for Northern America.

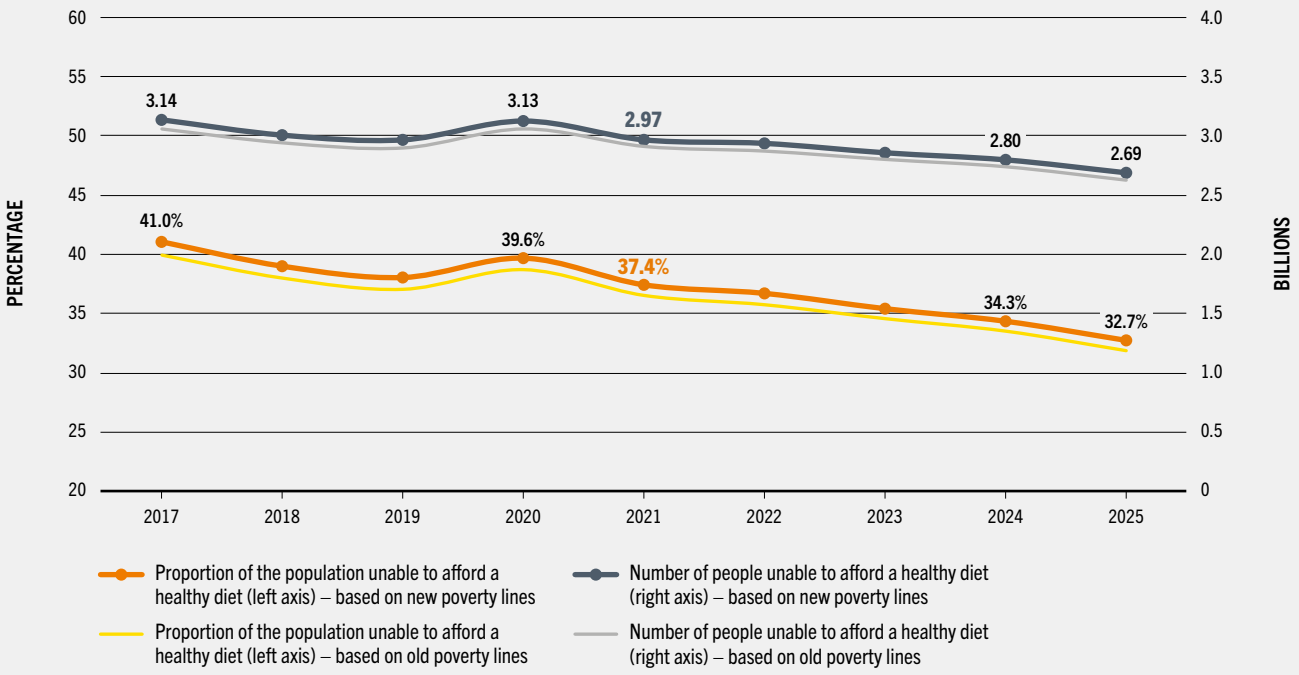
From the perspective of the World Bank income classification of countries, the CoHD is, on average, higher in lower-middle-income countries (4.36 PPP dollars in 2025) and lower in low-income countries (4.05 PPP dollars), remaining closer to the global average in upper-middle- and high-income countries (Table 2.5).

The prevalence and number of people unable to afford a healthy diet

Once the CoHD is estimated, it is possible to take the next step towards estimating what ultimately matters most: how many people may not be able to afford a healthy diet. To do this, the CoHD for each country is compared to the distribution of incomes in that country, and the cost of other essential goods and services is also considered in the calculation (see **Annex 1B**).

Based on the latest updates (see Box 2.4), it is estimated that in 2021, which is the reference year for the prices of foods that contribute to a healthy diet, 2.97 billion people may have been unable to afford a healthy diet, corresponding to 37.4 percent of the world population (Figure 2.8 and Table 2.6). More importantly, the number of people unable to afford a healthy diet may have fallen globally – following a peak of 3.13 billion in 2020 – to about 2.69 billion (or 32.7 percent of the world population) in 2025. The overall decreasing trend implies that the CoHD, driven by the increase in

FIGURE 2.8 THE PROPORTION AND NUMBER OF PEOPLE UNABLE TO AFFORD A HEALTHY DIET IN THE WORLD DECREASED FROM 2020 TO 2025



NOTES: The distance between the two reported series for both the proportion and the number of people unable to afford a healthy diet reflects the impact of changes in the poverty lines used as a reference to calculate the allowance for expenditures on non-food essential goods and services only.

SOURCE: FAO. 2026. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/CAHD. Licence: CC-BY-4.0.

https://doi.org/10.4060/cd8306en-fig2.8

food prices, may have risen less relative to total income.[e] It is worth noting that, as shown in the figure, the use of the new poverty lines has only a marginal effect on the series of the prevalence of unaffordability of a healthy diet (PUA) and the number of people unable to afford a healthy diet (NUA), shifting the series upwards somewhat without changing the underlying trends.

The percentage of people unable to afford a healthy diet remains highest in Africa, where it is estimated to have reached 66.6 percent in 2025, more than double the levels currently estimated for Asia (28.9 percent) and Latin America and the Caribbean (25.7 percent). The differences have increased since 2021 due to diverging trends, with the PUA increasing in Africa, but falling in Asia, Latin America and the Caribbean, and Northern America and Europe (Figure 2.9).

When considering the distribution by country income group, it is found that more than half (about 1.4 billion) of the almost 2.7 billion people who are estimated to be unable to afford a healthy diet in 2025 live in lower-middle-income countries (Figure 2.10). »

e In interpreting the time series of the PUA and NUA indicators, it must be noted that the procedure used until now provides only an approximation of how the actual cost of a healthy diet might have evolved over time in a country, given that the prices of the items that compose the HDB may follow a pattern that differs from the general food CPI – a reason why possible changes in the methods of computation are under consideration to improve the reliability of the time series in the future (see Box 2.3).

TABLE 2.6 PROPORTION OF THE POPULATION AND NUMBER OF PEOPLE UNABLE TO AFFORD A HEALTHY DIET, 2017–2025

	Proportion of the population unable to afford a healthy diet			Number of people unable to afford a healthy diet		
	2017	2021	2025	2017	2021	2025
	(%)			(millions)		
WORLD	**41.0**	**37.4**	**32.7**	**3 135.5**	**2 973.5**	**2 692.1**
AFRICA	**64.8**	**66.2**	**66.6**	**830.3**	**935.0**	**1 031.2**
Northern Africa	36.3	31.0	34.8	88.0	80.7	96.1
Sub-Saharan Africa	71.4	74.2	73.5	742.5	854.6	935.4
Eastern Africa	74.9	78.7	76.5	311.6	364.5	392.8
Middle Africa	78.3	79.1	78.7	134.1	153.2	172.8
Southern Africa	60.8	58.6	58.3	40.0	41.1	43.2
Western Africa	66.7	70.0	70.4	258.0	297.5	327.9
ASIA	**43.1**	**36.7**	**28.9**	**1 972.3**	**1 729.4**	**1 399.1**
Central Asia	25.8	22.0	11.3	18.6	17.1	9.4
Eastern Asia	26.8	16.0	11.2	442.7	265.7	185.2
South-eastern Asia	50.3	48.7	46.5	330.0	331.0	325.5
Southern Asia	57.9	52.0	39.0	1 110.4	1 041.9	813.7
Western Asia	18.9	21.1	18.1	52.0	61.7	56.7
LATIN AMERICA AND THE CARIBBEAN	**31.2**	**32.2**	**25.7**	**197.1**	**209.2**	**172.0**
Caribbean	47.9	50.0	48.9	20.6	21.9	21.8
Latin America	30.4	31.3	24.6	179.0	189.9	153.6
Central America	34.4	31.8	25.4	59.1	56.7	47.0
South America	28.7	31.1	24.3	119.6	133.2	106.6
OCEANIA	**5.2**	**5.9**	**5.0**	**2.2**	**2.6**	**2.3**
Australia and New Zealand	3.5	3.6	3.2	1.0	1.1	1.0
Oceania excluding Australia and New Zealand	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
NORTHERN AMERICA AND EUROPE	**10.9**	**7.7**	**6.8**	**122.1**	**87.4**	**77.5**
Europe	13.8	10.4	8.2	102.8	78.0	61.0
Eastern Europe	25.0	18.7	12.7	73.7	54.7	36.1
Northern Europe	4.6	3.3	3.4	4.8	3.6	3.7
Southern Europe	16.1	11.3	10.3	24.6	17.2	15.5
Western Europe	2.5	3.1	3.8	4.8	6.1	7.5
Northern America	5.6	2.8	4.4	20.6	10.6	17.0
COUNTRY INCOME GROUP						
Low-income countries	77.5	77.0	76.1	398.4	443.1	487.6
Lower-middle-income countries	56.0	52.4	44.1	1 595.8	1 574.8	1 394.2
Upper-middle-income countries	33.2	26.7	22.2	920.9	758.4	636.7
High-income countries	11.9	9.2	8.1	161.8	127.0	113.2

NOTES: The prevalence of unaffordability (PUA) for a region or country group is reported only if the countries for which an estimate is available cover at least 50 percent of the region's or the group's total population. The number of people unable to afford a healthy diet in each region or country group is obtained by multiplying the PUA by the region's or the group's total population. Totals may not match, due to rounding.

SOURCE: FAO. 2026. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/CAHD.
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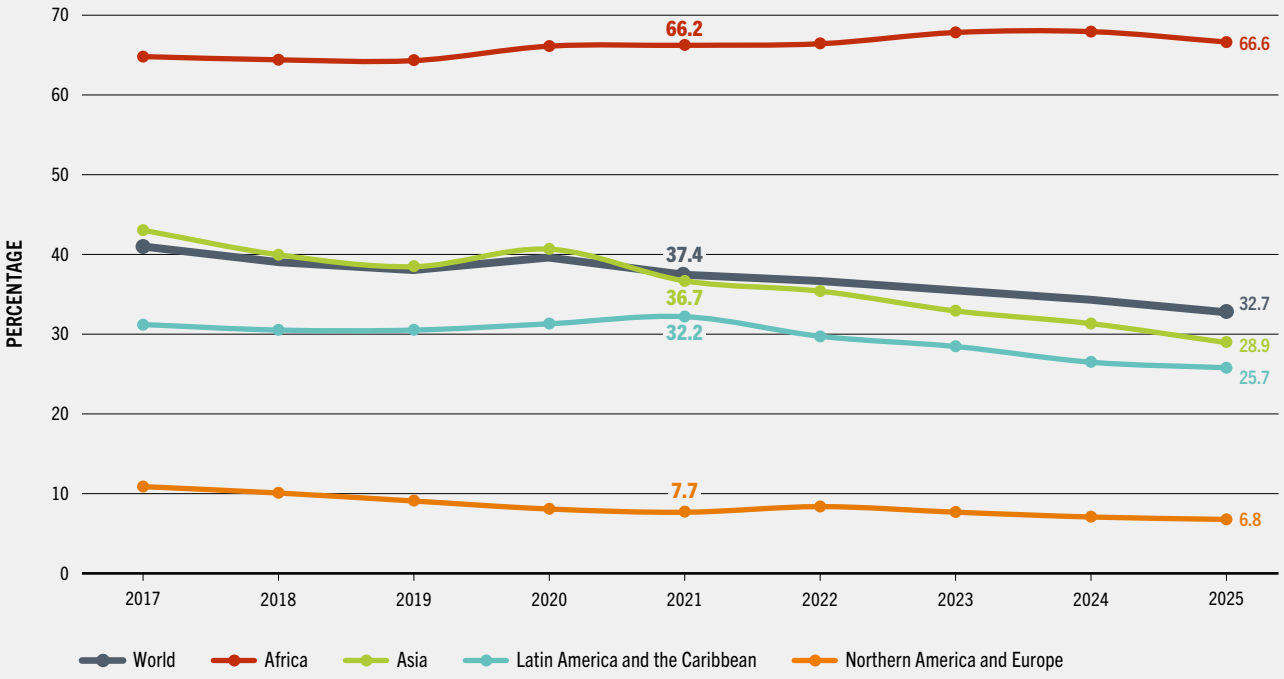
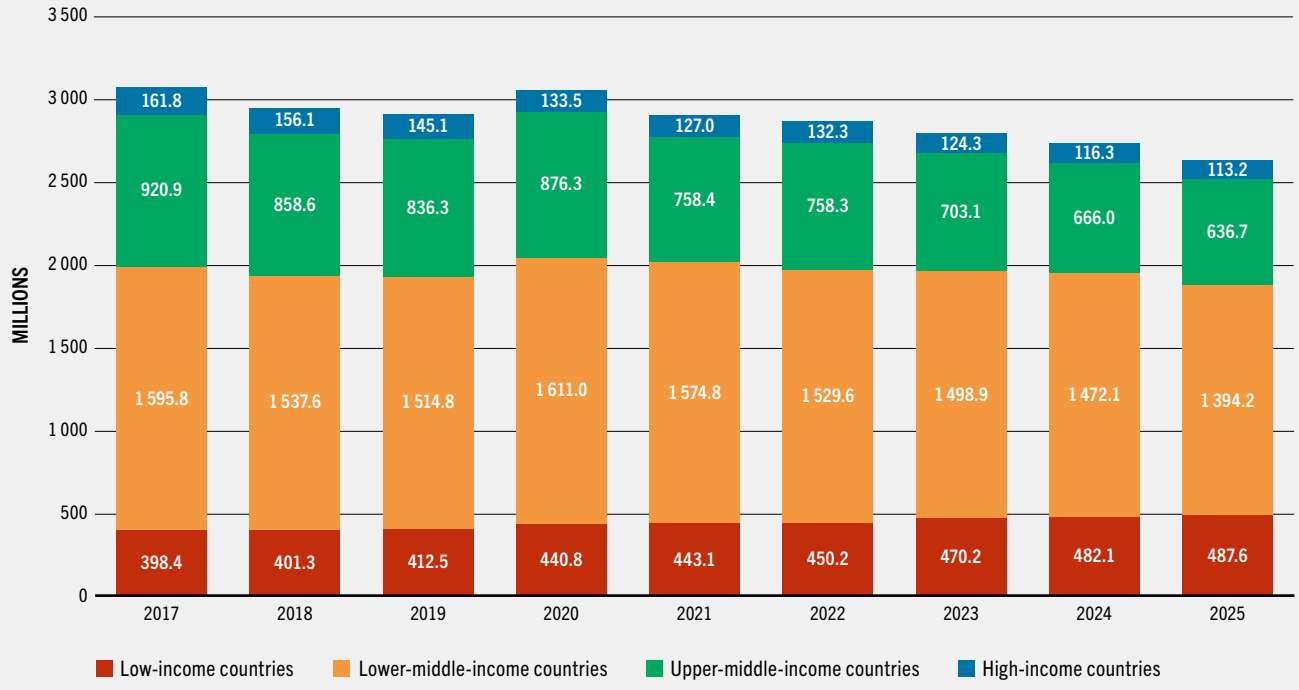
FIGURE 2.9 THE PROPORTION OF PEOPLE UNABLE TO AFFORD A HEALTHY DIET IN THE VARIOUS REGIONS HAS EVOLVED DIFFERENTLY FROM 2017 TO 2025



SOURCE: FAO. 2026. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 21 July 2026]. http://www.fao.org/faostat/en/#data/CAHD. Licence: CC-BY-4.0.

https://doi.org/10.4060/cd8306en-fig2.9

FIGURE 2.10 THE NUMBER OF PEOPLE UNABLE TO AFFORD A HEALTHY DIET IS ON THE RISE IN LOW-INCOME COUNTRIES AND DECREASING IN OTHER COUNTRY INCOME GROUPS



SOURCE: FAO. 2026. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/CAHD. Licence: CC-BY-4.0.

https://doi.org/10.4060/cd8306en-fig2.10

BOX 2.5 ONGOING IMPROVEMENTS IN THE METHODOLOGY FOR ESTIMATING THE COST OF A HEALTHY DIET AND THE PROPORTION OF THE POPULATION UNABLE TO AFFORD A HEALTHY DIET

FAO and the World Bank are continuously making efforts to increase the validity and reliability of the cost of a healthy diet (CoHD) and the prevalence of unaffordability of a healthy diet (PUA) indicators, by considering revisions of the computation methods so that the resulting estimates may better reflect the constructs that they are intended to capture.

For the CoHD, one important revision would be to use a specific consumer price index for the set of foods that more often enter into the Healthy Diet Basket (HDB), rather than the general food consumer price index, as currently done. This improvement would allow the time series of the CoHD indicator to reflect possible differential inflation between the foods that compose healthy diets and the rest of the foods consumed in a country. In this way, the indicator would be able to capture the effect of policies and programmes that aim at altering relative prices to make healthy diets more affordable. In order to implement such a revision at scale, countries would need to make available more granular consumer price index data for food groups relevant to the HDB, enabling more timely and reliable updates of the indicator. At the same time, more frequent and detailed food price data would remain the preferred basis for constructing and regularly updating the CoHD itself.

For the PUA, several revisions are being considered to better reflect differences that exist between countries. Revisions under consideration include:

- the use of country-specific societal poverty lines,[18] instead of global poverty lines, when calculating the income allowance for expenditure on essential non-food goods and services. This would better reflect the differences in the cost of living (and therefore in the cost of essential non-food goods and services) between countries in the same income group.
- scaling the HDB to reflect the actual average daily dietary energy requirement of each country, based on population age, sex and anthropometry data. Currently the HDB is referenced to a basket that supplies 2 330 kilocalories, which corresponds to the estimated average daily energy requirement for an active 30-year-old, non-pregnant woman, and closely approximates the global average daily dietary energy requirement across sex-age groups. It is used to create an HDB that, despite including different food items from each of the six reference food groups, remains quantitatively comparable across diverse markets. It is not intended – and should not be expected – to account for the wide variation in dietary energy needs in a population depending on age, sex, physical activity levels, etc.

» It is also worth noting that 750 million people living in upper-middle-income and high-income countries cannot afford healthy diets (Figure 2.10), reflecting the fact that even in more affluent societies, agrifood systems still fail to make healthy diets universally accessible. The figure also shows an increasing trend in the NUA for low-income countries in contrast to the decreasing trends in the other country income groups.[f]

Refinements in the cost and affordability of a healthy diet indicators are continuously being made to increase their reliability and timeliness (see Box 2.5).

The indicators of economic access to food presented in this section provide an overview of trends since 2017 and a snapshot of the cost and affordability of a healthy diet in 2025. Given the events currently unfolding, this accounting of the situation in 2025 will contribute to monitor the impact of the 2026 conflict in the Middle East on this key dimension of access to food.

The next section turns to one of the key principles of a healthy diet – diversity – and the newest SDG Target 2.2 indicator, which is an important addition to the SDG monitoring framework: minimum dietary diversity. ■

f The decreasing trend in the group of lower-middle-income countries is driven mainly by India. If India is excluded from the group, the estimates show an increasing trend in the number of people unable to afford a healthy diet.

2.3 DIET QUALITY: MINIMUM DIETARY DIVERSITY IN CHILDREN AND WOMEN

KEY MESSAGES

➔ Monitoring healthy diets has been a critical gap in tracking progress towards the achievement of SDG 2. The inclusion of minimum dietary diversity (MDD) in the SDG indicator framework in 2025 marks an important step in filling this gap.

➔ Dietary diversity – one of the four core principles of healthy diets – remains inadequate globally for both children and women.

➔ Only 30.8 percent of children aged 6 to 23 months worldwide consume a minimally diverse diet.

➔ Globally, 62.7 percent of women aged 15 to 49 years consume a minimally diverse diet.

➔ Major data gaps continue to limit a full understanding of dietary diversity in children and women in different parts of the world. Urgent government-led action, supported by partner organizations, is needed to close these gaps and track progress on this important SDG 2 indicator of a key component of healthy diets.

Monitoring healthy diets

Unhealthy diets are a common cause of all forms of malnutrition.[19] Addressing this challenge requires urgent and coordinated actions across multiple sectors to increase access to and enable consumption of healthy diets. Such interventions are essential to improve individual and population health, while simultaneously supporting sustainable food production for the planet. This priority is widely recognized by governments, development agencies, health professionals and other stakeholders worldwide.

Evidence suggests that dietary patterns are changing rapidly almost everywhere, with reduced intake of diverse nutritious foods and increasing consumption of less nutritious so-called ultra-processed foods, increasing the prevalence and consequences of diet-related non-communicable diseases globally.[20–22] Unhealthy diets are among the leading causes of premature mortality from diseases such as diabetes, cardiovascular diseases, stroke and cancer.[23] The same dietary trends are also exacerbating existing challenges of micronutrient deficiencies in all world regions.[24] The agrifood systems that enable such shifting consumption patterns also contribute to loss of agrobiodiversity, intensive use of productive resources, and increased greenhouse gas emissions.[25] True progress towards sustainable development cannot be achieved without addressing these issues,[26, 27] yet until last year, diets have remained unmeasured as part of the SDG framework.

Data on what people eat are urgently needed to better understand current trends, inform priority actions to improve diets, identify the most vulnerable, and track progress over time. While comprehensive, quantitative data on dietary intake from individual-level surveys are ideal to inform needed actions in countries, such data are complex and often costly to collect, and as a result, are collected infrequently or are even lacking for many countries.[28, 29] With this gap, information on food availability at national level or household food acquisition data have been used as alternatives for approximations of dietary intake. Such data are useful for studying some diet-related disease risk factors in populations. Household data can help identify population subgroups that may be at higher risk due to limited food access. National and household data, however, should not be used to track changes in consumption patterns for individuals at risk of malnutrition such as children and women.

In March 2025, the United Nations Statistical Commission approved Minimum Dietary Diversity for Children (MDD-C) and Women (MDD-W) as new indicators for SDG 2 monitoring (SDG 2.2.4).[30, 31] These indicators provide a simple assessment of dietary diversity by counting the number of predefined food groups consumed during the previous 24 hours, at the population level. They have been validated to identify elevated risk of inadequate micronutrient intake among children[32] and women,[33] when reported

food group consumption is below the threshold for the recommended number of food groups, providing a proxy indicator for nutrient adequacy. Data collected to calculate MDD-C or MDD-W can also support food-group specific analyses and provide insights into whether consumption of some food groups may be particularly low in a population. The MDD-C and MDD-W indicators are unique to children and women, respectively, based on assessment of consumption of distinct food groups, and they should not be compared directly. Further, data for the two indicators may have been collected via different data collection platforms, which may limit comparability.

Minimum dietary diversity captures diversity and adequacy which are two of the four principles of a healthy diet, together with balance and moderation.[11] The Healthy Diets Monitoring Initiative (HDMI), a partnership among FAO, the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO), was established in 2022 to seek consensus and advance evidence on other measures to assess the healthfulness of diets including moderation.[34] The HDMI will publish guidance in late 2026 on the state of development of healthy diet measures as well as the current state of evidence for the validity of minimum dietary diversity and other healthy diet measures for other population groups including older children and adolescents. As this additional evidence evolves, current national and global monitoring of minimum dietary diversity only among children and women is justified, given the vulnerability of these population groups to all forms of malnutrition.

Minimum dietary diversity in children

The indicator, Minimum Dietary Diversity for Children (MDD-C), is a longstanding measure, first defined in 2008,[g] when it was validated as a proxy indicator for mean micronutrient density adequacy covering micronutrients such as calcium, folate, vitamin A and zinc.[32] Following a decade of experience implementing this indicator, the definition was revised in 2021.[35] The SDG 2.2.4 MDD-C indicator is defined as the percentage of children aged 6 to 23 months who consumed foods and beverages from at least five out of eight food groups during the previous day (see **Annex 1B** for further details on the methodology).

The eight key food groups are:

- breastmilk
- grains, roots, tubers and plantains
- pulses (beans, peas and lentils), nuts and seeds
- dairy products (milk, infant formula, yoghurt, cheese)
- flesh foods (meat, poultry, fish and organ meats)
- eggs
- vitamin A-rich fruits and vegetables
- other fruits and vegetables

Population-based nationally representative household surveys (e.g. Demographic and Health Surveys [DHS], Multiple Indicator Cluster Surveys [MICS], Standardized Monitoring and Assessment of Relief and Transitions [SMART] surveys, National Nutrition Surveys [NNS]) are the main sources of data used to calculate MDD-C. In these surveys, caregivers are asked to report all the foods and drinks the child consumed in the preceding 24 hours at home and elsewhere. Consumption of any amount of food or beverage from a food group is sufficient to count, i.e. there is no minimum quantity required.

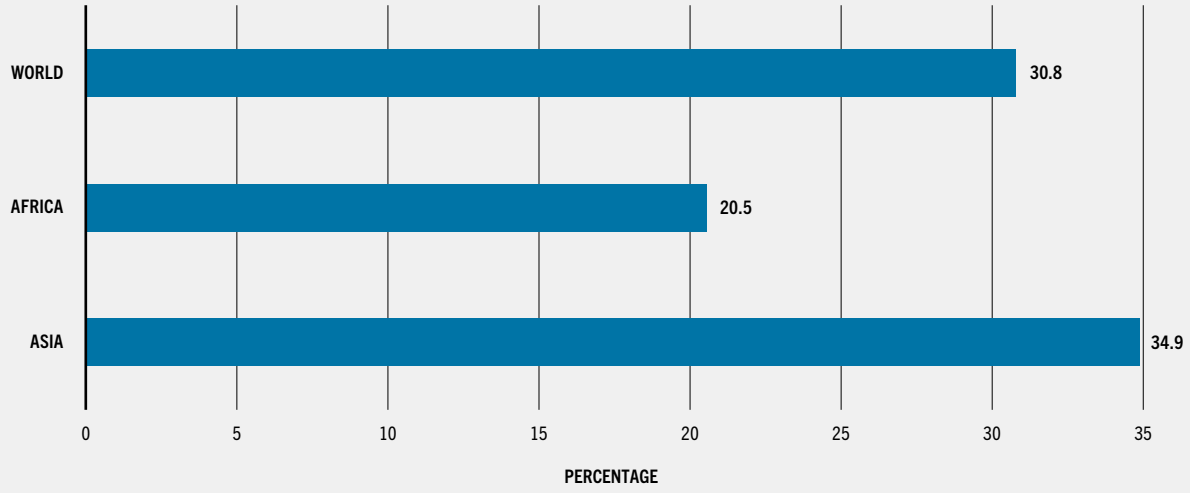
UNICEF regularly collects and reviews data sources containing information on MDD-C for quality assurance and compiles them in the UNICEF Global Database on Infant and Young Child Feeding to support national and global monitoring of MDD-C and inform policy and programmatic action.

Global and regional estimates for minimum dietary diversity in children

Globally, less than one-third of children aged 6 to 23 months (30.8 percent) achieved minimum dietary diversity between 2018 and 2024 – a prevalence level that has remained largely unchanged over the past decade (prevalence was

g The 2008 indicator was defined as the percentage of children aged 6 to 23 months who consumed food and beverages from at least four out of seven food groups. The seven food groups were: grains, roots, tubers and plantains; pulses (beans, peas and lentils), nuts and seeds; dairy products (milk, infant formula, yogurt, cheese); flesh foods (meat, fish, poultry, organ meats); eggs; vitamin A-rich fruits and vegetables; and other fruits and vegetables. This is different from the SDG 2.2.4 indicator on MDD-C, which has been updated to include breastmilk as the eighth food group and has increased the number of foods consumed from at least four to at least five.

FIGURE 2.11 FEWER THAN ONE IN THREE CHILDREN AGED 6 TO 23 MONTHS WORLDWIDE ACHIEVED MINIMUM DIETARY DIVERSITY



NOTES: Based on nationally representative surveys conducted between 2018 and 2024. Estimates are presented only for regions for which data are available for at least 50 percent of children aged 6 to 23 months. Prevalence estimates for the regions were weighted based on the 2024 population of children aged 6 to 23 months (defined as half of population aged 0 combined with population aged 1 year) of each available country (based on the 2024 revision of the United Nations *World Population Prospects*).

SOURCE: UNICEF. 2025. UNICEF: Diets. [Accessed on 23 April 2026]. https://data.unicef.org/topic/nutrition/diets. Licence: CC BY-NC 3.0 IGO.

https://doi.org/10.4060/cd8306en-fig2.11

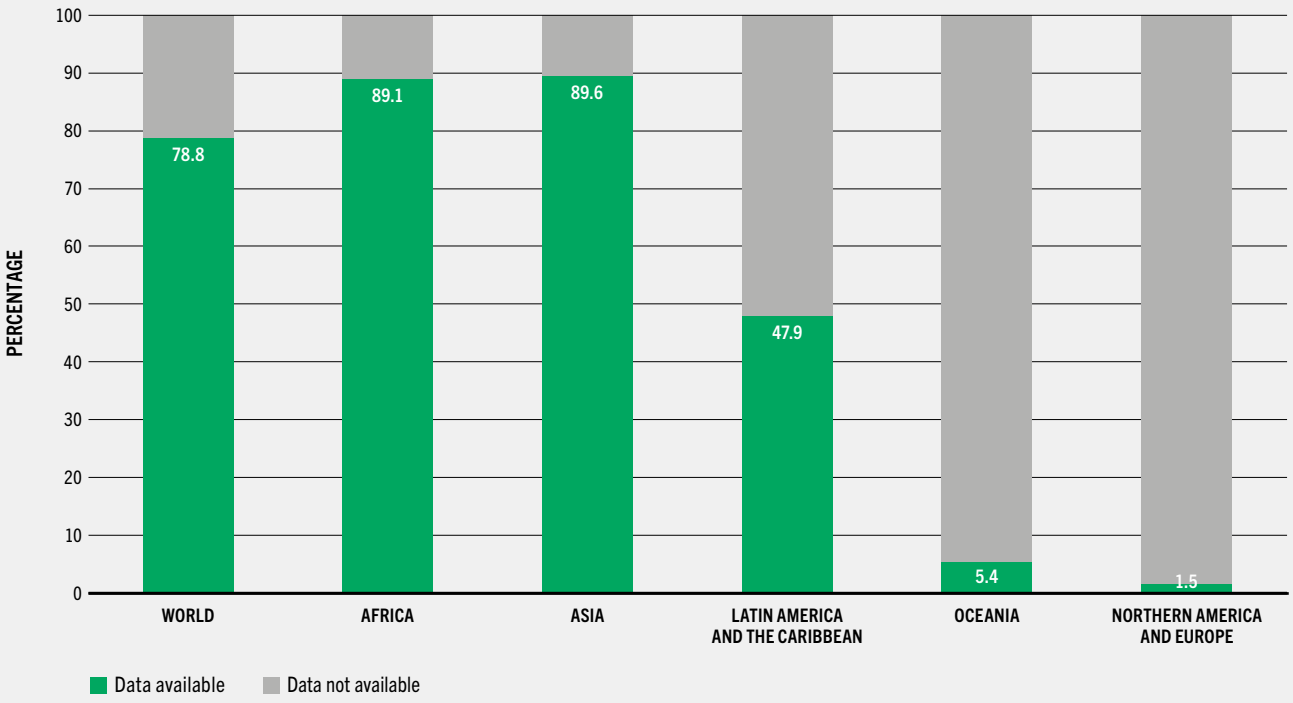
29.4 percent between 2011 and 2017). This means that more than two-thirds of young children worldwide did not consume sufficiently diverse diets, potentially limiting their intake of essential vitamins, minerals and other nutrients critical for healthy growth and development. This is particularly worrisome as nutrient-poor diets are a key determinant for all forms of malnutrition among children. Globally, an estimated 150.2 million children under five years of age are stunted, 42.8 million are affected by wasting (see **Section 2.4** for further details), and obesity has overtaken underweight as the more dominant form of malnutrition among school-age children and adolescents.[36]

Disparities in children's diets are observed across regions. In Africa, only one out of five children aged 6 to 23 months (20.5 percent) achieved minimum dietary diversity, compared to 34.9 percent of children in Asia in the same reporting period (Figure 2.11). Data scarcity, however, prevents the generation of reliable aggregated estimates for the other regions, highlighting the persistent data gaps in global monitoring of children's diets.

Data availability

As of the first quarter of 2026, MDD-C data for the period from 2018 to 2024 were available from 91 countries, representing 79 percent of the global population of children. However, significant data gaps persist across regions. Coverage is particularly limited in Northern America and Europe, and Oceania, where available data – from just four and seven countries, respectively – cover less than 10 percent of the population. Gaps are also evident in Latin America and the Caribbean, where data from 15 countries represent less than half of the region's child population. While data availability is higher in Africa and Asia, sustained investments in national surveys and monitoring systems remain essential to strengthen and maintain countries' capacity to monitor children's diets (Figure 2.12).

FIGURE 2.12 AVAILABLE MINIMUM DIETARY DIVERSITY IN CHILDREN DATA REPRESENT NEARLY 80 PERCENT OF CHILDREN AGED 6 TO 23 MONTHS GLOBALLY, WITH LACK OF DATA AFFECTING SOME REGIONS MORE THAN OTHERS



NOTES: Based on nationally representative surveys conducted between 2018 and 2024. Data were available for this period for 91 countries globally, of which 38 are in Africa, 27 in Asia, 4 in Northern America and Europe, 15 in Latin America and the Caribbean, and 7 in Oceania. Population coverage was calculated as the ratio of the total population of children aged 6 to 23 months in countries with Minimum Dietary Diversity for Children data to the total population of children aged 6 to 23 months in each region and globally, based on the 2024 revision of the United Nations *World Population Prospects*.

SOURCE: UNICEF. 2025. UNICEF: Diets. [Accessed on 23 April 2026]. https://data.unicef.org/topic/nutrition/diets. Licence: CC BY-NC 3.0 IGO.

https://doi.org/10.4060/cd8306en-fig2.12

Minimum dietary diversity in women

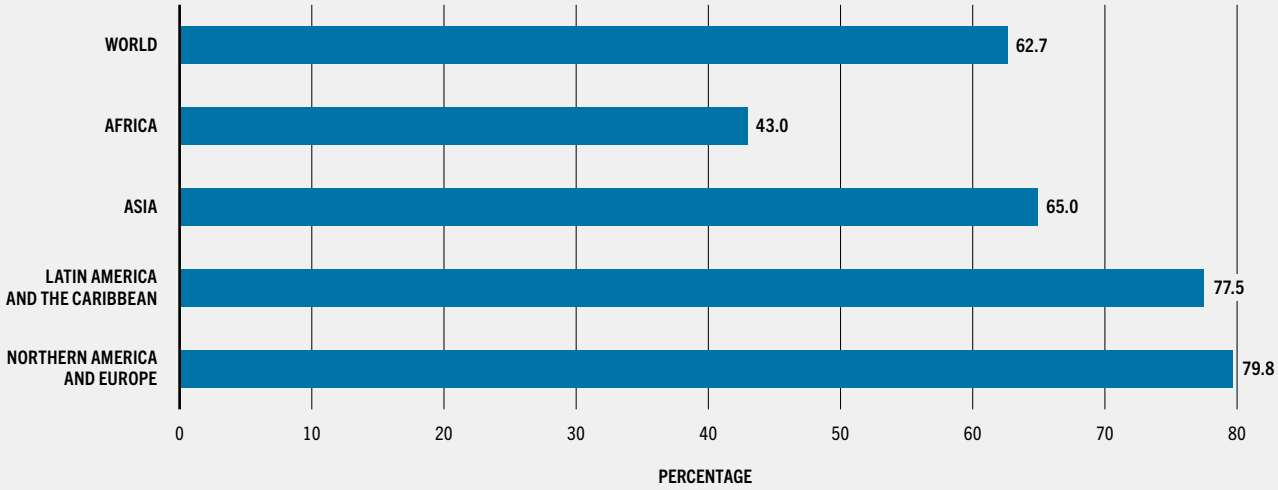
Minimum Dietary Diversity for Women is a simple population-level indicator that measures the proportion of women aged 15 to 49 years who consumed at least five out of ten predefined food groups in the previous 24 hours (see **Annex 1B** for further details on methodology). Evidence shows that women who meet this threshold are more likely to achieve adequate micronutrient intakes than those who consume fewer than five food groups in a day.[33]

Data for computing MDD-W are collected through population-based surveys, with questionnaires administered to women aged 15 to 49 years.

Standard questionnaires are prepared in advance using the ten food groups: grains, white roots and tubers, and plantains; beans, peas and lentils; nuts and seeds; milk and milk products; meat, poultry and fish; eggs; dark green leafy vegetables; other vitamin A-rich fruits and vegetables; other vegetables; and other fruits. These pre-set questionnaires often include locally appropriate "sentinel" or commonly consumed foods from each food group, focusing on food items typically consumed in amounts of at least 15 g (approximately one tablespoon) per day.

MDD-W data have been generated as part of a variety of surveys. For global monitoring, the

FIGURE 2.13 LESS THAN TWO-THIRDS OF WOMEN AGED 15 TO 49 YEARS WORLDWIDE ACHIEVED MINIMUM DIETARY DIVERSITY



NOTES: Based on nationally representative surveys conducted between 2021 and 2025. Data were available for 99 countries, representing 87.5 percent of the global reference population of women aged 15 to 49 years. These comprised 42 countries in Africa, 31 in Asia, 14 in Latin America and the Caribbean, 11 in Northern America and Europe, and 1 in Oceania. Oceania was excluded from the regional analysis due to data availability for only one country. The global and regional prevalence estimates were weighted by the total population of women of reproductive age in each country, based on the 2024 revision of the United Nations *World Population Prospects*.

SOURCE: FAO. 2026. FAOSTAT: SDG Indicators. [Accessed on 21July 2026]. https://www.fao.org/faostat/en/#data/SDGB. Licence: CC-BY-4.0.

https://doi.org/10.4060/cd8306en-fig2.13

data should ideally be nationally representative, while further disaggregation into geographic subregions and demographic or other population subgroups is important to inform national efforts and track progress, including equity considerations. MDD-W is often included in large, standardized surveys such as the DHS and the Gallup© World Poll, as well as in national health, nutrition and food security surveys. MDD-W data are also collected through other platforms like MICS, Living Standards Measurement Study (LSMS) and SMART surveys in some countries. In addition, MDD-W is frequently incorporated into subnational surveys (e.g. rural agricultural surveys) and programme monitoring and evaluations.

Global and regional estimates for minimum dietary diversity in women

A large proportion of women worldwide still lack minimally diverse diets, placing them at higher risk of not consuming sufficient essential micronutrients, aligned with established requirements. Globally, only 62.7 percent of women aged 15 to 49 years achieved minimum dietary diversity between 2021 and 2025, meaning that about one in three did not (Figure 2.13). This is very similar to the prevalence of 65.0 percent reported in the 2025 edition of this report,[37] based on data pooled from 2020 to 2024, and indicates that there has been virtually no progress in improving women's diets worldwide since the reporting period last year.

Disparities in regional estimates were observed, with the lowest percentage of women aged 15 to 49 years achieving minimum dietary diversity observed in Africa (43.0 percent), followed by Asia (65.0 percent) and Latin America and the Caribbean (77.5 percent), while the highest was recorded in Northern America and Europe (79.8 percent).

Beyond its role as an SDG indicator, MDD-W can also be used to inform the design, monitoring and evaluation of programmes, including agrifood

BOX 2.6 USING MINIMUM DIETARY DIVERSITY IN WOMEN IN EVALUATIONS OF AGRIFOOD SYSTEMS INTERVENTIONS

With repeated surveys and/or valid control groups, dietary diversity among women generally, and the Minimum Dietary Diversity for Women (MDD-W) indicator specifically, can capture changes over time or assess the impact of interventions on dietary diversity and consumption of specific food groups, thereby making it a useful tool to assess the nutrition sensitivity of agrifood systems and related investments. Dietary diversity among women was assessed in impact evaluations of development projects financed by the International Fund for Agricultural Development (IFAD). The results provide policy-relevant and programmatic insights into the potential co-benefits and trade-offs of such investments. In these three examples, the continuous food group diversity score (FGDS) was used, rather than the dichotomized MDD-W, which is generated from the same questions about food group intake.

- In Türkiye, a ten-year project (2012–2022) combining watershed rehabilitation with extension services for orchard farmers in rural communities along the Murat River Watershed was associated with a 3 percentage point higher FGDS among women aged 15 to 49 years relative to comparison households at endline.[38] A higher proportion of women in programme households consumed nuts and seeds, meat, poultry and fish, and dark green leafy vegetables, compared to those in control households.
- In Nepal, a climate adaptation project (2014–2022) provided support to smallholder farmers in remote hilly provinces of Karnali and Lumbini through investments in climate-resilient infrastructure, climate-smart agriculture, and diversified production, with an emphasis on commercial vegetable farming and fruit cultivation.[39] The project was associated with a 9 percentage point higher FGDS among women aged 15 to 49 years in participating households compared to women in non-participating communities. A higher proportion of women in participating households consumed nuts and seeds, eggs, vitamin A-rich fruits and vegetables, and other fruits, compared to those in control households.
- In contrast, in Cabo Verde, a water infrastructure investment project (2012–2023) targeting poor rural households on the seven non-tourist islands showed no significant impact on the FGDS.[40]

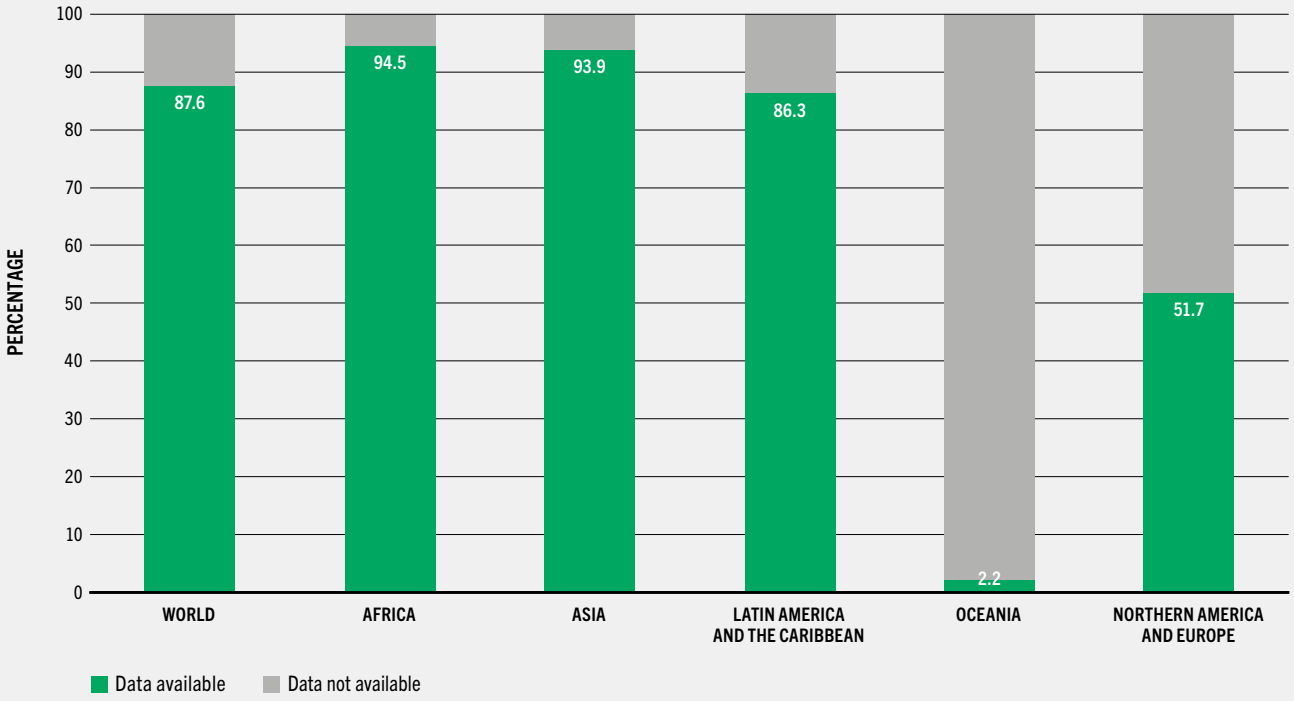
The MDD-W indicator itself has also been used for monitoring programme outcomes. For example, the World Food Programme integrated MDD-W into its corporate results framework in 2017. The indicator is used to monitor outcomes of both "nutrition-specific" prevention-focused interventions and "nutrition-sensitive" conditional cash transfer interventions aimed at improving dietary quality in more than 55 countries.[41] The evidence from such programme monitoring and impact evaluations using FGDS and MDD-W can be used for accountability towards organizations' aims related to nutrition, and can help guide decisions on programme design and targeting, and identify entry points for making the nutrition sensitivity of interventions more effective.

systems interventions (Box 2.6). By capturing the diversity of women's diets within a population, it provides valuable insights into population groups with limited dietary diversity and helps identify under-consumed food groups. This information is critical for designing and targeting interventions aimed at improving access to (in terms of both availability and affordability of nutritious foods) and consumption of healthy diets.

Data availability

As of the first quarter of 2026, MDD-W data were available for 99 countries worldwide, up from 92 countries in the same period in 2024. Figure 2.14 shows that currently available MDD-W data cover 87.6 percent of the global population of women aged 15 to 49 years. Significant data gaps are observed in Oceania, where data are available for only one country, representing just 2.2 percent of the region's population of women of reproductive

FIGURE 2.14 **AVAILABLE MINIMUM DIETARY DIVERSITY IN WOMEN DATA REPRESENT ALMOST 90 PERCENT OF WOMEN AGED 15 TO 49 YEARS GLOBALLY, WITH DATA GAPS AFFECTING SOME REGIONS MORE THAN OTHERS**



NOTES: Based on nationally representative surveys conducted between 2021 and 2025. Data were available for this period for 99 countries globally, of which 42 are in Africa, 31 in Asia, 14 in Latin America and the Caribbean, 11 in Northern America and Europe and 1 in Oceania. Proportions were calculated as the ratio of the total population of women of reproductive age in countries with Minimum Dietary Diversity for Women data to the total population of women of reproductive age in each region and globally, based on the 2024 revision of the United Nations *World Population Prospects*.

SOURCE: FAO. 2026. FAOSTAT: SDG Indicators. [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/SDGB. Licence: CC-BY-4.0.

https://doi.org/10.4060/cd8306en-fig2.14

age. Gaps are also evident in Northern America and Europe, where data are available for only 11 countries, covering 51.7 percent of the population of women in this regional grouping. In Latin America and the Caribbean, MDD-W data cover more than 80 percent of the population of women, although only 14 of the region's 33 countries have data available. In contrast, most countries in Africa (42) and Asia (31) have MDD-W data, representing over 90 percent of the population of women in these regions.

At a time when official development assistance for nutrition and data systems is under increasing pressure, regular data collection is critical. UNICEF and FAO plan to support countries in addressing critical data gaps by strengthening capacity to collect, analyse and report data on MDD-C and MDD-W. This will enable the global community to assess trends, identify inequities, track progress, and guide policies and programmes aimed at promoting healthy and diverse diets for children and women. While monitoring these indicators marks a crucial step towards dietary assessment, sustained investments and efforts are needed to build on this momentum and capture additional dimensions and indicators of healthy diets across all population groups.

Progress on these new SDG 2.2 indicators of dietary diversity has the potential to accelerate

gains towards the global nutrition targets presented in the next section. In fact, MDD-C and MDD-W are included among the six "process indicators" endorsed at the Seventy-eighth WHA because of their potential to accelerate progress on child stunting and low birthweight, respectively (see the spotlight on the new process indicators in **Section 2.4**). ■

2.4 THE STATE OF NUTRITION: PROGRESS TOWARDS THE GLOBAL NUTRITION TARGETS

KEY MESSAGES

➔ In May 2025, the Seventy-eighth World Health Assembly formally extended the Comprehensive Implementation Plan on Maternal, Infant and Young Child Nutrition, including its six 2025 global nutrition targets, to 2030. The extended targets build on national progress made to date, while acknowledging shortfalls, and provide further momentum to accelerate progress, intensify actions and achieve the global targets in the next five critical years.

➔ Global progress on maternal and child nutrition is far too slow – and in several areas it is reversing – leaving the world off track for all 2030 targets.

➔ Stunting, wasting and overweight among children under five years of age, low birthweight and exclusive breastfeeding are improving only marginally at the global level and not at the pace required, while anaemia in women aged 15 to 49 years is worsening.

➔ New estimates of the prevalence of obesity in adults in the world show a steady increase from 12.1 percent in 2012 to 16.2 percent in 2024, contrary to the target of halting the rise in obesity by 2025.

➔ Progress towards the 2030 global nutrition targets is highly uneven across regions. The prevalence of child stunting is decreasing markedly in Africa and is on track to reach the 2030 target in Asia, while exclusive breastfeeding is improving in all regions for which data are available.

➔ On the other hand, nearly all regions are seeing widening gaps between the projected and target prevalence for anaemia in women aged 15 to 49 years, and child overweight is rising sharply in Oceania. Without stronger multisectoral policies and sustained investment, there is a risk of missing key nutrition targets in every region.

➔ As national progress varied across contexts, a set of six evidence-based process indicators with associated operational targets that are achievable, measurable and linked to actions influencing the six core nutrition outcomes were endorsed at the Seventy-eighth WHA. These process indicators help countries direct resources and sustain progress towards the 2030 global targets through targeted policies and programmes.

➔ Global and regional coverage of iron supplementation during pregnancy – one of the six process indicators – remains low, leaving many women vulnerable to anaemia, adverse pregnancy outcomes, and reduced productivity. There is an urgent need for stronger policies and programmes that expand access, and support adherence, to iron and folic acid supplementation.

WHO Member States at the Seventy-eighth World Health Assembly in May 2025 endorsed a resolution formally extending the maternal, infant and young child nutrition (MIYCN) targets by five years to align with the 2030 Sustainable Development Goals.[42, 43] The six MIYCN targets were originally endorsed at the Sixty-fifth WHA in 2012 – reducing child stunting and wasting, anaemia in women aged 15 to 49 years, and low birthweight; not increasing child overweight; and increasing exclusive breastfeeding – with a target year of 2025.[44]

The seventh global nutrition target reported in this section is adult obesity. The WHA advanced the global nutrition agenda further in 2013 by adopting the Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013–2020,[45] which included the objective of halting the rise in adolescent and adult obesity by 2025. Together, these commitments positioned nutrition as a central component of national health and development strategies, with more than 150 countries including these targets in their national policies.[46]

BOX 2.7 THE 2030 GLOBAL MATERNAL, INFANT AND YOUNG CHILD NUTRITION TARGETS

Target 1
40 percent reduction in the number of children under five years of age who are stunted.

Target 2
50 percent reduction in anaemia in women of reproductive age.

Target 3
30 percent reduction in low birthweight.

Target 4
Reduce and maintain overweight in children under five years of age to less than 5 percent.

Target 5
Increase the rate of exclusive breastfeeding in the first six months to at least 60 percent.

Target 6
Reduce and maintain wasting in children under five years of age to less than 5 percent.

NOTE: The 2030 targets are relative to the 2012 baseline.
SOURCE: WHO. 2024. *2025-2030 World Health Assembly global maternal, infant and young child nutrition targets and proposal for process indicators. Results of the online consultation and way forward.* Geneva, Switzerland. https://cdn.who.int/media/docs/default-source/breastfeeding/online-consultation-cip-discussion-paper-responses-2024.pdf?sfvrsn=f0fa14e7_3

The six extended MIYCN targets maintain the same goals for indicators yet to be achieved, namely, stunting and wasting among children under five years of age, anaemia in women aged 15 to 49 years, and low birthweight, while introducing more ambitious goals for indicators that have been nearly achieved – child overweight and exclusive breastfeeding – in order to sustain and accelerate global progress (Box 2.7).

This extension also introduced six new process indicators – representing a significant step towards strengthening accountability and implementation. These process indicators are achievable, measurable, and directly linked to actions that influence the six core nutrition outcomes while strengthening country-level monitoring, reinforcing advocacy efforts, and enhancing collaboration and harmonization of technical support.[47, 48] These process indicators are further explored below under the spotlight on the new process indicators.

This chapter centres on the pivotal five-year window from 2025 to 2030 – a period that will test global commitment to prioritizing and scaling the policies and interventions needed to accelerate progress and achieve the seven global nutrition targets presented below by 2030. In an era marked by geopolitical uncertainty and declining development financing, national leaders will need to navigate complex trade-offs, balancing public health with competing priorities. The returns on sustained nutrition action – measured in human potential, economic productivity and long-term societal resilience – will extend well beyond this five-year window.

Global trends: achieve the 2030 targets

The following section describes global progress for the seven nutrition indicators. Figure 2.15 provides a visualization of the global trends and Table 2.7 details the regional prevalence.

Global **low birthweight** prevalence (the percentage of newborns weighing less than 2 500 g at birth) has shown limited improvement over the past decade, signalling a period of stagnation that threatens progress towards the 2030 target of a 30 percent reduction. From 15.0 percent in 2012, prevalence declined marginally to 14.7 percent in 2020. Current projections indicate that, without significant acceleration, prevalence will reach only 14.2 percent by 2030 compared to the 2030 target of 10.5 percent. »

FIGURE 2.15 DESPITE IMPROVEMENTS IN GLOBAL STUNTING, WASTING AND EXCLUSIVE BREASTFEEDING OVER THE PAST DECADE, THE WORLD IS NOT ON TRACK TO ACHIEVE ANY OF THE SEVEN GLOBAL NUTRITION TARGETS BY 2030

NOTES: The target year to halt the rise in adult obesity is 2025. Methodology to calculate global aggregates and projecting to 2030 can be found in the Supplementary material to Chapter 2.

SOURCES: Data for low birthweight are from UNICEF & WHO. 2023. *Low birthweight joint estimates 2023 edition*. [Cited 23 April 2026]. https://data.unicef.org/topic/nutrition/low-birthweight, https://www.who.int/teams/nutrition-and-food-safety/monitoring-nutritional-status-and-food-safety-and-events/joint-low-birthweight-estimates; data for exclusive breastfeeding are based on UNICEF. 2025. *Infant and young child feeding.* [Cited 23 April 2026]. https://data.unicef.org/topic/nutrition/infant-and-young-child-feeding; data for stunting, wasting and overweight are based on UNICEF, WHO & World Bank. 2025. *Levels and trends in child malnutrition: UNICEF/WHO/World Bank Group Joint Child Malnutrition Estimates. Key findings of the 2025 edition.* New York, USA, Geneva, Switzerland and Washington, DC. [Cited 23 April 2026]. https://data.unicef.org/resources/JME, https://www.who.int/teams/nutrition-and-food-safety/monitoring-nutritional-status-and-food-safety-and-events/joint-child-malnutrition-estimates/latest-estimates, https://datatopics.worldbank.org/child-malnutrition; data for anaemia are based on WHO. 2025. *WHO global anaemia estimates, 2025 edition.* [Cited 23 April 2026]. https://www.who.int/data/gho/data/themes/topics/anaemia_in_women_and_children; data for adult obesity are based on WHO. 2026. Global Health Observatory (GHO) data repository: Prevalence of obesity among adults, BMI ≥ 30, age-standardized. Estimates by country. [Accessed on 15 June 2026]. https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-obesity-among-adults-bmi-=-30-(age-standardized-estimate)-(-). Licence: CC-BY-4.0.

https://doi.org/10.4060/cd8306en-fig2.15

TABLE 2.7 GLOBAL AND REGIONAL TRENDS IN PREVALENCE FOR SEVEN GLOBAL NUTRITION INDICATORS

	Prevalence of low birthweight		Prevalence of exclusive breastfeeding among infants (0–5 months)		Prevalence of stunting in children (<5 years)		Prevalence of overweight in children (<5 years)		Prevalence of wasting in children (<5 years)		Prevalence of anaemia in women (15–49 years)		Prevalence of obesity in the adult population (≥18 years)	
	2012	2020	2012	2024	2012	2024	2012	2024	2012	2024	2012	2023	2012	2024
	(%)		(%)		(%)		(%)		(%)		(%)		(%)	
WORLD	**15.0**	**14.7**	**37.0**	**47.4**	**26.4**	**23.2**	**5.3**	**5.5**	**7.4**	**6.6**	**27.6**	**30.7**	**12.1**	**16.2**
AFRICA	**14.5**	**13.9**	**35.2**	**44.8**	**34.0**	**30.3**	**4.9**	**4.5**	**6.7**	**5.4**	**34.9**	**35.9**	**12.7**	**16.6**
Northern Africa	14.0	14.1	40.9	36.2	23.1	18.1	11.3	8.5	5.4	5.2	29.5	32.0	26.0	31.5
Sub-Saharan Africa	14.5	13.9	34.2	45.6	36.0	32.2	3.7	3.9	6.9	5.5	36.3	36.8	8.4	12.1
Eastern Africa	14.7	14.0	48.5	59.1	38.7	31.2	3.9	3.9	6.1	4.8	27.3	31.4	4.8	8.1
Middle Africa	12.8	12.2	28.4	41.7	37.8	40.1	4.7	5.2	7.0	5.5	44.1	41.7	6.5	9.9
Southern Africa	16.4	16.4	n.a.	n.a.	23.2	24.1	12.3	12.1	3.8	3.0	26.0	31.0	27.3	30.7
Western Africa	14.9	14.3	22.0	34.6	33.8	29.7	2.1	2.2	8.2	6.5	45.2	41.9	8.2	12.8
ASIA	**17.2**	**17.2**	**39.1**	**51.4**	**28.4**	**23.3**	**4.7**	**5.0**	**9.7**	**9.1**	**30.6**	**33.6**	**6.4**	**11.2**
Central Asia	6.3	6.0	29.1	33.1	14.8	7.4	7.7	6.4	3.8	2.1	32.3	32.0	18.1	26.0
Eastern Asia	5.5	5.5	28.5	35.2	7.6	4.8	6.5	10.1	2.1	1.4	15.9	16.0	4.4	9.1
South-eastern Asia	12.8	12.5	33.5	n.a.	30.4	22.7	5.9	4.3	8.1	7.0	26.0	24.2	5.8	10.7
Southern Asia	26.1	24.4	47.2	59.5	40.2	31.4	2.6	3.2	15.1	13.6	45.9	49.3	5.6	10.5
Western Asia	12.2	12.2	31.8	31.0	20.0	18.0	9.1	6.2	4.2	3.5	28.0	28.7	28.9	31.6
LATIN AMERICA AND THE CARIBBEAN	**9.5**	**9.6**	**34.0**	**43.2**	**12.8**	**12.4**	**7.3**	**8.8**	**1.6**	**1.3**	**17.7**	**19.9**	**22.5**	**31.5**
Caribbean	11.4	11.7	29.5	25.0	12.9	12.2	6.4	6.7	3.1	2.9	24.6	29.1	19.5	25.6
Central America	10.9	10.9	21.6	37.9	18.1	17.2	6.5	7.0	1.4	0.9	10.6	13.8	27.9	35.8
South America	8.6	8.8	42.1	49.8	10.1	9.9	7.8	9.9	1.5	1.3	20.0	21.8	20.8	30.2
OCEANIA	**11.3**	**11.8**	**n.a.**	**n.a.**	**19.8**	**20.8**	**11.4**	**20.0**	**n.a.**	**n.a.**	**12.6**	**16.8**	**26.5**	**31.2**
NORTHERN AMERICA AND EUROPE	**7.4**	**7.4**	**n.a.**	**n.a.**	**3.9**	**3.8**	**8.4**	**8.6**	**n.a.**	**n.a.**	**13.2**	**17.3**	**24.6**	**26.5**

NOTE: n.a. = not available.

SOURCES: See sources of Figure 2.15.

» The prevalence of **exclusive breastfeeding** for infants under six months of age has improved significantly since 2012. However, progress is not yet sufficient to meet the updated global ambitions of 60 percent. From a baseline of 37.0 percent in 2012, the global prevalence increased to 47.4 percent in 2024, representing a gain of more than 10 percentage points over 12 years. Projections indicate continued progress, with the prevalence expected to reach 53.6 percent by 2030 if current trends persist. Achieving the target will require coordinated, multisectoral action in the next five years, elevating breastfeeding as a core public health and social protection priority, including national implementation of the International Code of Marketing of Breast-milk Substitutes and subsequent WHA resolutions.[49]

Stunting among children under five years of age has continued to decline globally, but at a pace that remains moderate relative to the global goal of a 40 percent reduction in the number of stunted children. From a baseline of 26.4 percent (180.4 million) in 2012, prevalence decreased to 23.2 percent (150.2 million) in 2024. If current

trends persist, global stunting is projected to reach 21.1 percent (136.3 million) by 2030. While progress is ongoing, it is not occurring at the scale or speed required to achieve the target of 16.8 percent (108.3 million) by 2030 – a decline that is nearly twice as steep as the current trend.

Global progress towards reducing **overweight** among children under five years of age has remained largely stagnant over the past decade, with levels rising slightly from a baseline of 5.3 percent in 2012 to 5.5 percent in 2024. Projections to 2030 suggest only a marginal decline to 5.4 percent, leaving global prevalence above both the 2012 baseline and the 2030 target of maintaining overweight below 5 percent. This gap underscores how the world is not on track to meet the global child overweight target and the pace of change is insufficient to counter rising risks.

The global trajectory of child **wasting** from 2012 to 2030 shows a slow but steady decline, yet one that remains insufficient to meet the internationally agreed target of 5 percent. Starting from a baseline prevalence of 7.4 percent in 2012, global levels decreased to 6.6 percent in 2024. If current trends continue, the global prevalence is projected to fall further to 6.2 percent by 2030. Without urgent efforts over the next five years, the global community risks leaving millions of the most vulnerable children behind.

Global **anaemia** prevalence among women aged 15 to 49 years has not only failed to decline since the 2012 baseline but may have increased, signalling a significant departure from the trajectory required to meet the target of a 50 percent reduction by 2030. In 2012, the baseline prevalence stood at 27.6 percent. By 2023, prevalence had marginally risen to 30.7 percent. If current patterns persist, projections indicate a further increase to 32.6 percent by 2030. Instead of halving the prevalence of anaemia (13.8 percent), the world is moving towards a gap of nearly 19 percentage points by 2030. The widening gap underscores the complex aetiology of anaemia and the profound challenges to monitor, prevent and treat the condition.

Global trends in **adult obesity** (≥18 years) continue to move away from the non-communicable disease (NCD) target of halting the rise in obesity by 2025. Global prevalence was 12.1 percent in 2012. Over the subsequent decade, instead of stabilizing, prevalence had increased to 16.2 percent by 2024 and is projected to rise to 16.6 percent by 2025 and 18.6 percent by 2030. Without a significant acceleration to tackle the magnitude of the challenge, the world is unlikely to realign with the global NCD target, and obesity will continue to impose growing health, social and economic burdens.

Regional progress assessment: accelerate towards 2030

The 2030 global nutrition targets remain within reach over the next five years, but only if governments and nutrition stakeholders significantly intensify and better direct their investments to match political commitments. Yet global averages can obscure substantial regional disparities. Assessing progress through a regional lens is therefore essential, as it reveals where gains are lagging and where acceleration is most urgently needed. This regional progress assessment, covering the period from the 2012 baseline to 2030, highlights the areas requiring the greatest focus to ensure the world collectively meets its nutrition commitments.

Table 2.8 summarizes progress towards the six MIYCN targets by region and Figure 2.16 complements it by illustrating the absolute prevalence gap, in percentage points, that a region must close to achieve the global target (represented by the shaded area in each chart). The adult obesity target beyond 2025 is awaiting formal extension of the NCD plan that includes the 2025 target.

Africa is on track to achieve the child overweight and wasting targets, with projections indicating that both targets will be surpassed by 2030. Although the gaps to the low birthweight, exclusive breastfeeding and stunting targets are expected to narrow relative to baseline levels, the pace of progress remains insufficient to meet the global targets by 2030. In contrast, the gap to target for anaemia is projected to widen – from 17.5 percentage points at the baseline to 18.9 percentage points by 2030 – underscoring persistent challenges related to maternal nutrition, infant feeding practices and chronic undernutrition.

TABLE 2.8 PROGRESS TOWARDS THE 2030 GLOBAL MATERNAL, INFANT AND YOUNG CHILD NUTRITION TARGETS BY REGION

	Low birthweight	Exclusive breastfeeding among infants (0–5 months)	Stunting in children (<5 years)	Overweight in children (<5 years)	Wasting in children (<5 years)	Anaemia in women (15–49 years)
World	Off track	Off track	Off track	Off track	Off track	Off track
Africa	Off track	Off track	Off track	On track	On track	Off track
Asia	Off track	Off track	On track	On track	Off track	Off track
Latin America and the Caribbean	Off track	Off track	Off track	Off track	On track	Off track
Oceania	Off track	Insufficient data	Off track	Off track	Insufficient data	Off track
Northern America and Europe	Off track	Insufficient data	Off track	Off track	Insufficient data	Off track

NOTE: The methodology for assessing regional-level progress towards the global nutrition targets can be found in the Supplementary material to Chapter 2.
SOURCE: See sources of Figure 2.15.

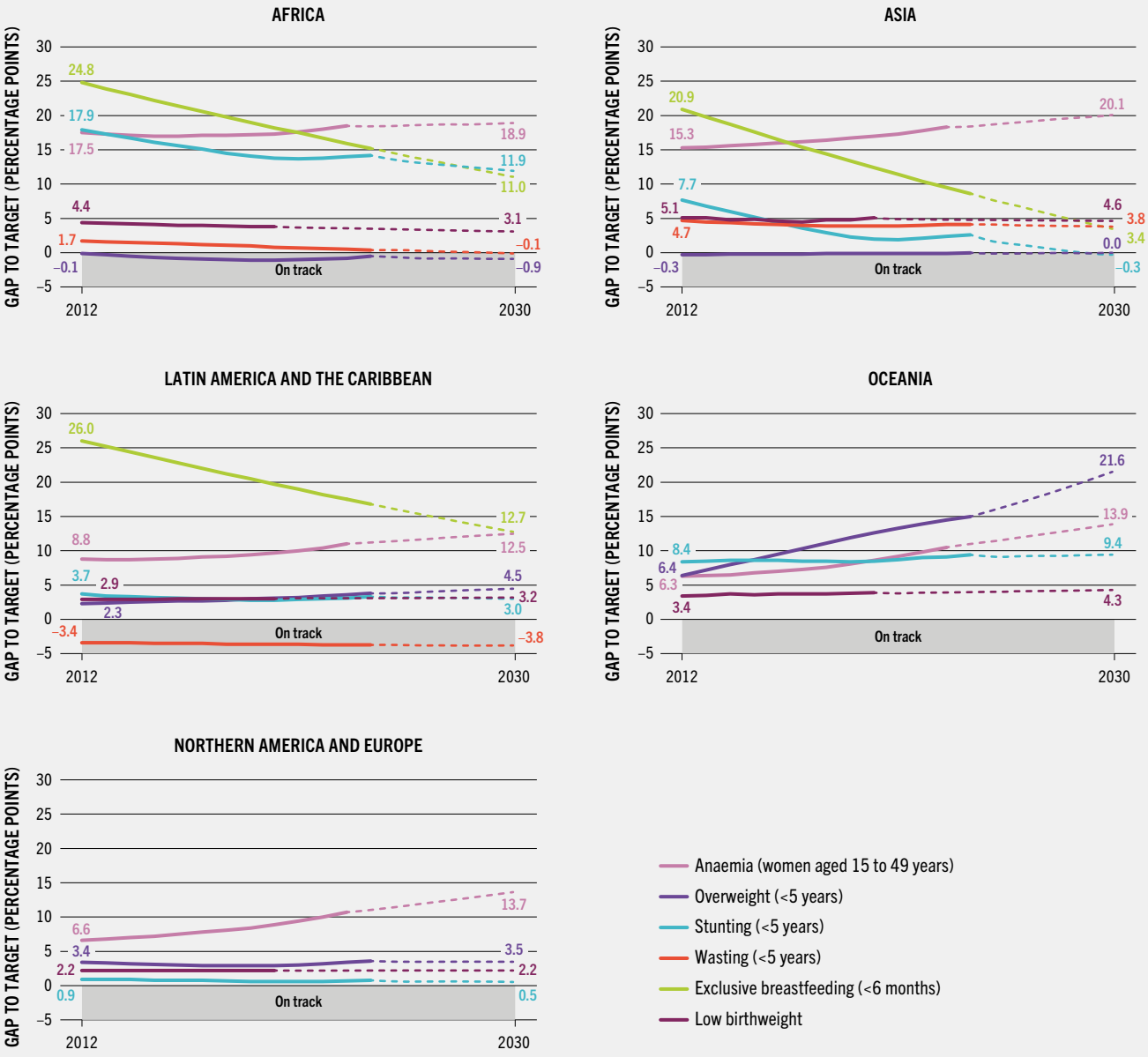
Asia is on track to achieve the global stunting target, with the gap narrowing dramatically from 7.7 percentage points in 2012 and projected to surpass the target by 2030. The region is also poised to meet the global child overweight goal, having successfully maintained a halt in the rise in overweight prevalence since the baseline period. Although the gap to target for exclusive breastfeeding is expected to narrow sixfold – from 20.9 percentage points in 2012 to 3.4 percentage points in 2030 – it remains insufficient to meet the global target. Meanwhile, outcomes for anaemia are projected to deteriorate, with the gap widening from 15.3 percentage points in 2012 to 20.1 percentage points by 2030.

Latin America and the Caribbean is on track to meet the global wasting target by 2030, having already achieved it at the baseline in 2012 and subsequently maintained that progress throughout the decade. In contrast, the gaps to target for child overweight and anaemia in women aged 15 to 49 years are projected to widen by 2030, signalling deterioration in both indicators. The gaps to target for low birthweight and stunting are projected to stagnate, with virtually no change projected through 2030. The region has made meaningful progress towards the global exclusive breastfeeding target – reducing the gap to target by half, from 26.0 percentage points in 2012 to a projected 12.7 percentage points in 2030 – but this improvement remains insufficient to reach the target

Oceania remains off track for four out of six MIYCN global nutrition targets, with assessment of exclusive breastfeeding and wasting not possible due to insufficient data. Of particular concern is child overweight, where the gap to target is projected to triple – from 6.4 percentage points in 2012 to 21.6 percentage points in 2030. The region faces the triple burden of malnutrition, i.e. the coexistence of undernutrition, micronutrient deficiencies and overweight. If current rates of increase persist, the gap to target for stunting will steadily increase from 8.4 percentage points in 2012 to 9.4 percentage points in 2030, and the gap to target for anaemia among women aged 15 to 49 years will more than double – from 6.3 percentage points in 2012 to 13.9 percentage points in 2030.

In **Northern America and Europe**, the gap to target for anaemia is projected to double – from 6.6 percentage points in 2012 to 13.7 percentage points by 2030 – indicating a significant setback to achieving this goal. Despite the presence of several high-income countries, the region

FIGURE 2.16 GAP TO 2030 GLOBAL MATERNAL, INFANT AND YOUNG CHILD NUTRITION TARGETS BY REGION



NOTE: The methodology for assessing gaps to target can be found in the Supplementary material to Chapter 2.
SOURCE: See sources of Figure 2.15.

https://doi.org/10.4060/cd8306en-fig2.16

is expected to narrowly miss the 2030 global stunting target by less than 1 percentage point. The low birthweight trend is stagnant, and concentrated efforts are needed to make progress towards the target. Child overweight is projected to rise, with a widening gap to target over the same period, underscoring the need to urgently address policies that shape agrifood systems and mitigate the overweight/obesity epidemic.

TABLE 2.9 PROCESS INDICATORS AND 2030 OPERATIONAL TARGETS FOR THE WORLD HEALTH ASSEMBLY GLOBAL NUTRITION TARGETS

Global nutrition target	Process indicator	Operational target
Stunting in children under five years of age	% of children aged 6–23 months consuming minimum dietary diversity	Increase by 20%
Anaemia in women aged 15–49 years	% of women consuming at least 90 iron-containing supplements during pregnancy	Increase by 50%
Low birthweight	% of women consuming minimum dietary diversity	Increase by 30%
Overweight in children under five years of age	% of children aged 6–23 months consuming sweet beverages on the previous day	Decrease by 25%
Exclusive breastfeeding of infants under six months of age	% of newborns being put to the breast in the first hour after birth	Increase by 25%
Wasting in children under five years of age	% of caregivers counselled on infant and young child feeding	Increase by 65%

NOTE: The operational targets are relative to the 2025 baseline for most of the indicators.

SOURCE: WHO. 2024. *2025-2030 World Health Assembly global maternal, infant and young child nutrition targets and proposal for process indicators. Results of the online consultation and way forward.* Geneva, Switzerland. https://cdn.who.int/media/docs/default-source/breastfeeding/online-consultation-cip-discussion-paper-responses-2024.pdf?sfvrsn=f0fa14e7_3

Spotlight on the new process indicators: act through policies and programmes

The six process indicators and associated operational targets endorsed at the Seventy-eighth WHA provide context-specific guidance for countries to shape nutrition policies and programmes. These process indicators are measurable, actionable, trackable and evidence-based – ready for implementation. They help countries plan for long-term resource allocation across nutrition-specific and nutrition-sensitive sectors to scale up effectively within their own settings and sustain progress over the remaining years to 2030 and beyond.

Table 2.9 presents the six global maternal, infant and young child nutrition targets alongside their corresponding process indicators and operational targets. Figure 2.17 maps the interconnected pathways between process indicators and nutrition outcomes, highlighting how progress in one area can accelerate gains in others. Thick arrows in the framework show how the global targets reinforce one another, while dotted arrows show how process indicators can become practical entry points for interventions to accelerate progress.

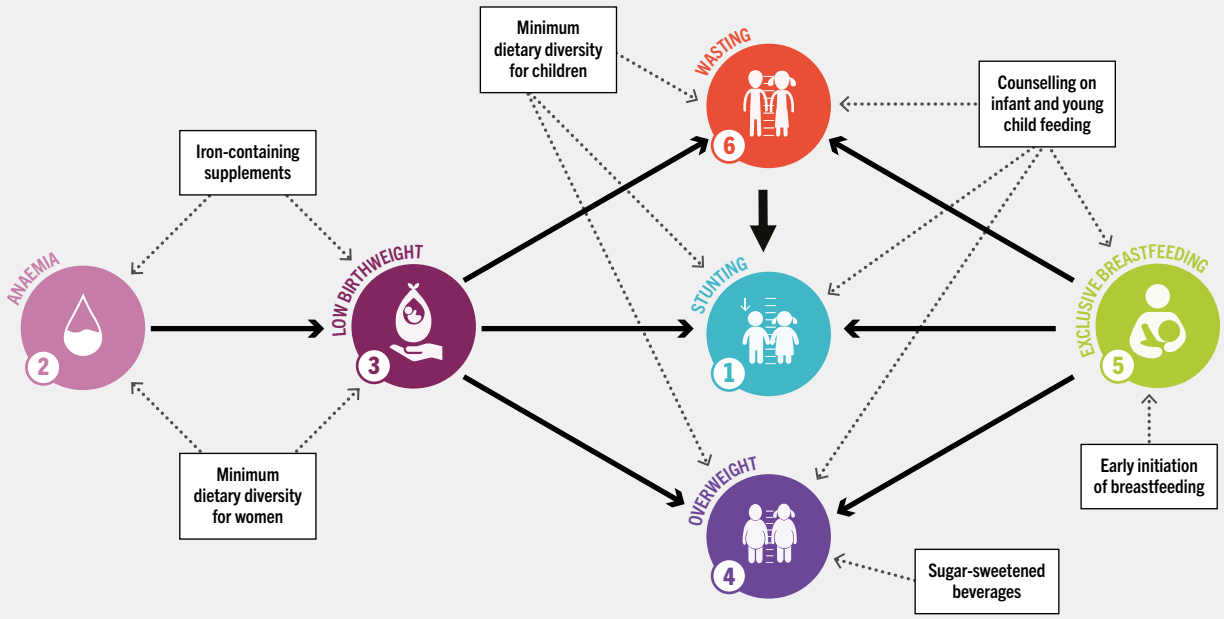
Focus on the process indicator for anaemia in women: iron-containing supplementation

One of the six process indicators that track country progress towards the global nutrition targets is iron supplementation (see Figure 2.17). Globally, the prevalence of anaemia in pregnant women has stagnated, changing only marginally from 35.3 percent in 2012 to 35.5 percent in 2023.[50] Strengthening the monitoring of effective interventions, such as iron supplementation, could provide valuable evidence to guide future actions to accelerate progress.

Anaemia has multiple causes including inadequate nutrient intake, infection, inflammation and excessive blood loss. The World Health Organization recommends daily iron and folic acid supplementation as part of routine antenatal care to reduce the risk of low birthweight, maternal anaemia, and iron deficiency. Improving iron and folic acid intake during pregnancy among women of reproductive age is therefore a critical strategy for enhancing pregnancy outcomes and safeguarding maternal and infant health.[51]

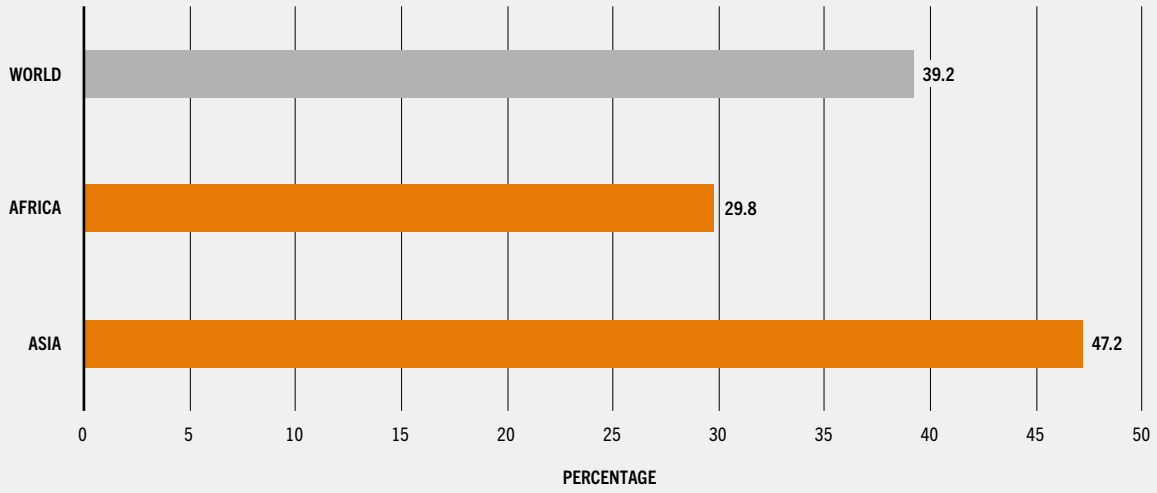
A regional analysis presented in Figure 2.18 shows the proportion of women who consumed any iron-containing supplements for more than 90 days during their current or most recent pregnancy within the past two years. »

FIGURE 2.17 THE 2030 GLOBAL NUTRITION TARGETS FRAMEWORK WITH INTERLINKAGES AMONG THE NUTRITION OUTCOMES AND THE SIX PROCESS INDICATORS



SOURCE: WHO. 2024. *2025-2030 World Health Assembly global maternal, infant and young child nutrition targets and proposal for process indicators. Results of the online consultation and way forward.* Geneva, Switzerland. https://cdn.who.int/media/docs/default-source/breastfeeding/online-consultation-cip-discussion-paper-responses-2024.pdf?sfvrsn=f0fa14e7_3

FIGURE 2.18 GLOBALLY FROM 2015 TO 2025, LESS THAN TWO IN FIVE WOMEN CONSUMED ANY FORM OF IRON-CONTAINING SUPPLEMENT DURING PREGNANCY, PUTTING WOMEN AT RISK DURING PREGNANCY AND RESULTING IN ADVERSE BIRTH OUTCOMES



NOTES: Percentages refer to the proportion of women aged 15 to 49 years consuming iron-containing supplements (90+ days) during pregnancy. Based on 47 countries with Demographic and Health Survey data from the period 2015 to 2025 (61 percent population coverage). Insufficient population coverage (<50 percent) in Latin America and the Caribbean, Oceania, and Northern America and Europe. The methodology used to generate the regional and global aggregates can be found in the Supplementary material to Chapter 2.

SOURCE: DHS Program. 2025. STATcompiler. [Accessed on 23 September 2025]. http://www.statcompiler.com

https://doi.org/10.4060/cd8306en-fig2.18

» Globally, only two in five pregnant women aged 15 to 49 years (39.2 percent) take any form of iron-containing supplement – including iron and folic acid tablets, multiple micronutrient supplements or powders, and iron-only tablets. Where regional population coverage data are available, fewer than one in three women in Africa (29.8 percent) and fewer than one in two in Asia (47.2 percent) report taking any iron supplementation during their current or most recent pregnancy within the past two years. These low coverage levels leave adolescent girls and women of reproductive age vulnerable to complications during pregnancy, adverse birth outcomes, and reduced productivity due to severe fatigue and lethargy.

To address this persistent gap, governments and nutrition stakeholders must intensify efforts to prevent and treat iron deficiency. Priority investment areas include ensuring timely access to antenatal care; establishing clear national policies and programmes on iron and folic acid supplementation; strengthening supply chain systems; improving the quality of counselling and behaviour change communication; and engaging communities to support sustained demand and adherence.

The World Health Organization and key partners are addressing gaps in population-level coverage data by developing guidance to operationalize monitoring of the iron-supplementation process indicator. This work includes strengthening technical capacity to collect high-quality data and improve analysis, thereby supporting the tracking of trends and progress towards the 2030 global anaemia target while ensuring sustainable data availability.

In summary, the overview of the state of food security and nutrition in the world presented in this chapter points to sustained progress in many areas for several consecutive years – a positive momentum which could be at risk, given concerns about the potential impacts of the 2026 conflict in the Middle East and reductions in funding for official development assistance. The new estimates for 2025 point to sustained, gradual improvement in hunger and food insecurity since 2021 and a smaller gap in food insecurity between men and women. Africa and Asia show promising gains on wasting, stunting and overweight, although global progress on maternal and child nutrition is far too slow, and in some cases reversing.

Another positive sign is the decrease in the number of people in the world who were unable to afford a healthy diet in 2025 – a trend that has shown improvement for several consecutive years, despite an apparent increase in the average cost of a healthy diet at the global level. The chapters that follow examine more closely the dynamics that contribute to changes in the cost of a healthy diet and the actions that can be taken to help bring the cost down and improve economic access to nutritious foods. ■

CANADA
An irrigation pivot watering a field of turnips.
© istock.com/Songbird839

CHAPTER 3
UNDERSTANDING THE DRIVERS OF THE COST OF A HEALTHY DIET AROUND THE WORLD

KEY MESSAGES

➔ Healthy diets are essential to achieving Sustainable Development Goal 2 but remain economically out of reach for large segments of the global population. In the context of inflationary pressures and cost of living crises, reducing the cost of a healthy diet is a necessary, but not sufficient, condition to enhance diet quality and thus improve nutrition, health and development outcomes.

➔ Healthy diets are those that meet four core principles. They should be diverse (composed of a variety of nutritious foods across and within food groups), adequate (in essential nutrients and bioactive compounds without excess), balanced (in dietary energy and its main sources, i.e. fats, carbohydrates, proteins) and moderate (in dietary components that are detrimental to health if consumed in excess).

➔ In 2025, the global average cost of a healthy diet (CoHD) was 4.28 PPP dollars, about 40 percent above the international extreme poverty line of 3 PPP dollars (2025 definition). Driven by food inflation, the cost of a healthy diet increased sharply between 2021 and 2025, reflecting widespread supply- and demand-side shocks, with substantial regional variation.

➔ The CoHD indicator is designed for global monitoring and international comparison. It does not aim to provide guidance on dietary composition or to indicate the cost of adequate diets based on the nutritional needs of all individual members of a community.

➔ The CoHD indicator uses price data from a worldwide statistical initiative, potentially limiting the range of food items covered and the frequency of price updates. As a complement to this global monitoring, United Nations agencies are working with national governments to support their own CoHD estimates using national retail food price data.

➔ There are pronounced regional differences in CoHD estimates. These regional patterns are driven by broad structural characteristics rather than a small number of outlier countries.

➔ Animal source foods, fruits and vegetables account for a large share of the CoHD. In contrast, starchy staples contribute relatively little – one-sixth – to the total cost.

➔ Differences in both food basket composition and overall food prices explain cross-country variation in diet costs. Flexibility in selecting locally available, low-cost foods substantially reduces the CoHD, particularly in regions with greater product diversity. At the same time, the CoHD is positively associated with overall food prices (relative to household expenditures). However, at any given level of relative food prices, substantial variation in the CoHD between countries remains. This underscores the distinct feature of the CoHD indicator, which establishes a cost floor for a healthy diet by focusing on the least-cost available items rather than on general food prices.

➔ National and subnational data reveal substantial geographical and seasonal variation in the CoHD. Within countries, annual national averages can mask possibly significant variation over time and across locations. This underscores the importance of using frequent, granular price data to inform well-timed and well-targeted policies.

➔ Structural features of agrifood systems are closely associated with the cost of a healthy diet. Higher agricultural productivity, sustained public investment in agricultural research and development, efficient logistics and transport infrastructure, effective trade integration, and reduced input costs are consistently associated with a lower CoHD, highlighting key policy entry points to improve economic access to healthy diets.

Healthy diets are central to achieving SDG 2 (Zero Hunger), which comprises two targets: ensuring access to safe and nutritious food (SDG 2.1) and ending all forms of malnutrition (SDG 2.2). Unhealthy dietary patterns hinder the world's ability to meet these targets and impose significant health consequences and socioeconomic costs globally. Poor diets were associated with 12.2 percent of all deaths in 2023.[1] Cardiovascular diseases – linked to high sodium consumption and low consumption of important food groups, such as fruits, vegetables and whole grains – were the leading cause of deaths associated with diets. Consuming healthy diets helps prevent all forms of malnutrition and reduce the risk of diet-related non-communicable diseases (NCDs).[2–4] Moreover, there are large economic costs associated with unhealthy dietary patterns, which are linked to a high incidence of NCDs such as heart disease, strokes and diabetes. The hidden costs pertaining to increased risk of these diseases related to unhealthy dietary patterns around the world amount to USD 8.1 trillion annually.[h, 6] These economic costs include lost labour productivity. In 2021, 18 million people died from NCDs before the age of 70 years and 82 percent of these premature deaths occurred in low- and middle-income countries.[7] Reducing avoidable mortality leads to substantial economic gains: for cardiovascular diseases alone, they are estimated at 2 to 8 percent of annual income.[8] The impact goes beyond the current workforce. Inadequate diets during childhood can lead to undernutrition, which is linked to impaired cognitive and physical development, lower educational attainment and reduced lifetime earnings.[9, 10] As populations age,[i] fewer working-age people will support a growing number of older individuals, raising the economic costs of premature mortality. Thus, reducing preventable dietary risks and ensuring access to a healthy diet is important not just for public health but also for supporting a productive workforce, easing long-term fiscal pressures on healthcare systems, and building human capital across generations.

Several factors determine the consumption of healthy diets. These include the cost of the items that shape such diets. Additionally, household incomes (particularly when considered relative to the CoHD), as well as non-cost-related factors that influence people's physical access to food and food-related decisions and choices, are critical determinants of healthy diet consumption. The structure of a country's agrifood systems, as well as general food environments, shape consumption by influencing food prices; they also govern the physical availability of items, the convenience and marketing conditions under which choices are made, and the social norms that frame those choices.[j] These factors do not operate in isolation, but interact in complex ways that vary across countries and contexts.

Household incomes and non-cost-related factors influence the choice to consume healthy diets. Household purchasing power may determine which foods households can buy. For example, low-income populations are less able to afford nutrient-rich food items from groups such as animal source foods, and are more likely to consume items from food groups that have lower prices.[k, 16, 17] Consumers' preferences,[18] nutritional knowledge[19] and women's empowerment to decide over the allocation of resources within their households[20] also play an important role in shaping the consumption of healthy diets. Other factors, such as convenience, input requirements, and time for meal preparation,[21, 22] also affect households' food consumption choices.

h Analysis done by WHO also highlights the importance of reducing the incidence of NCDs. Their calculations suggest that, between 2025 and 2030, targeted investments to prevent and manage NCDs could save over 12 million lives and generate economic gains exceeding USD 1 trillion globally.[5]

i The global population aged 60 years and over is projected to double from 1 billion in 2020 to 2.1 billion by 2050, with the increase most pronounced in low- and middle-income countries.[11]

j Relatedly, WHO (2024)[12] identifies a set of cost-effective and feasible interventions – its "best buys" – for reducing unhealthy diets. These comprise six measures: reformulating food and beverage products to make them healthier (for example, eliminating trans-fatty acids and reducing saturated fats, free sugars and sodium); front-of-pack labelling to help consumers choose healthier foods; public food procurement and service policies that promote healthy diets; behaviour-change communication and mass-media campaigns; policies to protect children from the harmful effects of food marketing; and the protection, promotion and support of optimal breastfeeding practices.

k When household incomes increase, diets tend to improve and become more diverse. A review of different cash transfer programmes around the world suggests that supplementing incomes of vulnerable households with children increases households' consumption of animal source foods and dietary diversity.[13] This is consistent with evidence (see, for example, Almås *et al.* [2019])[14] of higher-income elasticities for animal source foods (a food group with low consumption levels in low- and middle-income countries).[15]

Agrifood systems and food environments shape the availability of the food items that make up a healthy diet. Agrifood systems encompass the entire range of actors – and their interlinked value-adding activities – engaged in the primary production of food and non-food agricultural products, as well as in storage, aggregation, post-harvest handling, transportation, processing, distribution, marketing, disposal and consumption of all food products including those of non-agricultural origin.[23] While the world produces enough food to sustain a growing population, it does not deliver sufficient nutritious and safe foods that contribute to healthy diets to every individual. Shortfalls are particularly pronounced for fruits, vegetables, and legumes, nuts and seeds, and there are large regional disparities in the availability of animal source foods.[24] Food environments, which link consumers to agrifood systems, are key determinants of consumers' physical access to a variety of both nutritious and nutrient-poor foods.[25] This has been clear, for example, with the "supermarket revolution",[26, 27] which has had both positive and negative effects for consumers in developing countries. On the one hand, it has helped increase the diversity and affordability of foods, but at the same time, it has also led to a higher availability of energy-dense, nutrient-poor processed foods.[28–32]

This report focuses on the average cost of a healthy diet and the food groups that compose it, exploring how they differ across regions of the world. It is built on the seminal work in *The State of Food Security and Nutrition in the World 2020*,[33] which introduced the concept and provided the first global estimates. In the global context of food inflation, it also follows *The State of Food Security and Nutrition in the World 2025*,[34] which analyses global food price inflation, both in general and for the food groups that compose healthy diets. While all the factors mentioned above are important for understanding and promoting the consumption of a healthy diet, this year's edition extends the analysis to examine differences in costs (and the shares of the different food groups that make up these costs) across countries and regions. It also offers insights on the structural factors that might explain them. It is relevant to focus on cost because the "price tag" of a healthy food basket is one of the first signals perceived by consumers, an important driver[l] of healthy diet consumption and a critical lever for food and agricultural policy.[m] By focusing on the supply-side determinants of prices, including agricultural productivity, trade infrastructure and value chain efficiency, this report examines which factors are associated with higher costs and what policy options may help reduce the average cost of a healthy diet. From a political economy perspective, and in the context of inflationary pressures[34] and the rising cost of living faced by households around the world, well-targeted cost-reduction strategies are highly appealing to governments and deliver visible outcomes for citizens.

Several dimensions related to healthy diets fall outside the scope of this report. An important distinction is that the report focuses on the average cost of a healthy diet and its components at the national level, thus abstracting away from the role of income distributions (net of the amount needed to acquire all basic non-food goods and services) in shaping their affordability. In line with its focus on cost, the report mostly abstracts away from demand-side factors such as incomes, non-cost-related factors that influence people's physical access to food and food-related decisions and choices (including consumer preferences and dislikes, food and nutrition education, skills and beliefs), food environment interventions, and other socioenvironmental factors. Additionally, the report focuses on the market valuation of Healthy Diet Baskets (HDBs) and does not adopt a true-cost accounting framework that would capture environmental and social externalities, though insights from *The State of Food and Agriculture* reports[6, 39] help contextualize these broader costs. FAO's forthcoming report on healthy diets (see Box 3.1) will address many of these complementary dimensions. »

l Several studies find that rebates, discounts and coupons are effective to encourage the consumption of fruits and vegetables,[35–37] suggesting that costs are an important barrier to the consumption of nutrient-dense (but more expensive per kilocalorie) foods. In a metanalysis of such studies, Huangfu *et al.* (2024)[38] conclude that "price reductions can lead to increases in purchases of fruit and vegetables, potentially sufficient to generate health benefits, if sustained".

m Other factors that determine the consumption of healthy diets, such as household incomes and consumer preferences, are less directly influenced by food and agricultural policies alone and require wider social and macroeconomic interventions.

BOX 3.1 PREVIEW OF FAO'S FORTHCOMING REPORT ON HEALTHY DIETS

Attention to healthy diets is both justified and timely. However, data and evidence limitations remain. Policies have advanced in many countries, particularly those designed to deter consumption of energy-dense nutrient-poor foods,[12] but comprehensive policies and investments with true potential to enable lasting access to and consumption of diverse nutritious foods as part of a healthy diet are still elusive in many countries. At the same time, growing attention to healthy diets has generated a proliferation of terms, tools, data and approaches, presenting an important opportunity to align concepts and consolidate evidence to better inform action. Healthy diets remain economically inaccessible for an estimated 2.7 billion people, with 76 percent of people in low-income countries priced out (see **Section 2.2**); moreover, consumers may not be choosing a healthy diet, even when affordable.

In this context, FAO will publish a high-level report on healthy diets in late 2026, bringing together the current state of data and evidence across a broad range of related factors. The report aims to advance consensus and understanding of what it will take to enable access to and consumption of healthy diets, and to inform concrete actions to do so. The report will provide a comprehensive yet accessible overview of recent data and evidence, backed by several expert reviews, and benefiting from collaboration across FAO's areas of expertise. It follows the updated vision and approach for FAO's work in nutrition (VAN) 2025–2031,[40] which articulates FAO's deep commitment to addressing the key constraints across the supply and demand for healthy diets, and the enabling environment needed to achieve progress.

Specifically, the high-level report on healthy diets will:

- present the state of the rapidly evolving evidence and conceptual understanding of healthy diets, including guidance on the use of terminology bridging food security, healthy diets, and nutritional status;
- critically review and summarize multiple forms of evidence and information, spanning dietary intake, dietary guidelines, Indigenous Peoples' food and knowledge systems, and emerging measurement methods and proxy indicators for diets and dietary patterns;
- outline evidence on healthy diet implications on human health and economic outcomes globally, and in key contexts such as protracted crises, and in the context of climate variability and extremes;
- describe how agrifood systems can sustainably supply nutritious foods for healthy diets through policy coherence, fiscal instruments, and supply-chain innovation;
- highlight evidence clarifying what it would take for people to be able to choose a healthy diet, noting the affordability constraints and providing an in-depth review of factors influencing food-related decisions beyond economic;
- provide evidence-based deep dives into contested, current topics – so-called "superfoods" and nutrients, ultra-processed foods, and animal source food alternatives – for greater consensus and progress for all stakeholders moving forward; and
- propose targeted recommendations to address the data, evidence, policies, actions and investments needed to enable access to and consumption of healthy diets for all.

This new report on healthy diets will build on the long history of high-level publications at FAO (particularly *The State of Food Security and Nutrition in the World* flagship report). It also complements efforts from other United Nations agencies (such as the World Food Programme's Enhance platform or the Healthy Diets Monitoring Initiative of FAO, the United Nations Children's Fund and the World Health Organization) that inform about the cost of a healthy diet around the world. The report will dive deep into the world of healthy diets, mobilizing data and evidence for policymakers and stakeholders across sectors, aiming to highlight both the imperative and the opportunities to act in order to enable access to and consumption of healthy diets for all.

» Given the relevance of the cost of a healthy diet as an indicator for both consumers and policymakers, this chapter explains how the indicator is constructed (**Section 3.1**) and how it should be interpreted. It then examines why the cost of a healthy diet differs across regions (**Section 3.2**) and assesses the extent to which using more granular national and subnational price data can yield more targeted insights and policy-relevant recommendations (**Section 3.3**). Finally, the chapter identifies the key structural drivers that help explain variation in the cost of a healthy diet across countries and food groups (**Section 3.4**). ■

3.1 MEASURING THE COST OF A HEALTHY DIET

What is a healthy diet?

A healthy diet promotes optimal health, growth and development; supports active lifestyles; prevents nutrient deficiencies and excesses, NCDs and foodborne illness; and promotes a population's overall well-being. While the exact composition of a healthy diet varies across people, cultural contexts and communities, and depends on, *inter alia*, an individual's age and activity level, preferences and beliefs, traditions, religion and income, as well as on the availability and affordability of foods, FAO and WHO (2024)[41] identify four core principles that are universal in their application, based on human biology and underpinned by evidence. Healthy diets are:

- **adequate** – providing enough essential nutrients to meet nutrient requirements, prevent deficiencies and promote health, without excess;
- **balanced** – in energy intake and the three primary energy sources (carbohydrates, proteins and fats) to promote healthy weight, growth and disease prevention;
- **diverse** – including a wide variety of nutritious foods within and across food groups, to favour nutrient adequacy and consumption of other health promoting substances; and
- **moderate** – in foods, nutrients and other compounds associated with poor health outcomes, such as free sugars, sodium, saturated fats and trans fats.

Additionally, diets can be healthy only if the foods are safe. Food safety is critical to healthy diets because "without the assurance of safety, diets cannot nourish and will instead cause illness" (p. 23).[42] Foods and beverages are considered safe if they do not cause adverse health effects in consumers when prepared and/or eaten.[41] Food safety ensures the prevention of foodborne diseases and the efficient utilization of nutrients.

From concept to measurement: the cost of a healthy diet indicator

Over several decades, researchers have developed methods to estimate the average cost of specific diets at national and subnational levels for different intended uses. An established element of these efforts is food price monitoring. National statistical offices have long tracked the prices of commonly consumed foods to measure inflation and compute consumer price indices. To do so, they define baskets of items that capture what is most frequently consumed by the population. However, such baskets may not be appropriate to cost a normatively defined "healthy" diet.

Other approaches aim to identify the cheapest combination of foods that meet a set of nutrient requirements. The concept of least expensive ("least-cost") as a benchmark for a diet was first proposed by Stigler (1945),[43] who sought to identify the cheapest combination of foods meeting a set of nutrient requirements. This concept has since been applied to different definitions of dietary quality and standards, producing varying cost estimates.[44, 45] One such benchmark, the cost of caloric adequacy (CoCA), estimates the cost of a hypothetical diet that provides the amount of kilocalories for energy balance at a given level of physical activity and body size, relying only on the least-cost starchy staple in each country. Another, the cost of nutrient adequacy (CoNA), estimates the cost of a hypothetical diet that provides, not only enough kilocalories, but also adequate levels of all essential nutrients – carbohydrates, proteins, fats, vitamins and minerals – within the upper and lower bounds needed to prevent deficiencies and avoid toxicity.[n] FAO has developed DietSolve,

n FAO *et al.* (2020)[33] finds that the CoHD was, on average, 60 percent higher than the cost of a nutrient adequate diet and almost 5 times the cost of an energy sufficient diet by 2017.

a diet optimization tool to aid low- and middle-income countries in translating nutrient requirements into recommended dietary patterns.[46, 47] The World Food Programme (WFP)'s Fill the Nutrient Gap analysis, introduced in 2016, applies a related approach using linear programming software to estimate least-cost nutrient-adequate diets for specific population groups (e.g. young children or pregnant women), taking into account subnational market prices, local dietary practices and seasonal variation. In 2023, WFP transitioned to the Enhance analytical platform, which supports multi-objective optimization to estimate nutrient-adequate and healthy diet baskets, including those aligned with national dietary guidelines, also known as food-based dietary guidelines, while minimizing cost, environmental impacts and deviation from current consumption patterns.[o, 48, 49]

The HDB – the benchmark for calculating the CoHD indicator discussed in this report (see Section 2.2) – is a combination of locally available foods that meet energy and most nutrient requirements. Introduced in *The State of Food Security and Nutrition in the World 2020* for global monitoring,[33, 44] the HDB specifies a total daily dietary energy requirement target, dietary energy shares for six different food groups, and the number of food items from each. The food groups and energy requirements are based on common elements found in quantified dietary guidelines worldwide.[p] Because dietary guidelines are not currently available in every country and for the purpose of cross-country comparability of the resulting CoHD, the HDB is calibrated so that the food items from various food groups contribute to these shares and jointly provide a dietary energy intake of 2 330 kilocalories (kcal) (see Box 2.5 in **Chapter 2**).[q, 44] More specifically, the HDB comprises 11 food items spread across six food groups,[r] each contributing a determined share. Starchy staples contribute the largest share (50 percent or 1 160 kcal, from two items), followed by animal source foods (two items), legumes, nuts and seeds (one item), and oils and fats (one item), with each of these three groups contributing 300 kcal. Fruits contribute 160 kcal from two items, and vegetables contribute 110 kcal from three items (Table 3.1). To select the actual food items that compose an HDB in each country, the items in each of these food groups are compared in terms of their price per kilocalorie, and the least-cost ones are chosen. As the relative prices of different items vary across countries, the least-cost items that compose the HDB will differ by country (see **Annex 1B** for details).

The CoHD is estimated using retail food price data from the International Comparison Program (ICP), coordinated by the World Bank, which is based on a dataset of comparable items across countries.[51] The ICP periodically collects standardized item-level retail food prices from national statistical offices and includes prices from a core global list of comparable items applicable to all participating countries. It also includes the prices of an additional set of items from region-specific lists, in order to balance international comparability with local product availability.[s] The most recent rounds of data collection were in 2011, 2017 and 2021. Retail prices from this dataset are converted to prices per kilocalorie using each item's edible portion and energy

o Enhance was developed by WFP in partnership with the Zero Hunger Lab of Tilburg University, Capgemini and Johns Hopkins University. The platform enables rapid, scalable and transparent least-cost diet analyses across large datasets spanning multiple countries or regions, seasons and population groups. It integrates expanded data sources, including food composition tables, nutrient requirements for specific groups such as children with moderate acute malnutrition, and environmental footprint indicators (water use and greenhouse gas emissions).

p Not all countries have dietary guidelines, and those that do often lack quantifiable recommendations for food quantities and kilocalories. To address this and develop a global standard, the HDB is based on standardized recommendations derived from commonalities across ten quantified dietary guidelines and thirty semi-quantified food guidelines, reflecting a wide array of dietary preferences and recommendations representative of different world regions.[50]

q The figure of 2 330 kcal roughly corresponds to the energy needs of an active, 30-year-old, non-pregnant woman of median height and weight and is taken as a common reference to ensure comparability of the HDB, in quantitative terms, as a basket of items to compute the CoHD.

r Not all food items in the ICP dataset are eligible for selection as least-cost items when computing the cost of a healthy diet. Specifically, "excluded items included those that were non-caloric, ingredients, condiments, baby food, items with unclear composition and foods not recommended as part of a healthy diet, such as trans fats, sugar-sweetened beverages and processed meats" (p. 629).[50] As a result, products such as instant noodles, potato chips, chicken nuggets and canned fruit in syrup are not eligible to be part of HDBs.

s Region-specific lists are coordinated by the ICP's regional implementing agencies. These are the African Development Bank, the Asian Development Bank, the Interstate Statistical Committee of the Commonwealth of Independent States, the United Nations Economic Commission for Latin America and the Caribbean, the United Nations Economic and Social Commission for Western Asia, and the Statistical Office of the European Union with the Organisation for Economic Co-operation and Development.

TABLE 3.1 COMPOSITION OF A HEALTHY DIET BASKET BY FOOD GROUP

Number of items	Number of items	Food energy	
		Quantity	Share
		(kcal)	(%)
Starchy staples	2	1 160	49.8
Animal source foods	2	300	12.9
Legumes, nuts and seeds	1	300	12.9
Oils and fats	1	300	12.9
Fruits	2	160	6.9
Vegetables	3	110	4.7
TOTAL	11	2 330	100.0

NOTES: In food groups where the Healthy Diet Basket (HDB) includes two or three items, each one provides an equal share of the dietary energy requirements; for example, in the case of vegetables, each of the three items in the HDB would provide 110/3 = 36.7 kcal. Percentages may not sum to 100 due to rounding.

SOURCE: Adapted from Table 4 in Herforth, A., Venkat, A., Bai, Y., Costlow, L., Holleman, C. & Masters, W.A. 2022. *Methods and options to monitor the cost and affordability of a healthy diet globally – Background paper for The State of Food Security and Nutrition in the World 2022*. FAO Agricultural Development Economics Working Paper 22-03. Rome, FAO. https://doi.org/10.4060/cc1169en

density from standard food composition tables. Following the guidelines in Table 3.1, the least-cost items and the quantities needed to contribute to the specified kilocalorie target from each food group are identified to build each country's HDB. Once this HDB has been defined, computing the CoHD is a straightforward exercise of summing up the costs associated with the quantities of each of the included food items.

For global comparability, the CoHD is reported in purchasing power parity (PPP) dollars. As ICP retail food prices are collected in local currency units (LCU), the CoHD is first computed in local currency and then converted from local currency units to international dollars using PPP conversion factors for private consumption. Purchasing power parities are factors that translate different currencies into a common unit while adjusting for price level differences across countries. In practical terms, PPPs measure how much local currency is needed in each country to purchase a basket of goods and services comparable to that obtained with one US dollar in the United States of America, the reference economy.[52] The CoHD uses PPP conversion factors rather than market exchange rates. Market exchange rates are set by the supply of and demand for currencies in foreign exchange markets, driven largely by capital flows and financial transactions. As a result, market exchange rates reflect more than the differences in price levels between countries. By contrast, PPPs provide a direct measurement of price level differences.[53] Expressed in PPP terms, the CoHD indicator reflects differences in prices across food groups and across countries on a common basis, enabling comparisons worldwide.

What the cost of a healthy diet is and what it is not

The CoHD is a cost benchmark. It captures the average minimum budget required to purchase a healthy diet composed of locally available foods in each country. It should be seen as a theoretical cost floor and not necessarily a realistic estimate of what healthy eating costs in practice. As such, the CoHD indicator does not measure, nor is it meant to reflect, the following:

- **What people actually eat and spend on food:** The CoHD does not measure what or how much food people actually buy and consume. National statistical offices create metrics (such as the food consumer price index) that provide insight into these patterns, usually as part of tracking domestic food inflation based on the changing costs of frequently purchased and consumed food items.

- **Food preferences, cultural norms or dietary restrictions:** The CoHD refers to a hypothetical least-cost diet. It does not reflect different food and taste preferences, cultural norms, dietary restrictions, convenience, perceived quality, marketing, or other factors that determine actual diets. In practice, consumers do not always purchase the least-cost options or the healthy ones. There are other methodologies that incorporate food preferences – for example, the cost of a recommended diet with food preferences (CoRD-FP),[44, 54] which measures the cost of meeting a country's national dietary guidelines, but adds local food preferences within groups to the analysis.
- **The full cost of preparing and consuming a healthy diet at the household level:** The CoHD measures only the cost of purchasing food ingredients. Transforming those ingredients into edible meals requires time, fuel, water and equipment, and these preparation costs can be substantial and vary considerably across households and food types. The CoHD does not capture these costs, nor does it account for household food waste, which may add to the "total" or "full" cost of sustaining a healthy diet.[55] It also does not account for economies of scale in household food preparation.[t]
- **Whether the diet meets full nutrient adequacy for every individual:** The CoHD does not capture whether the HDB whose cost is measured provides full nutrient adequacy for each specific individual in the population. This is particularly relevant for groups with high requirements, such as young children and pregnant women, whose micronutrient needs may exceed those of the adult reference person on which the indicator is calibrated. In addition, because the least-cost items are selected without explicit micronutrient targets, the resulting basket may not provide these in adequate quantities. There are other methodologies that calculate minimum-cost nutrient-adequate diets by age group (including children), such as the Thrifty Food Plan designed by the United States Department of Agriculture.[56] However, previous research suggests that the HDB on which the CoHD is based provides 95 percent of the average nutrient adequacy ratio of 15 micronutrients and proteins, as well as balanced macronutrient intakes – comparable to at least 16 national dietary guidelines.[50] This suggests that this approach approximates nutrient requirements well on average, despite not being explicitly designed to do so.[u]
- **Non-market food access, such as own production:** The CoHD methodology focuses on the cost of food purchased in markets. It does not capture food that households produce for their own consumption or obtain in other ways, outside the market. This is particularly relevant for households that rely on agricultural self-production, wild harvesting, fishing, hunting and informal exchange systems.[v] These foods do not have market prices and therefore fall outside the scope of the CoHD. Valuing food from non-market sources raises considerable methodological challenges.[w]

t Larger households may achieve savings through bulk purchasing and shared cooking, but the CoHD does not adjust for household size. Evidence on the magnitude of these savings is mixed and appears to be highly context-specific.[55]

u An example illustrating this at the national level is evidence that the least-cost diet based on Viet Nam's dietary guidelines fulfils more than 80 percent of nutrient requirements on average for both males and females, though it does not always meet requirements for iron (for females), zinc, vitamin A and B12.[57] These findings suggest that while the CoHD performs well as an approximation, specific nutrient gaps may remain, particularly for population groups with high micronutrient needs.

v This limitation is particularly relevant in rural and forested landscapes, where forest foods and tree-based systems contribute significantly to diets and nutrition. Globally, more than 5 billion people obtain food and/or income from non-timber forest products,[58] while approximately 3.5 billion rural people use wild species for food and livelihoods.[59] In many forest-dependent and forest-adjacent communities, households supplement purchased foods with wild edible plants (e.g. leafy vegetables, fruits, mushrooms and tubers), bushmeat, insects, and aquatic foods from forest–water systems, as well as foods produced in forest fallows and home gardens integrated into agroforestry systems. However, assigning monetary values to non-market forest foods remains methodologically challenging due to limited data on quantities harvested, high seasonal variability, diverse species composition, and the absence of market prices for many forest products.

w Technically, households' non-market consumption should be valued at its "shadow price". There is a large literature that has focused on agricultural households that both produce foods (which they self-consume or sell in markets to purchase other foods). In this literature, there is no consensus on whether shadow prices for self-consumed foods would be higher or lower than the prevailing market prices at which households could purchase those goods. The literature linking self-consumption to transaction costs – such as transportation, merchant mark-ups and item search – suggests that market prices exceed shadow prices.[60] When self-consumption is driven instead by the fact that market foods are imperfect substitutes for own-produced foods, due to differences in quality, variety or food safety, shadow prices may exceed market prices.[61–63] Due to the methodological complexities of estimating shadow prices and the ambiguity over their magnitude relative to prevailing market prices, the latter are used as proxies for assessing the options available to an average consumer in the economy.

Data limitations for the cost of a healthy diet

As with any indicator designed for cross-country monitoring, the CoHD involves limitations arising from its underlying data sources.

ICP food price data are not designed for measuring diet costs; consequently, potentially relevant country-specific food items that are not globally or regionally important might be omitted. The ICP collects standardized retail food prices (along with costs of other goods and services) to calculate PPP factors for cross-country income comparisons. Prices are collected following structured product descriptions, which include core and supplementary product characteristics to ensure comparability across countries. For example, a product description might indicate long-grain rice, not parboiled, from a well-known brand. This standardized and detailed product classification allows items to be consistently and relatively accurately classified into the HDB food groups and their nutritional composition identified. However, this standardized classification does not allow for the inclusion in the ICP dataset of the price of, for example, teff or ensete ("false banana"). These are very important food items in Ethiopia[x] and could well be included in the country's HDB,[55] but they are excluded from the global and regional food lists because elsewhere they are hardly consumed. The general design serves its intended purpose well for international cross-country comparisons, but is therefore to be avoided when estimating the cost of locally consumed healthy diets that include context-appropriate foods.

Relatedly, global standardization of ICP product lists results in uneven product coverage across countries, potentially inflating CoHD estimates where food item lists are short. The number of food items priced ranges from over 200 in some Asian countries to fewer than 70 in some Latin American countries, with more than half of all ICP countries reporting prices for fewer than 100 food items.[55] Coverage also varies across food groups, and gaps in some groups may be more consequential than in others. In Latin America and the Caribbean, for example, some countries price only two to three legume varieties, despite their dietary importance. Low coverage is also documented for fruits, vegetables and animal source foods in specific regions.[y]

ICP data report only one national average price per item, which limits the indicator's ability to reflect price variation within countries. Food prices can differ substantially across urban and rural areas, regions, and market types, but these differences may not be adequately reflected in the single national figure used in the CoHD calculation. For example, across 26 countries, WFP's Fill the Nutrient Gap analysis finds that diet cost differences within a single country can be as large as those between countries.[65] Household survey data from five sub-Saharan African countries (Burkina Faso, Ethiopia, Mali, Nigeria and Senegal) show that HDB costs vary considerably across subnational areas, with costs consistently lower in peri-urban areas than in urban centres, and highest in remote rural areas.[66] Across seven sub-Saharan African countries, diet costs are also considerably higher in dryland than in non-dryland areas, pointing to agroecological conditions as a further source of within-country variation.[67] Similar within-country variation is evident in data from Viet Nam, where the CoHD differs significantly across six geographic regions.[57] These findings suggest that national average CoHD estimates may mask subnational differences that could be relevant for policy (see Box 3.2).

Temporal coverage of ICP data is also limited, as prices are collected only every few years (most recently in 2017 and 2021). In years when ICP data are not available, the CoHD is updated using national food consumer price indices (food CPIs). These track price changes for a

x According to Stifel and Hassen (2020),[64] these items might account for around 19 percent of the kilocalories consumed in Ethiopia.

y Adjusting for low product coverage reduces the estimated cost of the EAT-Lancet reference diet by an average of 0.14 PPP dollars of 2017 per day globally (a reduction of about 5 percent). Some subregions, for example Latin America (USD 0.29 PPP dollars of 2017 per day per person, or about 10 percent of the cost), experience larger reductions. While the authors use a different metric, they argue that their estimations are also applicable to the CoHD. Along these lines, they "use the EAT-*Lancet* reference diet (ELD) as an example because it is intended to be a global reference diet, although our results would also extend to the healthy diet used in the most recent SOFI reports" (p. 3).[55]

BOX 3.2 LAYING THE FOUNDATION FOR COUNTRY-LED MONITORING OF THE COST OF A HEALTHY DIET

FAO has recently begun working with national governments to support the adoption and institutionalization of cost and affordability of a healthy diet (CoAHD)* – including the cost of a healthy diet (CoHD) – indicators within national statistical systems. This work responds to growing demand from countries for more frequent, granular and policy-relevant data on access to healthy diets.

Under a new FAO-led global initiative launched in late 2025, countries are being supported to compute the CoHD using routinely collected retail food price data, most commonly those compiled for consumer price indices or market monitoring. Anchoring CoAHD estimation in existing national price systems allows countries to produce estimates at monthly or quarterly intervals, and to disaggregate results geographically, substantially expanding the availability and timeliness of healthy diet cost statistics – and consequently, estimates of unaffordability of a healthy diet – for national decision-making.

FAO's support focuses on helping countries establish standardized, country-owned protocols, covering dietary guidelines, also known as food-based dietary guidelines, Healthy Diet Basket definition, food price preparation, food composition matching, and transparent documentation of assumptions and methods. These protocols are designed to ensure reproducibility, support capacity building, and enable regular updates by national institutions without external dependence.

As countries integrate the CoAHD into regular statistical production, national estimates derived from more timely and granular country-level data are increasingly complementing global estimates. By leveraging existing national price data systems, FAO's ongoing country engagement is laying the foundation for more frequent, country-led monitoring of the cost and affordability of a healthy diet, strengthening the evidence base needed to track changes in economic access to nutritious foods and inform food security, nutrition, and social policy over time.

NOTE: * See **Annex 1B** for details about the calculation of the unaffordability of a healthy diet; in particular, the prevalence of unaffordability and the number of people unable to afford a healthy diet.

broad basket of commonly consumed food items, weighted by their share in typical household consumption. The CoHD, by contrast, depends on the prices of a narrow set of least-cost items in each food group. The underlying assumption is that prices of the items that enter the HDB evolve, over time, in the same way as the food CPI does. Researchers (see, for example, Bai *et al.* [2024])[68] have used the 2011, 2017 and 2021 rounds of ICP data to calculate the difference between the CoHD estimates using the latest ICP data and the CoHD estimates that had used previous rounds and were subsequently updated using food CPIs (e.g. the CoHD computed with the 2021 ICP data vs the CoHD of 2017 updated using the 2017–2021 food CPIs). They found that using food CPI data to update CoHD values gives overall similar results based on global averages, even if the process "may not capture well the overall change of CoHD at the country or territory level" (p. 6).[z, 68] For example, researchers find that in India, the food CPI and the CoHD often diverge and can move in opposite directions.[70] This suggests that food inflation indices may not accurately capture changes in the prices of the specific items that constitute the least-cost healthy diet. This issue is particularly important for countries in crisis or affected by conflict, which may see drastic changes in economic conditions. ■

z As mentioned, Bai *et al.* (2024)[69] find that updating the CoHD with food CPIs during ICP gap years performs relatively well to estimate the worldwide average CoHD. This method tends to perform better for high- and upper-middle-income countries, but estimates are not as accurate for low- and lower-middle-income countries. Overall, overestimates and underestimates of the updated CoHD cancel each other globally. However, the method might not be well suited to properly update country-specific CoHD estimates.

3.2 COST VARIATION IN HEALTHY DIETS AROUND THE WORLD

The global average CoHD based on the most recent data is not affordable for almost one-third of the world's people. As already discussed in **Section 2.2**, the global average CoHD was 4.28 PPP dollars in 2025, about 40 percent larger than the international extreme poverty line of 3 PPP dollars (2025 definition).[aa] Almost one in three people (32.7 percent of the world's population) cannot afford a healthy diet. The CoHD (in PPP dollars) increased by almost 25 percent (based on the latest available data from the ICP) between 2021 and 2025 (Figure 3.1).[ab] This reflects the sharp surge in food prices driven by extensive demand- and supply-side global shocks, especially in 2022 and 2023.[34] By 2025, Latin America and the Caribbean had the highest CoHD, while Northern America, Europe and Oceania had the lowest (see **Section 2.2** for further details).

Differences in the CoHD across regions are generally driven by broad geographical patterns rather than by individual outlier countries. To account for whether it might be the case that one or two countries with a very high or low CoHD could be driving up or down average costs within a geographic region, Table 3.2 groups countries into terciles based on their 2025 CoHD. Latin America and the Caribbean accounts for 39.7 percent of countries in the third (i.e. most expensive) tercile and only 1.8 percent in the first (i.e. least expensive) tercile. The opposite is true in Northern America, Europe and Oceania, which together account for 45.6 percent of countries in the first tercile. Asia and Africa exhibit more variation in the distribution of their countries across terciles.

There is considerable heterogeneity in the costs of the food groups that make up the CoHD, across both groups and regions. The analysis of costs across food groups relies on ICP data from 2021 – the last year with data collected by food item and food group.[ac] Figure 3.2 shows the costs of the food groups (in PPP dollars per person per day) in the HDB in 2021. These are the costs of purchasing the following numbers of items from the food groups: starchy staples (two); animal source foods (two); legumes, nuts and seeds (one); vegetables (three); fruits (two); and oils and fats (one), with the lowest possible per kilocalorie cost (in quantities sufficient to meet food group-specific energy requirements). In general, oils and fats are the least expensive food group and there are no significant differences in their cost across regions. Animal source foods are, on average, the most expensive food group (especially in Africa), but this is not the case in Latin America and the Caribbean, where vegetables are the highest-cost group. Fruits in HDBs are cheaper in Africa than in other regions, while starchy staples are cheaper in Northern America, Europe and Oceania. Box 3.3 explores the challenges Landlocked Developing Countries face in reducing the cost of a healthy diet and draws on a policy example from Southern Asia.

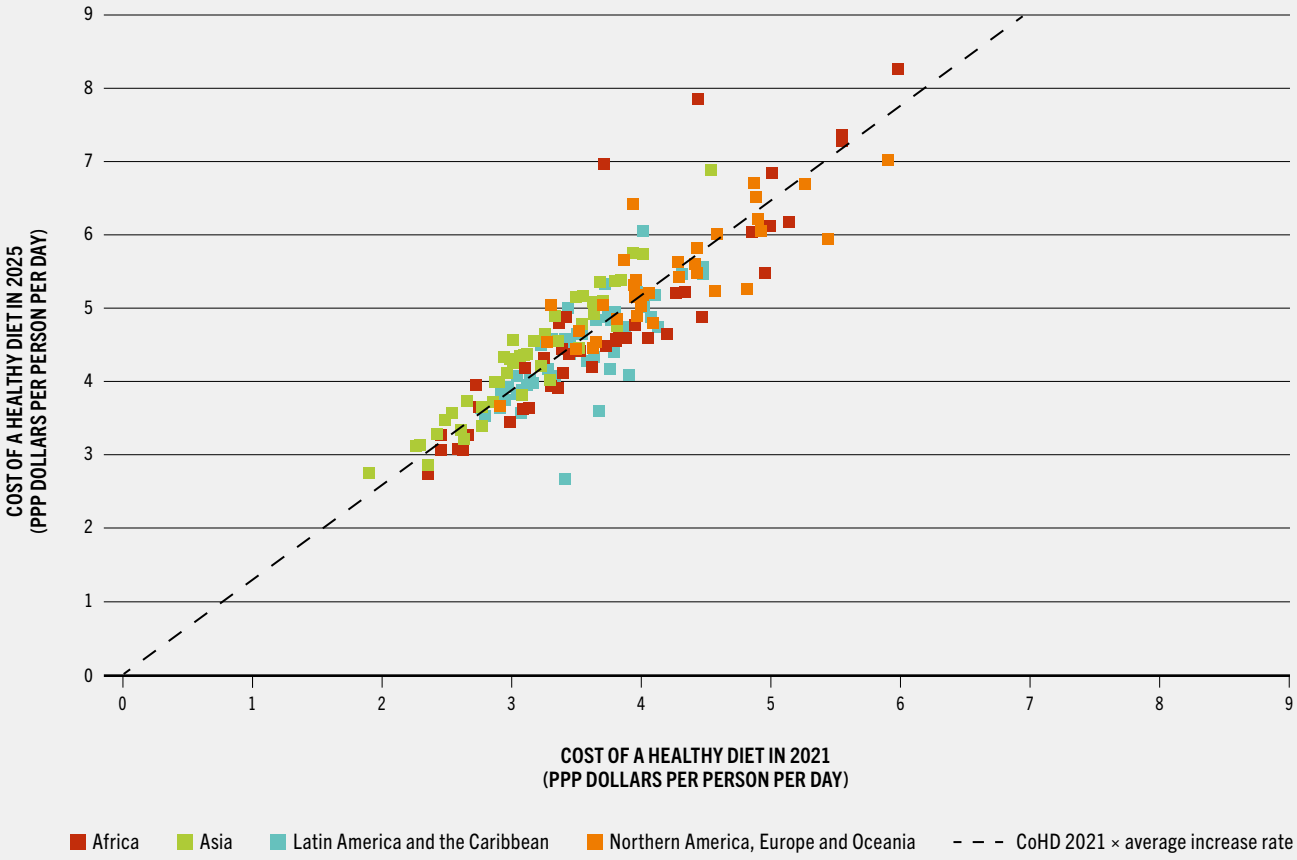
Differences in the relative costs of food groups also seem to be driven by regional patterns rather than by individual outlier countries. Dividing countries into terciles based on the costs of their food groups yields a forceful picture of these trends (Table 3.3). For starchy staples, 89.7 percent of countries in Latin America and the Caribbean, 90.2 percent of countries in Africa, and 62 percent of countries in Asia are in the second or third terciles in terms of cost (i.e. higher-cost food groups). In stark contrast, 70.5 percent of countries in Northern America, Europe and Oceania belong

aa The share of the population unable to afford a healthy diet is not derived from a direct comparison between the CoHD and the poverty line. Unaffordability is defined as the inability to pay for a healthy diet after accounting for the portion of income reserved for basic non-food goods and services. It is estimated as the percentage of individuals whose disposable income, net of essential non-food needs, is lower than the CoHD. See **Section 2.2** for more details and **Annex 1B** for the full methodology.

ab For analytical purposes, this section groups together countries from Northern America, Europe and Oceania.

ac The food CPIs used to update the overall CoHD in years between ICP data releases do not include sufficient information about the costs of the food groups that are part of the HDB. While 170 countries do report overall CPIs, only 58 countries also report more indices for different types of foods.[71] As a consequence, only the overall CoHD is updated during gap years of the ICP data, as this data limitation hinders the possibility of also updating the cost of individual food groups. As a result, the following analysis is based on data from 29 countries in Latin America and the Caribbean, 51 in Africa, 42 in Asia, 3 in Northern America, 38 in Europe and 3 in Oceania. Overall, the dataset covers about 94 percent of the global population in 2021. Estimates are based on countries' populations by 2021 in the World Development Indicators database.[72]

FIGURE 3.1 COST OF A HEALTHY DIET IN 2021 AND 2025



NOTES: PPP = purchasing power parity. Includes information for 173 countries, with cost of a healthy diet (CoHD) data for 2021 and 2025. The dashed line corresponds to the 2021 CoHD multiplied by the ratio of the 2025 average CoHD to the 2021 average CoHD. The CoHD is calculated using food item prices and purchasing power parity from the 2021 round of the World Bank's International Comparison Program. The CoHD for 2025 is obtained by projecting the 2021 reference value of the CoHD for each country, based on their food consumer price indices. For more details, see **Section 2.2**.

SOURCE: Authors' (FAO) own elaboration based on FAO. 2026. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 3 March 2026]. https://www.fao.org/faostat/en/#data/CAHD. Licence: CC-BY-4.0.

https://doi.org/10.4060/cd8306en-fig3.1

in the (lowest-cost) first tercile for starchy staples. Given the average high cost of animal source foods in Africa, 68.6 percent of its countries fall within the third tercile of costs for this food group. Analogously, high vegetable costs in Latin America and the Caribbean are not an artefact of a few outliers: 65.5 percent of this region's countries are in the third tercile for vegetables (and an additional 31 percent in the second tercile). Fruits are relatively inexpensive in Africa: 82.4 percent of its countries fall within the first tercile (while the same is true for only 13.8 percent of Latin America and the Caribbean, 11.9 percent of Asia, and 4.5 percent of Northern America, Europe and Oceania).

There is variation in the relationship between food groups' contribution of food energy to the HDB and their shares of the CoHD (Figure 3.3). Starchy staples, for example, contribute about half of the kilocalories in the HDB, yet they account for just 16 percent of the average CoHD globally; »

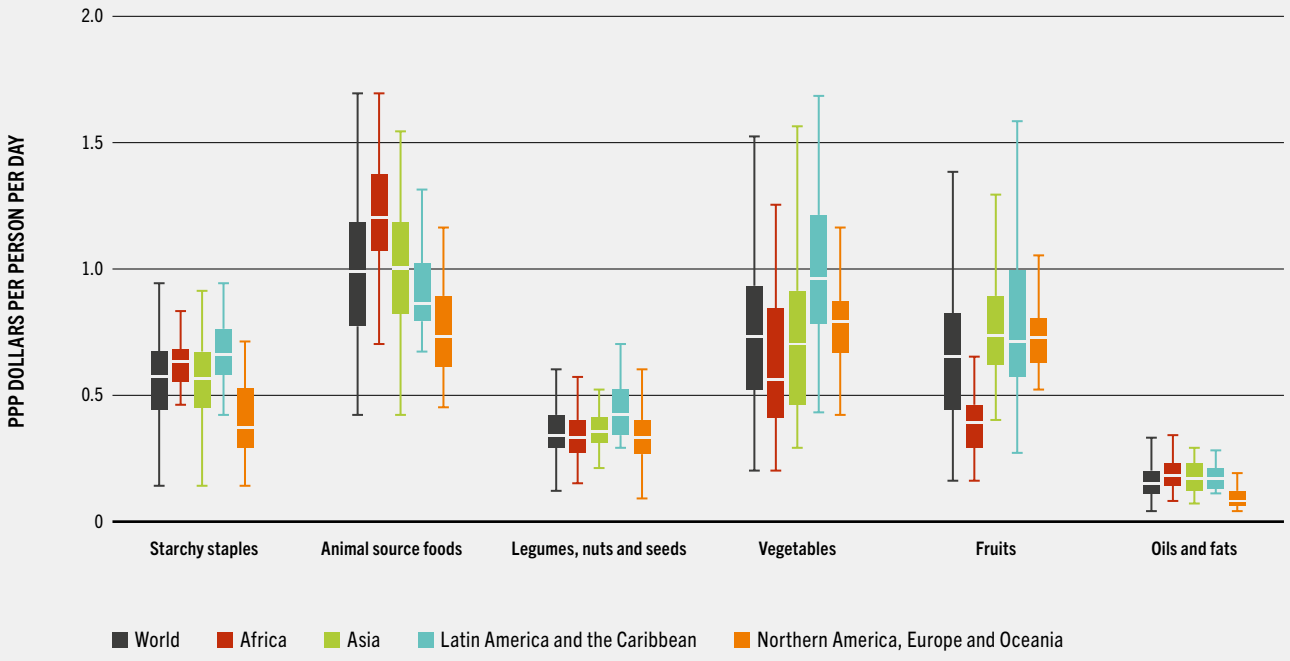
TABLE 3.2 SHARE OF COUNTRIES BY COST OF A HEALTHY DIET BY TERCILE AND REGION, 2025

Region	First tercile	Second tercile	Third tercile
	(%)	(%)	(%)
Africa	28.1	36.8	24.1
Asia	24.6	28.1	24.1
Latin America and the Caribbean	1.8	15.8	39.7
Northern America, Europe and Oceania	45.6	19.3	12.1

NOTES: Countries were classified into terciles of the cost of a healthy diet (CoHD). The first tercile corresponds to the group of countries with the lowest CoHD and the third tercile to the highest. Countries that fall exactly in the 33rd percentile were assigned to the second tercile and those in the 66th percentile to the third. Percentages may not sum to 100 due to rounding.

SOURCE: Authors' (FAO) own elaboration based on FAO. 2026. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 3 March 2026]. https://www.fao.org/faostat/en/#data/CAHD. Licence: CC-BY-4.0.

FIGURE 3.2 COST OF FOOD GROUPS BY REGION, 2021



NOTES: PPP = purchasing power parity. For each box plot, the centre line indicates the median; the box shows the interquartile range (IQR) 25th to 75th percentile; and the outer lines show the range of data points that fall within 1.5×IQR around the box

SOURCE: Authors' (FAO) own elaboration based on FAO. 2026. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 3 March 2026]. https://www.fao.org/faostat/en/#data/CAHD. Licence: CC-BY-4.0.

https://doi.org/10.4060/cd8306en-fig3.2

BOX 3.3 THE COST OF A HEALTHY DIET IN LANDLOCKED DEVELOPING COUNTRIES

Landlocked Developing Countries (LLDCs) face significant trade challenges due to their geographical position, as their exports and imports must transit through at least one other coastal nation. Long distances from the coast, often poor transport infrastructure, long supply chains and the reliance on transit countries hinder their integration into global trade. This geographical disadvantage has important economic consequences: LLDCs incur import logistics costs that are 79 percent higher than those of coastal countries in the same region.[73] In these contexts, goods must clear multiple international borders, while market inefficiencies along the port–hinterland transportation chain, together with infrastructure deficits (e.g. poor road networks, lack of cold chains), increase transaction costs, impose significant delays, and lead to post-harvest losses.[74, 75] These challenges affect the cost of foods that compose a healthy diet. Because the share of net food importers is greatest among LLDCs,[76] agrifood systems policies and investments that strengthen domestic production of these foods are particularly important for increasing their availability and reducing the cost of a healthy diet.

A case study highlights how strengthening market linkages and improving market infrastructure can help address the effects of challenging geographical conditions faced by small-scale producers, thereby increasing production of key agricultural commodities and expanding consumer access. The High-Value Agriculture Project in Hill and Mountain Areas (HVAP), implemented by the Government of Nepal in collaboration with the International Fund for Agricultural Development and SNV (Netherlands development organization), targeted isolated areas in Western Nepal characterized by difficult topography. Despite the favourable agroclimatic conditions, farmers in these areas mostly grew cereals for self-consumption due to limited market access. The project promoted seven agricultural commodities, including fruits, off-season vegetables, and animal source foods. In particular, it improved linkages between producers and markets to reduce transaction costs; strengthened farmers' production and marketing capacities; and created market infrastructures (such as collection centres, storage facilities, and warehouses). By reducing transaction costs and enhancing critical infrastructure, HVAP encouraged farmers to allocate more of their land to the project's target crops and to increase their production.[77] This led to a win–win outcome where both producers and consumers benefited. On the one hand, consumers gained improved market availability of key food items in HDBs (e.g. fruits, vegetables and animal source foods, three of the most expensive food groups); the increase in supply also led to a decrease in the market prices of these items. On the other hand, farmers secured higher agricultural incomes as increases in sales volumes more than offset the decline in market prices. The project therefore suggests that agricultural value chain interventions in challenging landscapes can potentially reduce the cost of the most expensive food groups in HDBs, benefiting consumers and, arguably, achieving self-sustainability for producers through higher incomes.

» they are low in price, but provide a relatively large number of kilocalories per unit.[ad] Meanwhile, oils and fats contribute 13 percent of the HDB's kilocalories, but their share of the global CoHD is only 5 percent; this is because, among all food groups, they provide the largest number of kilocalories per unit. Animal source foods, on the other hand, also contribute 13 percent of the kilocalories in the HDB, but their share of the global CoHD is the greatest of all the food groups at 28 percent; these are high-value products and their price per kilogram is, on average, the highest. Fruits and vegetables present another scenario: together, their contribution to the kilocalories in the HDB is 12 percent, which contrasts with their 40 percent »

ad Among the items in the HDB, the average price per kilogram of starchy staples is 1.66 PPP dollars. In contrast, the average price across all other foods groups (two items from animal source foods; one item from legumes, nuts and seeds; three items from vegetables; two items from fruits; and one item from oils and fats) is 4.53 PPP dollars. At the same time, the energy content of starchy staples in the HDB is 3.52 kcal per gram. The contribution of other food groups is quite variable (e.g. oils and fats provide a large number of kilocalories per gram, while vegetables provide few). The combination of low prices and relatively high caloric content reduces the overall cost of starchy staples, despite their large share of kilocalories in the HDB.

TABLE 3.3 SHARE OF COUNTRIES BY FOOD GROUP COST TERCILE AND REGION, 2021

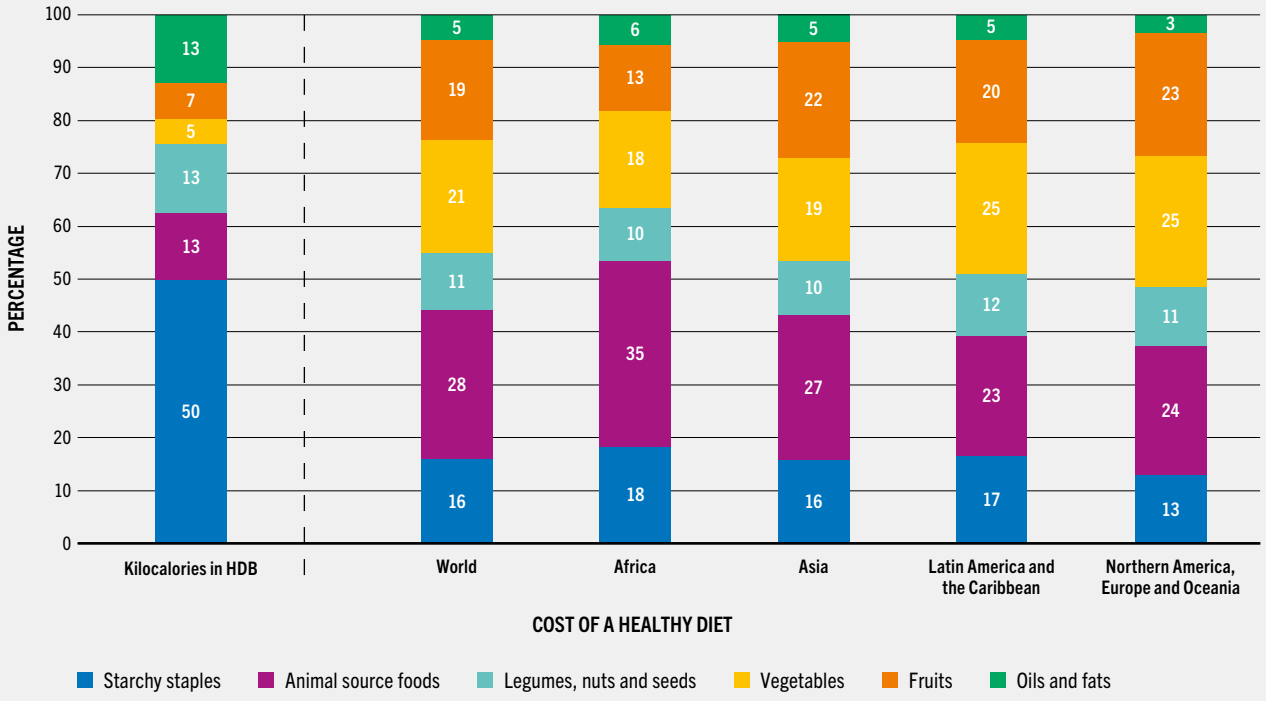
Food group/region	First tercile	Second tercile	Third tercile
	(%)	(%)	(%)
Starchy staples			
Africa	9.8	41.2	49.0
Asia	38.0	31.0	31.0
Latin America and the Caribbean	10.3	34.5	55.2
Northern America, Europe and Oceania	70.5	22.7	6.8
Animal source foods			
Africa	3.9	27.5	68.6
Asia	31.0	35.7	33.3
Latin America and the Caribbean	38.0	44.8	17.2
Northern America, Europe and Oceania	66.0	29.5	4.5
Legumes, nuts and seeds			
Africa	41.2	33.3	25.5
Asia	28.6	35.7	35.7
Latin America and the Caribbean	10.3	24.1	65.5
Northern America, Europe and Oceania	43.2	27.3	29.5
Vegetables			
Africa	53.0	23.5	23.5
Asia	38.1	33.3	28.6
Latin America and the Caribbean	3.5	31.0	65.5
Northern America, Europe and Oceania	15.9	52.3	31.8
Fruits			
Africa	82.4	7.8	9.8
Asia	11.9	40.5	47.6
Latin America and the Caribbean	13.8	41.4	44.8
Northern America, Europe and Oceania	4.5	52.3	43.2
Oils and fats			
Africa	9.8	39.2	51.0
Asia	19.0	33.4	47.6
Latin America and the Caribbean	3.4	55.2	41.4
Northern America, Europe and Oceania	72.7	20.5	6.8

NOTES: The costs of each food group by country were classified into terciles. The first tercile corresponds to the group of countries with the lowest cost and the third tercile to the group of countries with the highest cost. Countries that fall exactly in the 33rd percentile were assigned to the second tercile and those in the 66th percentile to the third. Percentages may not sum to 100 due to rounding.

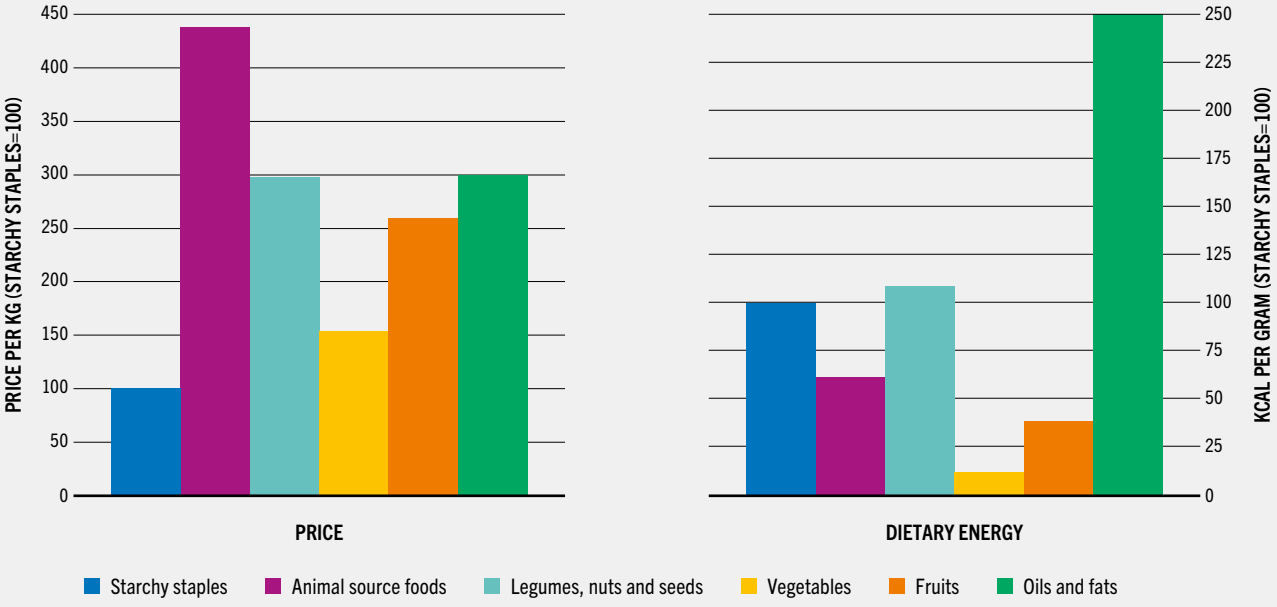
SOURCE: Authors' (FAO) own elaboration based on FAO. 2026. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 3 March 2026]. https://www.fao.org/faostat/en/#data/CAHD. Licence: CC-BY-4.0.

FIGURE 3.3 FOOD GROUPS IN THE HEALTHY DIET BASKET, 2021

A) SHARE OF FOOD GROUPS IN THE CALORIC CONTENT AND COST OF A HEALTHY DIET BY REGION



B) AVERAGE PRICE AND CALORIC CONTENT BY FOOD GROUP



NOTES: HDB = Healthy Diet Basket. Panel B is based on the items in each country's HDB (for 166 countries with cost of a healthy diet data in FAOSTAT). The price and caloric content for starchy staples are the averages of the two least-cost food items in this food group across countries. Analogously, the averages include the following number of least-cost items based on the HDB guidelines: animal source foods (two); legumes, nuts and seeds (one); vegetables (three); fruits (two); and oils and fats (one).

SOURCES: Authors' (FAO) own elaboration based on (for panel A) FAO. 2026. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 3 March 2026]. https://www.fao.org/faostat/en/#data/CAHD. Licence: CC-BY-4.0; (for panel B) World Bank. 2024. DataBank: International Comparison Program (ICP) 2021. Unpublished.

https://doi.org/10.4060/cd8306en-fig3.3a

» share of the CoHD; this is due on the one hand to their relatively low energy density, and on the other to their comparatively high prices (especially for fruits).[ae]

Exploring variation in the cost of a healthy diet: differences in Healthy Diet Basket composition and overall food price effects

The CoHD and the costs of the food groups it comprises vary considerably across countries, with a country's CoHD calculated as the total value of its least-cost items in each food group. Even when the CoHD is expressed in PPP dollars (adjusting for disparities in purchasing power across countries), differences remain. These differences can arise from the composition of least-cost items in each country's HDB or might reflect overall food price variation across regions. To investigate the importance of these factors, this section focuses on two analyses. The first constructs a common global basket (a fixed set of food items that typically comprise HDBs worldwide) and values it at national prices. It then compares the cost of this fixed basket to the CoHD (allowing for variation in the composition of HDBs based on each country's least-cost items). This comparison aims to shed light on how the flexibility in HDB composition shapes the CoHD. The second analysis investigates the extent to which variation in the CoHD reflects differences in overall food prices worldwide. Both CoHD analyses in this section are based on the latest (2021) round of ICP data.

Common global basket at national prices

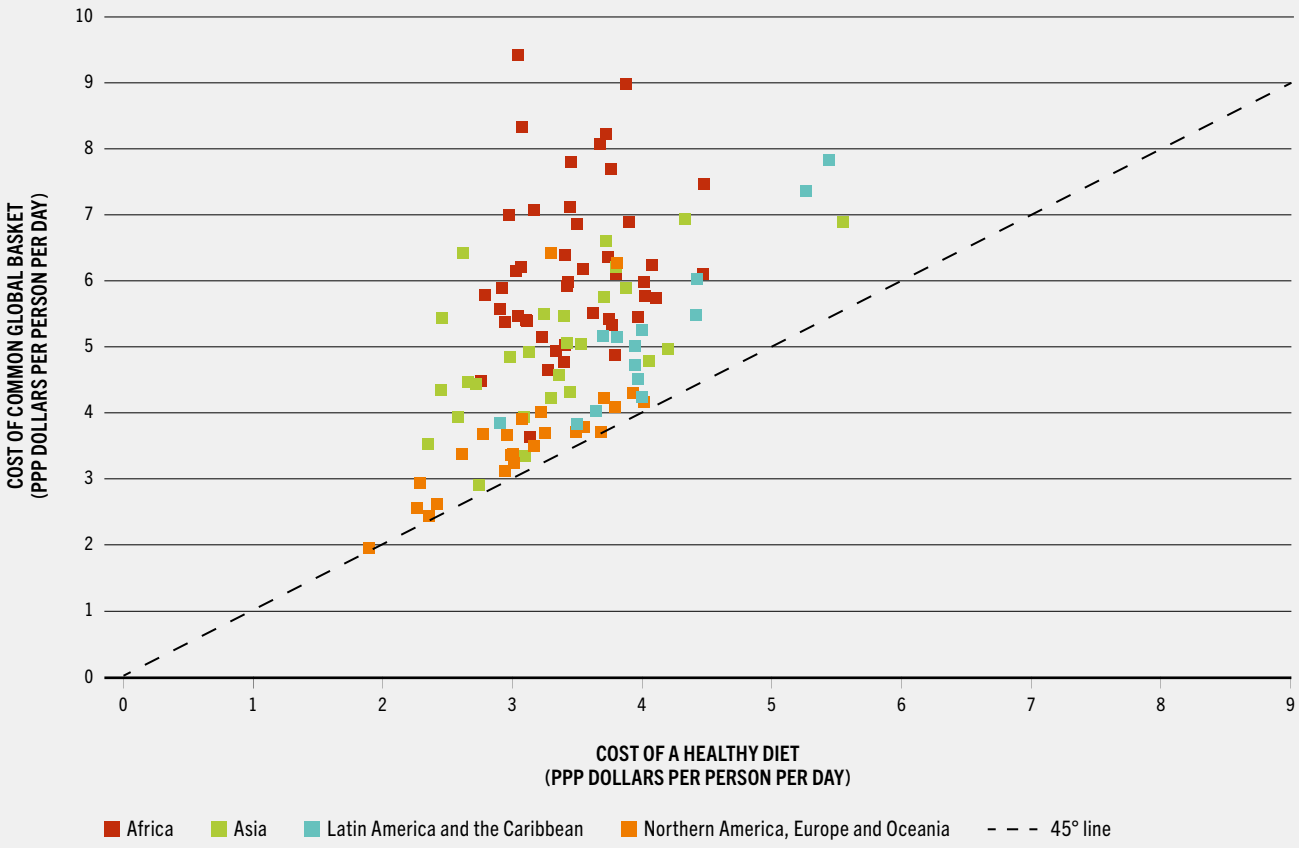
The CoHD methodology allows flexibility in the composition of each country's HDB based on the least-cost food items nationally, rather than prescribing a fixed set of items to consume. Unlike approaches that prescribe a fixed basket of foods, the CoHD methodology allows each country's HDB to comprise country-specific least-cost available items across the six food groups in Table 3.1. The first simulation in this section quantifies the extent to which this flexibility drives differences in CoHD estimates across countries. To do so, it establishes a common global basket and establishes its cost in each country based on national prices. The gap between the cost of the common global basket and the CoHD – which uses least-cost national HDBs (which vary across countries) – captures how much variation in basket composition alone accounts for differences in the CoHD worldwide.

The composition of HDBs worldwide depends not only on which products are least-cost, but also on differences in the availability of food items across countries. This creates a challenge in determining a globally standardized basket given differences in the food items available in the ICP data. Prices for some regional items are available only in a handful of countries. Others are more widely available, but still far from universal. To bridge these differences in item availability, only items with prices available in at least 75 percent of the sample are considered. Then, from these items, the most frequently chosen in country-specific HDBs are selected to build the common global basket. This is a basket with the 11 food items that are most frequently included in countries' HDBs globally: wheat and rice (starchy staples), milk and chicken (animal source foods), white beans (legumes, nuts and seeds), onions, carrots and cabbages (vegetables), bananas and apples (fruits) and sunflower oil (oils and fats) (for details, see Supplementary material to Chapter 3).

The variation in the least-cost items that compose each country's HDB significantly reduces CoHD estimates relative to the common global basket. This flexibility produces CoHD estimates that are 34 percent lower on average compared to the common global basket. Within the ICP dataset, there are 111 countries (out of 166) with price information for all 11 items in the common global basket. National prices are applied to estimate the cost of the common global basket for these countries. Naturally, the cost of the common global basket is higher than the CoHD, because items are fixed in the former, while they represent the least-cost items in the latter. In the sample of 111 countries with comparable data, the cost of the common global basket (valued at national prices) is 5.20 PPP dollars, compared to an average CoHD (based on country-specific

ae This is consistent with FAO *et al.* (2025),[34] which analyses the relative prices of different food groups in the 2011, 2017 and 2021 ICP rounds. The report finds that starchy staples and oils and fats have, on average, lower prices per kcal than more nutrient-dense food groups (such as vegetables, animal source foods and fruits) across all rounds.

FIGURE 3.4 COST OF THE COMMON GLOBAL BASKET VS COST OF A HEALTHY DIET, 2021



NOTES: PPP = purchasing power parity. The cost of a healthy diet (X-axis) is estimated using the methodology described in **Annex 1B**. The cost of the common global basket (Y-axis) is based on country-specific items. The comparison is restricted to countries with available prices for the 11 items in the global common basket in **Table S3.1** of the Supplementary material to Chapter 3.

SOURCE: Authors' (FAO) own elaboration based on World Bank. 2024. DataBank: International Comparison Program (ICP) 2021. Unpublished.

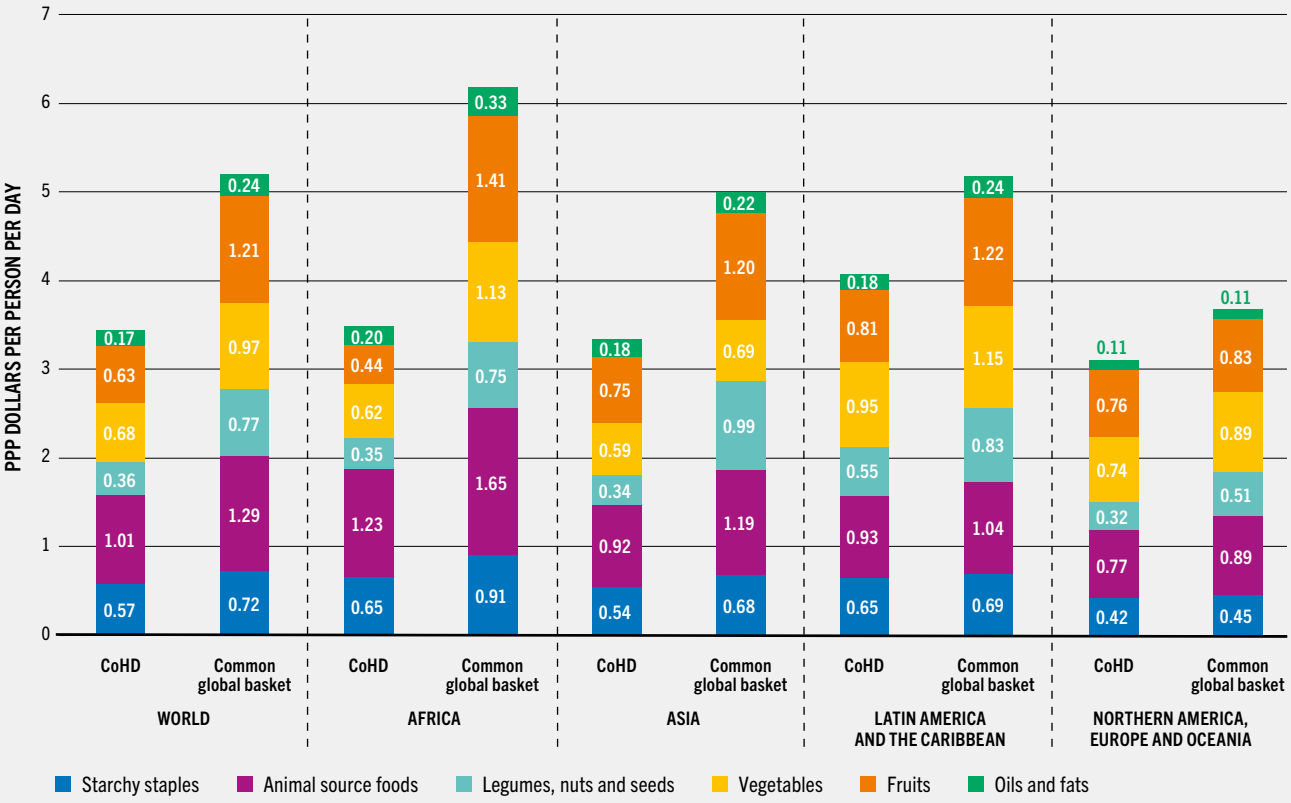
least-cost baskets) of 3.43 PPP dollars.[af] Figure 3.4 plots the cost of the common global basket against the CoHD across countries. The vertical distance of each point from the 45° line measures the difference between the two estimates. This difference ranges from 1 percent to 210 percent of the CoHD, with larger regional differences for African countries, which shows the importance of country-specific items for this region.

The diversity of products (relative to a fixed set of food items) plays a larger role in shaping African CoHD estimates in comparison to other regions. Figure 3.5A illustrates the difference between the CoHD and the cost of the common global basket by food group and region. Consistent with Figure 3.4, the difference between these two estimates is greatest in Africa, where the cost of the common global basket is 78 percent higher than the average CoHD based on countries' HDBs. This highlights how African HDBs differ considerably from the HDBs in other regions. Asia presents the second-largest difference (50 percent). While there are also differences in Latin America and the Caribbean (27 percent), and Northern America, Europe and Oceania (19 percent), they »

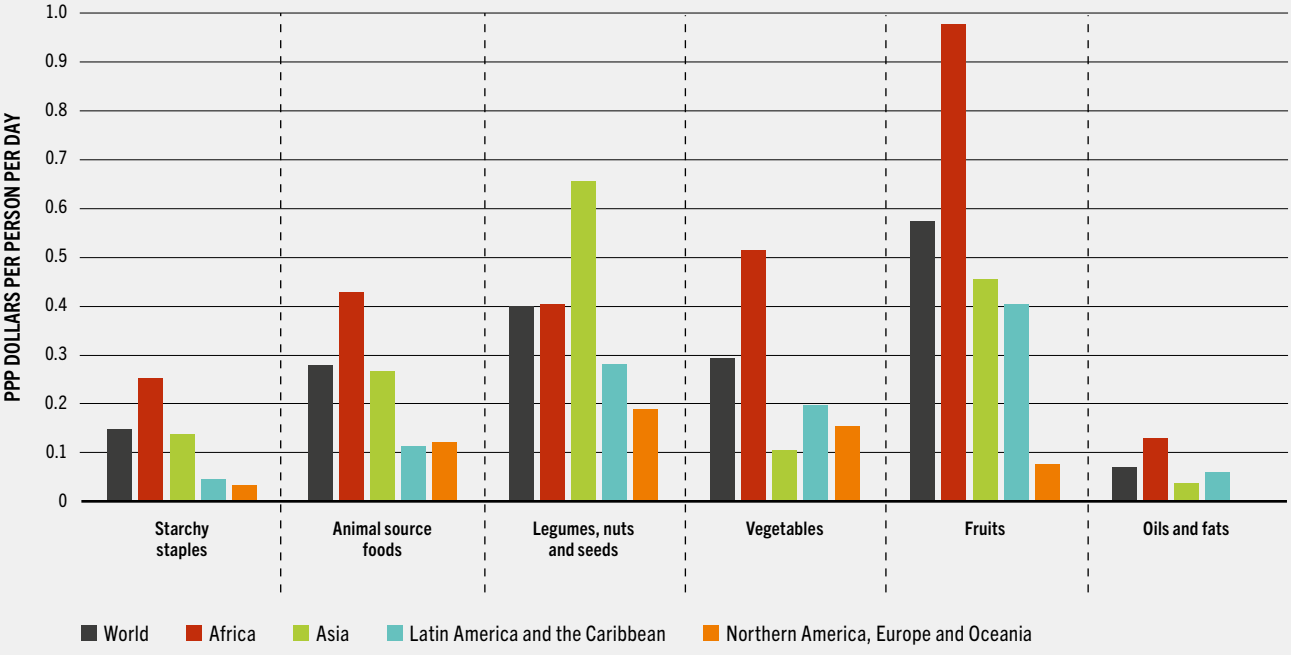
af The average CoHD is lower in the 111 countries with price information for all 11 items in the common global basket (3.43 PPP dollars per person per day). Countries where this price information is not fully available have a larger CoHD (3.86 PPP dollars per person per day).

FIGURE 3.5 COST OF THE COMMON GLOBAL BASKET VS COST OF A HEALTHY DIET BY REGION AND FOOD GROUP

A) COST OF THE COMMON GLOBAL BASKET AND COST OF A HEALTHY DIET BY REGION



B) DIFFERENCE BETWEEN THE COST OF THE COMMON GLOBAL BASKET AND THE COST OF A HEALTHY DIET FOR EACH FOOD GROUP BY REGION



NOTES: CoHD = cost of a healthy diet; PPP = purchasing power parity. The common global basket includes the 11 food items that are most frequently included in countries' Healthy Diet Baskets globally. For details, see Supplementary material to Chapter 3.

SOURCE: Authors' (FAO) own elaboration based on World Bank. 2024. DataBank: International Comparison Program (ICP) 2021. Unpublished.

» are smaller, which may suggest that the items in their HDBs are more aligned with those in the common global basket.

The impact of product diversity in HDBs on the CoHD also varies considerably across food groups. The effect of this diversity is especially strong for fruits, but is also significant for other food groups across regions (Figure 3.5B). The difference in the composition of the fruits in HDBs (and the variation in their prices) accounts for 32 percent of the total difference between the cost of the common global basket and the CoHD (1.21 vs 0.63 PPP dollars). Many least-cost fruits (e.g. coconuts, dates, oranges), especially in Africa, are oftentimes different from those in the common global basket (i.e. bananas and apples). In Africa, less common vegetables (e.g. bean leaves, cassava leaves) also play a crucial role. Combined, diversity in fruits and vegetables accounts for about 36 percent of the gap between the cost of the common global basket and the CoHD in this region. While diversity in starchy staples and animal source foods is relatively small globally, it is somewhat greater in Africa (where maize is frequently the least-cost starchy staple and beef is a usual animal source food). In Asia, the variety of legumes and nuts (e.g. lentils, peas, peanuts) is the most important driver of the divergence between the cost of the common global basket and the CoHD.

General food price levels and the cost of a healthy diet

Besides the composition of HDBs, price differentials are another source of variation in the CoHD. Differences in the CoHD might reflect variation in food prices across countries: a higher CoHD might simply indicate that food is more expensive in some economies than in others. To assess this possibility, this section examines the relationship between countries' CoHD and the price of food relative to the overall cost of living. The relative price of food in an economy can be estimated as the ratio of two PPP conversion factors. The numerator is the food-specific PPP conversion factor – the number of local currency units needed to buy the same quantity of food that one US dollar buys in the United States of America. The denominator is the PPP conversion factor for household final consumption expenditure[ag] – the local currency units needed to buy the same basket of goods and services, food and non-food alike, that one US dollar buys in the United States. Their ratio indicates how expensive food is within a country relative to everything else households purchase, compared to the same relationship in the United States of America. It is based on the 2021 ICP round and is therefore consistent with the CoHD calculations used throughout this chapter.

The CoHD tends to be higher in countries where food is relatively more expensive, suggesting that relative food prices shape cross-sectional differences in the CoHD. Figure 3.6 plots the CoHD (Y-axis) against the relative price of food (X-axis) for each country. Countries with higher relative food prices also tend to have a higher CoHD. This association is statistically significant: a 10 percent increase in relative food prices is associated, on average, with a 6 percent higher CoHD.[ah] Consistent with this pattern, regions with lower relative food prices – such as Northern America, Europe and Oceania[ai] – also tend to record a lower CoHD in absolute terms (see **Section 2.2**).

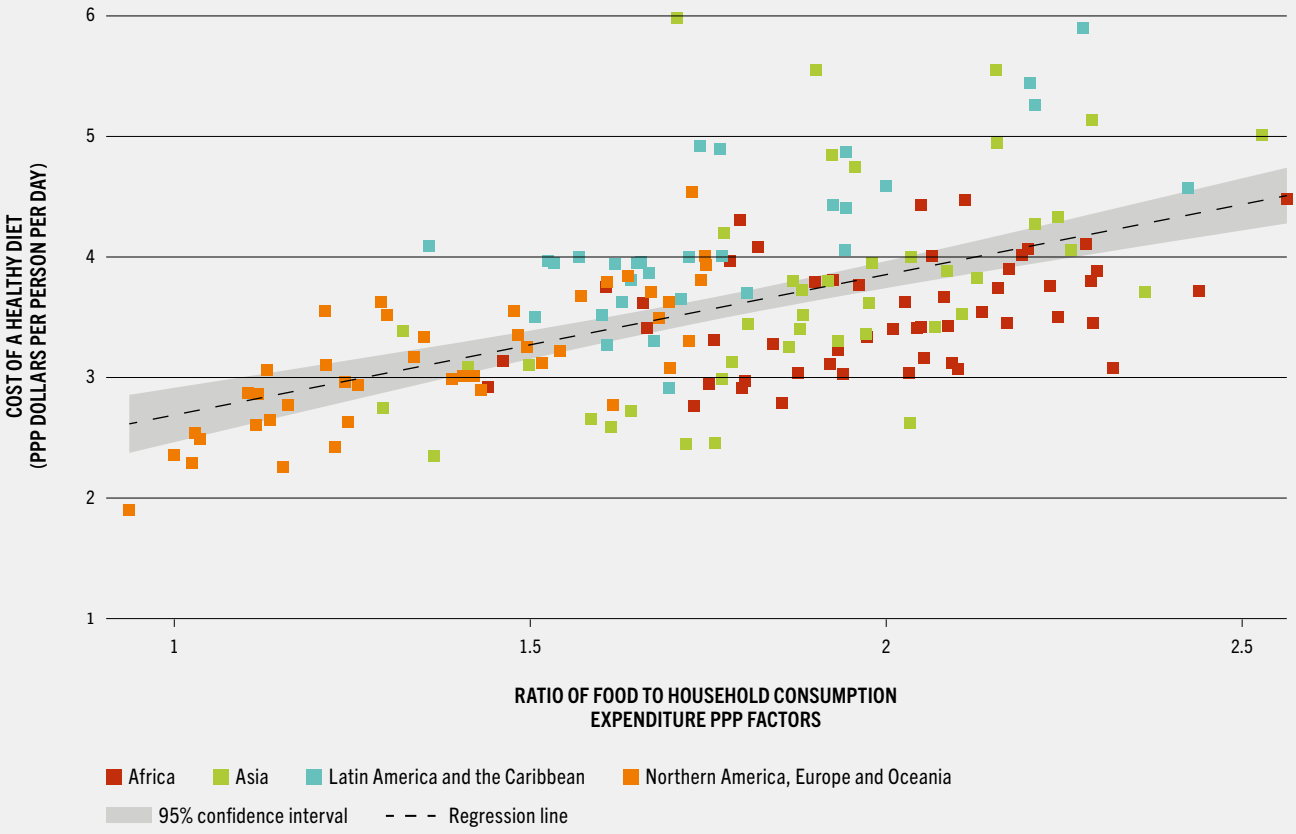
This relationship, nonetheless, masks considerable heterogeneity: at any given level of relative food prices, countries can exhibit notably different

ag In particular, this is the households and non-profit institutions serving households final consumption expenditure in PPP factors.

ah This relationship is estimated through a regression: $Log(CoHD_i) = \beta Log(Rel.Food\ Price_i) + \varepsilon_i$, where $CoHD_i$ is the cost of a healthy diet in country i. $Rel.Food\ Price_i$ is the ratio of the food to household final consumption expenditure PPP factors. ε_i is a mean-zero error term. The coefficient β in this regression is an elasticity and is estimated to be 0.57 (with a standard error of 0.06). This implies that a 10 percent increase in the relative food price is associated with a 5.7 percent increase in the CoHD.

ai Relative food prices tend to be lower in higher-income countries. This is consistent with different economic phenomena. On the one hand, this pattern can be explained by the Balassa-Samuelson effect.[78,79] Wealthier countries tend to have higher productivity in the production of tradable goods. International arbitrage equalizes the prices of these goods across countries, but higher productivity in the tradable sector raises wages economy-wide – including in the non-tradable sector, where productivity differences across countries are much smaller. This pushes up the prices of non-tradable goods and services, which in turn raises overall price levels. Because many food items are tradable – or contain large tradable components, food tends to become cheaper *relative to* other cost-of-living expenses as countries become richer. On the other hand, lower relative food prices are also consistent with Engel's law: as income rises, food expenditure shares fall,[80] depressing the relative weight (and partly the relative price) of food in the consumption basket.

FIGURE 3.6 ASSOCIATION BETWEEN THE COST OF A HEALTHY DIET AND OVERALL FOOD RELATIVE PRICES



NOTES: PPP = purchasing power parity. The dashed line is the linear regression line of the association between the two variables. The shaded grey area is the 95 percent confidence interval from this regression.

SOURCES: Authors' (FAO) own elaboration based on World Bank. 2024. DataBank: International Comparison Program (ICP) 2021. [Accessed on 3 March 2026]. https://databank.worldbank.org/source/icp-2021. Licence: CC-BY-4.0; FAO. 2025. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 3 March 2026]. https://www.fao.org/faostat/en/#data/CAHD. Licence: CC-BY-4.0.

https://doi.org/10.4060/cd8306en-fig3.6

levels of CoHD.[aj] The reason is that the CoHD is not a measure of overall food prices. It is an estimate of the cost of the HDB, composed of the least-cost items across the six food groups in each country. While the two measures are positively correlated, some countries with high relative food prices can still have items in their HDBs that are less expensive relative to other areas. Conversely, other countries might have lower relative food prices but may have HDB items that are more expensive than those in countries that have relatively more expensive food in general. This underscores the distinct role of the CoHD, which establishes a cost floor for a healthy diet by focusing on the least-cost available items rather than on general food prices.

The analysis also reveals geographical patterns from this relationship. In Latin America and the Caribbean, the CoHD is higher than the relative price of food would predict; in Africa, it is lower than predicted. Specifically, 90 percent of countries in Latin America and the Caribbean have a CoHD above the level predicted by relative food prices (i.e. above the regression line in

aj The R-squared of a regression of the logarithm of CoHD on the logarithm of food prices relative to household final consumption expenditure is 0.36. Thus, the portion that remains "unexplained" in this regression is 0.64, suggesting that within a given level of relative food prices, there is still considerable variation in CoHD.

Figure 3.6), while 80 percent of African countries fall below it. The picture is more mixed in the remaining regions: 52 percent of countries in Northern America, Europe and Oceania and 60 percent of countries in Asia have a CoHD higher than predicted by relative food prices.

Taken together, these exercises suggest that both the HDB composition and the overall food prices in the economy are important factors behind the global variation in CoHD estimates. This has important policy implications. First, the results in this section suggest that the composition of HDBs around the world varies considerably, reflecting local product diversity, availability and lower relative costs. Thus, reducing the CoHD requires policies targeted to a range of products across and within food groups (and their value chains). Second, overall food prices (relative to households' consumption) in the economy are also key to explaining cross-country variation in the CoHD. However, overall relative food prices do not fully reflect the prices of least-cost items in each country. ■

3.3 UNDERSTANDING SUBNATIONAL AND TEMPORAL VARIATION IN COST OF A HEALTHY DIET ESTIMATES WITH NATIONAL PRICE DATA

Global CoHD estimates enable cross-country comparisons, while national price data complement this information and provide additional detail for national policymaking.[ak] As explained in **Section 3.1**, global CoHD monitoring uses food price data gathered every few years through the ICP, which is based on annual national average prices for various items. When ICP data are unavailable, the CoHD is updated using each country's overall food inflation rate.

Using national price data to estimate the costs for country-specific HDBs can allow for examination of temporal and geographical patterns. Using three country case studies, this analysis highlights how national data can aid the design of more effective and targeted strategies to improve access to a healthy diet, ensuring seasonal and geographical relevance.[al] Along these lines, governments can implement social protection mechanisms or policies to address the high costs of critical food groups, *where* and *when* different policies could be most effective. This section provides examples of patterns based on information from Ghana, Nigeria and Pakistan, using retail prices collected between January 2023 and December 2024. The information includes monthly subnational prices for, respectively, 315, 101 and 89 food items in the three countries.[am] For each subnational dataset, the CoHD is calculated using the procedures described in **Section 3.1** (to select the least-cost starchy staples, animal source foods, legumes, nuts and seeds, vegetables, fruits, and oils and fats – as described in Table 3.1). All nominal prices are adjusted using the national general consumer price index to July 2021 local currency units and then converted to 2021 PPP dollars. The food

ak Relatedly, FAO *et al.* (2023)[81] analyse the differences in CoHD across the urban–rural continuum in 11 African countries. Their results suggest significant geographical variation in CoHD. Using data from these countries' Living Standard Measurement Surveys, the report finds that "the cost of a healthy diet in urban centres is much higher (on average 1.2 times higher) than in peri-urban areas and it then decreases the smaller the city size and moving closer to rural areas" (p. 93). For additional details on these calculations, also see Holleman and Latino (2023).[82]

al Several governments, including Ethiopia, Ghana, Malawi, Nigeria, Pakistan and Sri Lanka, now produce their own CoHD estimates using national retail food price data, which offer more frequent updates and subnational coverage.[83] In West Africa, the cost and affordability of a nutritious diet has been adopted as a contributing factor indicator for food security within the Cadre Harmonisé,[84] and the Permanent Interstate Committee for Drought Control in the Sahel (CILSS) and WFP initiated monitoring in Benin, Burkina Faso, Mali, the Niger, Senegal and Togo in 2024, with plans to scale up to all 17 countries in the region.[85]

am In Ghana, the Statistics, Research and Information Directorate of the Ministry of Food and Agriculture collects monthly prices for 89 food items across 16 administrative regions. In Nigeria, the National Bureau of Statistics collects monthly retail prices for 315 food items across 36 states and the Federal Capital Territory (disaggregated by urban and rural locations). The CoHD is calculated at the state–urban–rural level, but for analyses, simple averages are shown for the six geopolitical zones (North Central, North East, North West, South South, South East and South West). In Pakistan, the Pakistan Bureau of Statistics collects monthly prices for 101 food items across 35 urban and 27 rural districts. The CoHD is calculated for each urban–rural district, with distributions and averages by province (Punjab, Sindh, Khyber Pakhtunkhwa, Balochistan and the Islamabad Capital Territory, for which only urban areas are available). In all three countries, the prices and resulting estimates of food group costs are not nationally representative.

FIGURE 3.7 RELATIVE DIFFERENCES IN FOOD GROUP COSTS BY REGION, GHANA

NOTES: Bars show the cost of each food group in the cost of a healthy diet (CoHD) indicator for each subnational unit (region), indexed to the capital location = 100 (horizontal dashed line). For each region, the indexed value is calculated as the median daily food group cost across months in that region, divided by the corresponding median for Greater Accra, multiplied by 100. Food group costs in each region-month are calculated as the sum of the daily costs of the least-cost items selected for each food group according to the CoHD methodology. Values above 100 indicate that the region's median food group cost is higher than Greater Accra's; values below 100 indicate it is lower. Retail prices are from the Ministry of Food and Agriculture in Ghana, 2023–2024. Central region data were only available for 2023. Only complete least-cost Healthy Diet Baskets with 11 items and 2 330 kilocalories are included in the figure.

SOURCE: Gilbert, R., Martinez, E.M., Costlow, L., Jenkins, N., Yenesew, S. & Masters, W.A. 2026. *How sensitive is the cost of a healthy diet to inclusion of the least-cost items in each food group?* Unpublished.

https://doi.org/10.4060/cd8306en-fig3.7

group costs underlying the CoHD are presented as indices to illustrate relative differences over time (January 2023 = 100) and between locations (costs in a country's administrative unit where the capital city = 100).

Geographical variation in food group costs is less pronounced for oils and fats than for other food groups, while the variation is most significant among fruits and vegetables. Figures 3.7, 3.8 and 3.9 show the relative distributions of food group costs in the three case study countries, aggregated by geographic area (regions in Ghana, geopolitical zones in Nigeria and provinces in Pakistan) and indexed to each country's administrative area that includes the capital city. Generally, prices of the least-cost items in each food group across areas in Nigeria and Pakistan are more similar to those in the capital areas. Notable exceptions to these patterns include vegetables in Nigeria – where some regions have prices that are more than double those in the capital – and fruits and vegetables in Pakistan (which have lower prices outside the capital city area). In Ghana, there is larger and more heterogeneous variation across regions and food groups.

FIGURE 3.8 RELATIVE DIFFERENCES IN FOOD GROUP COSTS BY GEOPOLITICAL ZONE, NIGERIA

NOTES: Bars show the cost of each food group in the cost of a healthy diet (CoHD) indicator for each subnational unit (geopolitical zone), indexed to the capital location = 100 (horizontal dashed line). For each geopolitical zone, the indexed value is calculated as the median daily food group cost across all location-month observations in that unit, divided by the corresponding median for the capital location, multiplied by 100. Locations are state-by-urban/rural in Nigeria, with the North Central geopolitical zone (which includes the Federal Capital Territory) as reference. Food group costs in each location-month are calculated as the sum of the daily costs of the least-cost items selected for each food group according to the CoHD methodology. Values above 100 indicate that the subnational unit's median food group cost is higher than the capital's; values below 100 indicate it is lower. Retail prices are from the National Bureau of Statistics in Nigeria, 2023–2024. Only complete least-cost Healthy Diet Baskets with 11 items and 2 330 kilocalories are included in the figure.

SOURCE: Gilbert, R., Martinez, E.M., Costlow, L., Jenkins, N., Yenesew, S. & Masters, W.A. 2026. *How sensitive is the cost of a healthy diet to inclusion of the least-cost items in each food group?* Unpublished.

https://doi.org/10.4060/cd8306en-fig3.8

The temporal variation appears driven by different processes (sustained inflation periods, seasonality in food prices) in Ghana, Nigeria and Pakistan. Tracking and understanding the nature of the temporal variation in the CoHD can aid in the design of more effective policies. Figure 3.10 shows change over time in the average daily food group cost across each month-location in Ghana, Nigeria and Pakistan (Figure 3.10), with diet costs indexed to their January 2023 values. In the case of Nigeria, the data align with an extended period of increases in food prices. A combination of adverse weather events, protracted conflict in the northern areas of the country, and macroeconomic reforms, including the removal of fuel subsidies and currency

FIGURE 3.9 RELATIVE DIFFERENCES IN FOOD GROUP COSTS BY PROVINCE, PAKISTAN

NOTES: Bars show the cost of each food group in the cost of a healthy diet (CoHD) indicator for each subnational unit (region), indexed to the capital location = 100 (horizontal dashed line). For each region, the indexed value is calculated as the median daily food group cost across months in that region, divided by the corresponding median for Greater Accra, multiplied by 100. Food group costs in each region-month are calculated as the sum of the daily costs of the least-cost items selected for each food group according to the CoHD methodology. Values above 100 indicate that the region's median food group cost is higher than Greater Accra's; values below 100 indicate it is lower. Retail prices are from the Ministry of Food and Agriculture in Ghana, 2023–2024. Central region data were only available for 2023. Only complete least-cost Healthy Diet Baskets with 11 items and 2 330 kilocalories are included in the figure.

SOURCE: Gilbert, R., Martinez, E.M., Costlow, L., Jenkins, N., Yenesew, S. & Masters, W.A. 2026. *How sensitive is the cost of a healthy diet to inclusion of the least-cost items in each food group?* Unpublished.

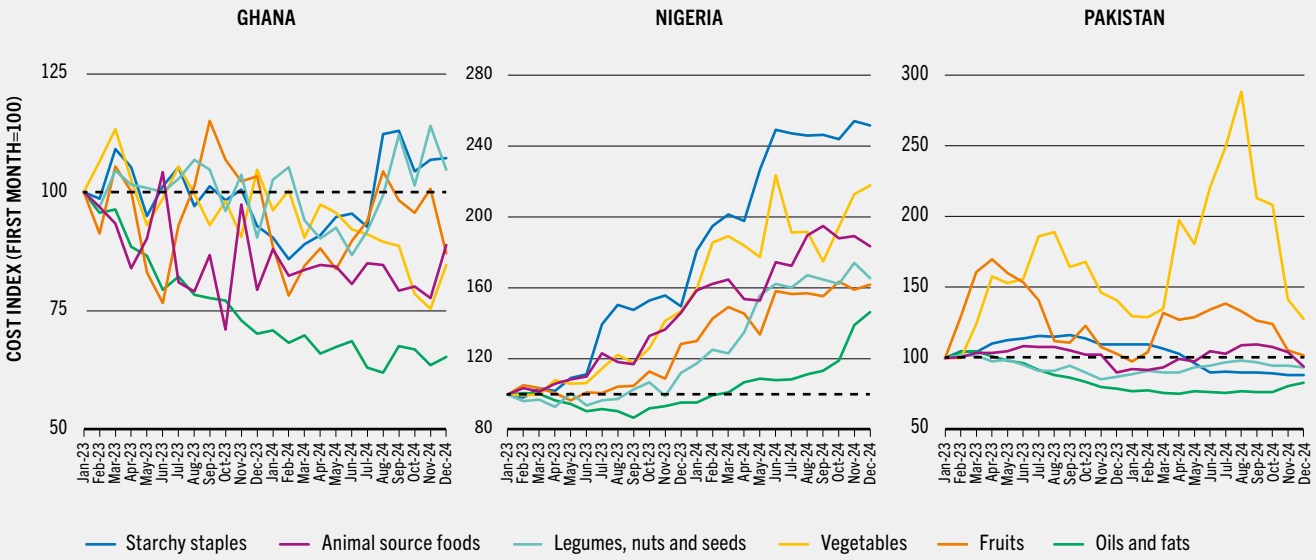
https://doi.org/10.4060/cd8306en-fig3.9

reforms that led to significant depreciation, appears to have compounded and created extensive food inflationary pressures.[an]

In contrast, the patterns in Pakistan suggest that time variation is more associated with seasonal food price patterns, especially for fruits and vegetables during the third quarter of each year (which coincides with the monsoon period). In Ghana, some food groups' costs showed a downward trend over time, while others exhibited slight fluctuations across months but did not show a clear trend. ■

an While a thorough analysis of food inflationary processes lies outside the scope of this report, several factors may have contributed to high food inflation in Nigeria. First, "widespread flooding in the 2022 rainy season damaged more than 676 000 ha of farmlands, which diminished harvests and increased the risk of food insecurity for families across the country".[86] The lingering effects of this major weather event may have affected food availability in the period from 2023 to 2024. Second, Nigeria experienced a pronounced macroeconomic reform in 2023, when the Central Bank unified multiple official exchange rates towards a market-determined rate (which led to significant currency depreciation) and the government phased out gasoline subsidies to curb its fiscal deficit.[87] These reforms significantly contributed to higher food price inflation during the 2023 to 2024 period. Third, the country has experienced significant and widespread conflict in the northern areas.[88, 89]

FIGURE 3.10 CHANGE OVER TIME IN FOOD GROUP COSTS IN GHANA, NIGERIA AND PAKISTAN



NOTES: Data shown are indexed food group costs comprising the cost of a healthy diet (CoHD), calculated using retail prices from three case study countries: Ghana, Nigeria and Pakistan. All cost estimates are indexed to the starting period of January 2023 (horizontal dashed line). Retail prices are from the Ministry of Food and Agriculture in Ghana, the National Bureau of Statistics in Nigeria and the Pakistan Bureau of Statistics. In Ghana, Central region data were only available for 2023. In Pakistan, Islamabad prices are only from urban areas. Only complete least-cost Healthy Diet Baskets with 11 items and 2 330 kilocalories are included in the figure. Lines show the median daily cost of each food group in the CoHD across locations, indexed to January 2023 = 100. Locations are region in Ghana, state-by-urban/rural in Nigeria and district-by-urban/rural in Pakistan. Food group costs in each location-month are calculated as the sum of the daily costs of the least-cost items selected for each food group according to the CoHD methodology.

SOURCE: Gilbert, R., Martinez, E.M., Costlow, L., Jenkins, N., Yenesew, S. & Masters, W.A. 2026. *How sensitive is the cost of a healthy diet to inclusion of the least-cost items in each food group?* Unpublished.

https://doi.org/10.4060/cd8306en-fig3.10

3.4 FACTORS ASSOCIATED WITH THE COST OF A HEALTHY DIET

The cost of a healthy diet varies significantly across countries. Understanding this cross-country variation can help identify policy entry points to ensure access. Food prices in each country reflect the interaction of supply and demand in local markets, shaped by long-term structural features of agrifood systems as well as broader socioeconomic conditions.[90] This section examines whether the CoHD (and, where data permit, the cost of food groups) is associated with a set of economic indicators across countries.

This set of variables is not exhaustive but reflects broad economic conditions (i.e. level of economic development, agricultural productivity, input costs, value chain efficiency, and trade integration). The aim is to provide suggestive evidence on the relationship between CoHD estimates and key factors, laying the foundation for further simulations in **Chapter 4**. These simulations will formally gauge how particular policies can affect the CoHD globally and regionally.

The analysis finds that several of these factors are associated with differences in the CoHD across countries, as summarized here and explored in detail in the rest of this section. Economic growth and development, as measured by gross domestic product (GDP) per capita, is only weakly associated with the overall CoHD, although the

association varies across food groups. Animal source foods and starchy staples tend to cost less in countries with higher GDP per capita, while fruits and vegetables tend to cost more. Among productivity-related factors, higher long-term public expenditure on agricultural research and development is associated with slightly lower costs for starchy staples, vegetables, and oils and fats. Higher crop yields are associated with lower costs for fruits and vegetables. Higher costs of inputs, including elecricity and agricultural labour, are associated with higher costs for several food groups, particularly vegetables. The efficiency of value chains, as captured by road quality and the cost of information and communications services, shows some of the strongest associations with the CoHD. Better road quality and lower costs of information and communications services are associated with lower diet costs, with particularly positive associations for vegetables and starchy staples. The efficiency of trade-related logistics, which captures how well countries manage the movement of goods across borders, shows some of the strongest and most consistent associations with the CoHD. The methodology is presented in the Supplementary material to Chapter 3.

While the variables analysed in this section are key to understanding pathways to reduce the CoHD, there are important caveats to the results in this section. First, the list is not comprehensive and focuses on a set of policy-relevant, yet limited factors. These factors were identified through literature reviews examining variables influencing overall food prices, as studies specifically analysing the drivers of least-cost items are scarce. Importantly, the cross-sectional nature of the data allows for testing whether these factors are related to differences between CoHD estimates, but it is not well-suited to understand the role of shocks that can affect the CoHD within countries over time (see Box 3.4). Second, the estimates in this section capture the association between variables and the CoHD, but they do not yield causal estimates. Doing so would require identifying instrumental variables or more complex research designs that could leverage exogenous variations to test for causal relationships. Third, the estimates in this section rely on a limited number of observations for which CoHD estimates and the variables in Table 3.4 are both available. Fourth, the data and methodological limitations of the CoHD (see **Section 3.1**) might impose measurement error in the dependent variable of the analysis; it is unclear whether this measurement error occurs at random or is systematic. Thus, the results from this section should be taken with caution; they aim to preliminarily identify a set of variables to perform more robust policy simulations in **Chapter 4**.

The cost of a healthy diet is weakly associated with economic development across countries. The level of economic development (as measured by a country's GDP per capita) is only weakly associated with the overall CoHD. Estimates suggest that a 10 percent increase in per capita GDP is associated with a 0.39 percent decrease in the CoHD. This is consistent with previous research that finds that national income is not correlated with the cost of a healthy diet.[34, 45] However, the estimates suggest that some food groups vary more significantly with economic development. A 10 percent increase in GDP per capita is associated with a 1.7 percent reduction in the cost of animal source foods, a 1.65 percent reduction in the cost of starchy staples, and a 2.4 percent reduction in the cost of oils and fats (Figure 3.11). In contrast, the same 10 percent increase in GDP per capita is associated with a 1.8 percent increase in the cost of fruits and a 1.2 percent increase in the cost of vegetables. Costs vary by income level, especially for animal source foods, which are often more expensive in low-income than in high-income countries, and for fruits and vegetables, which are substantially cheaper in low-income than in high-income countries.

The total amount of food available per person is associated with lower costs for several food groups in the HDB. Domestic food supply per capita – which combines production, imports and exports[ao] – captures the net quantity of food available for consumption in each country and may help explain variation in consumer food prices. A 10 percent increase in per capita »

ao Domestic food supply per capita is calculated from FAOSTAT Supply Utilization Accounts[113] for the specific food items in each country's HDB, aggregated at the food-group level and expressed in kilocalories per person per day. It reflects production plus imports minus exports, adjusted for stock variation.

BOX 3.4 WEATHER EVENTS, CONFLICT AND MACROECONOMIC SHOCKS ALSO DISRUPT THE COST OF A HEALTHY DIET

Shocks such as extreme weather events, conflicts and macroeconomic disruptions are an important source of variation in prices of foods that compose a healthy diet. These shocks do not raise all food prices equally. Their effect on different food items depends on how they interact with their physical and economic properties, including perishability, tradability, seasonality and input intensity.

Weather shocks can have major impacts on food prices, but their effects might be heterogenous across food groups and types of shock. In China, tropical storms were associated with retail food prices that were 2.3 percent higher, on average, between 1998 and 2012. The storms mostly affected the prices of fresh vegetables (which increased by about 6 percent), while grains and meats showed little response.[91] Consistent with this, Venkat, Masters and Naumova (2022)[92] found that, between 2000 and 2021, storms were associated with prices 26 percent higher for fruits and vegetables relative to cereals. Droughts and heatwaves also have important effects on food prices. Recently, vegetable prices in California and Arizona rose by 80 percent after a drought in 2022, and cabbage prices in the Republic of Korea rose by 70 percent after a heatwave in 2024.[93] However, the timing of price surges varies depending on the context. For example, in the Niger, a one-standard-deviation reduction in seasonal rainfall is associated with lower millet prices at harvest, but with higher prices six months later (during the lean season), amplifying seasonal price patterns.[94] Weather shocks can also affect the prices of animal source products (which is, on average, the most expensive food group in Healthy Diet Baskets). Droughts can affect prices of milk and livestock, as they can reduce the availability of water, pasture and feed, besides increasing heat stress and the prevalence of parasites and diseases.[95–97]

Extreme weather events also have heterogeneous price effects across countries based on their role in international food trade and the global significance of the affected region. Shocks in regions that are highly exposed to climate variability and extremes but account for a small share of global food exports tend to raise local prices sharply without propagating internationally. Between 2018 and 2019, intense wet weather and cyclones across Eastern Africa and the Arabian Peninsula triggered one of the worst desert locust outbreaks in decades, causing severe damage to agriculture and food security across the region; yet the impact on global food prices remained limited, reflecting the region's relatively small role in global food production.[98, 99] By contrast, shocks in major producing regions transmit to global commodity markets and effect import-dependent countries.[100, 101] The Russian Federation's 2010 drought reduced its wheat harvest to more than 50 percent below average, prompting an export ban that pushed global wheat prices up by more than 80 percent between June and August 2010. Pakistan, one of its key importing partners, saw domestic wheat prices rise 16 percent as a direct consequence.[102, 103] Droughts associated with La Niña events between 2020 and 2023 reduced wheat output in Argentina, a key global supplier, by around 35 percent and contributed to sharp increases in international wheat prices.[34] However, evidence also suggests that even when weather shocks in exporting countries raise world prices, the transmission to consumer prices in importing countries may be incomplete and highly dependent on value-chain characteristics.*

Conflict transmits to food prices through disruption of local production and global trade. Where conflict disrupts local production and internal supply routes, prices of locally produced staples increase. Sorghum prices in the Sudan more than doubled a year after conflict erupted in April 2023, with sharper rises in conflict-affected markets than in less-affected markets.[104, 105] In eastern Democratic Republic of the Congo, conflict in early 2025 raised maize flour, palm oil and cassava flour prices to 37 percent above pre-crisis levels.[106] Across 15 sub-Saharan African countries, wars were associated with staple food price increases of around 4 percentage points beyond generalized pressures, with effects concentrated in imported staples.[107] The impacts of conflicts also spill over to food prices in other countries through global trade. The war in Ukraine raised global prices of wheat, maize, sunflower oil and fertilizer, with the effects concentrated in import-dependent countries, with the Russian Federation and Ukraine together accounting for 34 percent of global wheat exports, 17 percent of maize, and 75 percent of sunflower oil.[108]

Macroeconomic shocks, including currency depreciation and fuel subsidy removal, affect food prices. Slowdowns or recessions tend to depress food

BOX 3.4 (Continued)

prices through demand destruction, in particular for products with higher sensitivity to income, like animal products and fruits and vegetables, or those associated with specific consumption patterns (see Kennedy *et al.* [2026],[109] for the heterogenous impacts of the COVID-19 crisis on fruit and vegetable markets). Other shocks, such as currency depreciation, can raise food prices by impacting the fiscal capacity of governments to maintain policies (e.g. subsidies), or by increasing the cost of their imports, with consequences that differ across food groups. In Nigeria, fuel subsidy removal in June 2023 raised transport costs sharply, driving price increases in domestically produced cereals with long supply chains (e.g. maize, sorghum, millet) by 57 to 84 percent in the months that followed.[110] The concurrent currency devaluation, which saw the naira lose over 50 percent of its value in a single quarter, compounded these effects by raising the cost of imported agricultural inputs. Cumulatively, these and earlier shocks drove prices of wheat up by 63 percent and brown sorghum by 84 percent.[110] More broadly, across 15 sub-Saharan African countries, a 1 percent real depreciation raised the price of highly imported staples by about 0.3 percent, but with little effect on domestically produced staples.[107] In Sri Lanka, multiple simultaneous macroeconomic shocks – including currency depreciation, monetary expansion and a sudden ban on chemical fertilizer imports – drove sharp food price increases during the 2021–2022 crisis, with pulses exceeding 100 percent, and cereals, chicken, fish and eggs surpassing 50 percent year-on-year.[111]

NOTE: * Using data from the UK banana market, Lloyd *et al.* (2021)[112] show that weather shocks in exporting countries generate substantial fluctuations in world and wholesale banana prices but have virtually no effect on retail banana prices, as adjustment occurs through changes in margins absorbed by intermediaries, the "missing middle" of the food supply chain.

» domestic food supply of animal source foods is associated with a 2.3 percent reduction in the cost of animal source foods, i.e. one of the HDB groups with the highest costs in the CoHD. Higher per capita supply of vegetables is also associated with a 0.8 percent reduction in their cost, and a higher per capita supply of oils and fats with a 0.5 percent reduction in the cost of oils and fats (Figure 3.11). Most countries depend on domestic production for a large share of their food consumption, with international trade smoothing supply across seasonal variation and production shortfalls.[114] Shortfalls in domestic production are a well-established driver of higher food prices, particularly in developing countries.[115] Domestic production capacity varies across countries according to arable land availability, agroecological conditions, and agricultural productivity. The analysis below examines long-term public expenditure on agricultural research and development (R&D), which shapes both productivity growth over decades through the development and diffusion of improved technologies,[116] and crop yields, which reflect the combined outcome of these investments, input use, and local growing conditions among many others.

Long-term public expenditure on agricultural R&D is associated with lower diet costs across several food groups. Sustained R&D expenditure is linked to higher yields[ap] and agricultural total factor productivity, which in turn expands food supply and exerts long-term downward pressure on consumer food prices.[aq, 120, 121] A 10 percent higher cumulative agricultural R&D expenditure between 1960 and 2022 is associated with a 0.3 percent reduction in the total cost of a healthy diet, a 0.4 percent reduction in the cost of starchy staples, a 0.5 percent reduction »

ap For example, Golin, Hansen and Wingender (2021)[117] find that the green revolution increased the yields of food crops between 1965 and 2010 throughout the developing world. In their analysis of modern or high-yielding crop varieties (MVs) generated through international agricultural research, Evenson and Gollin (2003)[116] find that "it is clear that productivity growth associated with MVs had important consequences. Increased food production has contributed to lower food prices globally" (p. 780).

aq Though not strictly related to the CoHD, R&D that targets food biofortification is another pathway through which these investments can improve nutrition globally.[118, 119]

TABLE 3.4 DESCRIPTION OF VARIABLES

Variable (X_i)	Description	Data source	Level of data and availability
Gross domestic product per capita	GDP (PPP dollars) per capita in 2021.	World Development Indicators.[i]	By country.
Yield	Average yield (kcal) of products in each food group, weighted by land allocation.	FAOSTAT.[ii]	By country and food group. Not available for animal source foods and oils and fats.
Research and development expenditure	R&D expenditures (PPP dollars) between 1960 and 2022.	WUR-ERS Global Research on Agriculture: Personnel & Expenditures dataset.[iii]	By country.
Domestic food supply	Domestic food supply (kcal) per capita from the food items in each country's HDB (aggregated at the food group level).	FAOSTAT[ii]	By country and food item.
Mean speed score in roads	Average travel speed between large cities. Proxy for road quality and access.	Road quality and mean speed score.[iv]	By country.
Price of a mobile phone basket with low usage	Price (PPP dollars) of a mobile data and voice low-consumption basket (70 min + 20 SMS + 500 MB) in 2021 (or earlier).	International Telecommunication Union, ICT Price Baskets.[v]	By country.
Nominal rate of protection in agriculture	Agricultural Incentives Consortium estimates of NRPs for agricultural products. NRPs quantify the degree to which domestic prices of a good are protected from world market prices due to trade barriers (tariffs, quotas, etc.). NRPs are estimated as the percentage difference between the value of production priced at national prices and the value of production priced at reference prices (i.e. border prices adjusted for distribution, storage, transport and other marketing costs) for each food group. The data correspond to 2021 (or the latest available year).	Global Database on Nominal Rate of Protection (NRP).[vi] For methodological details, see Laborde *et al.* (2023).[vii]	By country and food group. Not available for vegetables, fruits and oils and fats due to the small number of food items with information available for these groups.
Logistics performance index	Overall LPI in 2018. The index combines six dimensions: customs efficiency, quality of trade and transport infrastructure, ease of arranging shipments, quality/ competence of logistics services, tracking and tracing, and timeliness of deliveries. The variable ranges from 0 to 5 (higher values reflect better performance).	World Development Indicators.[i] For methodological aspects, see Arvis *et al.* (2018).[viii]	By country.
Electricity prices	Price (PPP dollars) of electricity (per kWh) in 2021 (or earlier).	World Bank Doing Business.[ix]	By country.
Labour costs	Proxy combining two variables. The first is labour intensity, i.e. the number of AWU (275-day full-time employees) to grow 1 000 tonnes of different crops. Crops are aggregated at the food group level. It is based on a modelled inventory where countries are assigned to production-system groups (four field-size classes for crops, four livestock-system clusters for livestock) and AWU per thousand tonnes is derived by dividing the group-level workers-per-hectare (or per-head) by country-specific FAOSTAT yields. The second is annual earnings of low-skilled workers in each country, adjusted by PPP. The proxy for labour costs is estimated as the product of both (cost of producing 1 000 tonnes by food group).	Labour intensity data are from Vittis *et al.*, 2025.[x] Wages are from ILOSTAT, SDG Indicator 8.5.1 (average hourly earnings, skill level 1), annualized and adjusted to PPP.[xi]	By country and food group.

NOTE: GDP = gross domestic product; PPP = purchasing power parity; R&D = research and development; HDB = Healthy Diet Basket; NRP = nominal rate of protection; LPI = logistics performance index; AWU = annual working units.

SOURCES: Author's (FAO) own elaboration based on [i] World Bank. 2026. DataBank: World Development Indicators. [Accessed on 3 March 2026]. https://databank.worldbank.org/source/world-development-indicators; [ii] FAO. 2026. FAOSTAT. [Accessed on 3 March 2026]. https://www.fao.org/faostat/en. Licence: CC-BY-4.0; [iii] van Dijk, M., Fuglie, K., Heisey, P.W. & Deng, H. 2025. A global dataset of public agricultural R&D investment: 1960-2022. *Scientific Data*, 12(1): 1140. https://doi.org/10.1038/s41597-025-05331-y; [iv] Moszoro, M. & Soto, M. 2022. *Road Quality and Mean Speed Score*. Working Paper, No. 2022/095. Washington, DC, IMF (International Monetary Fund). https://www.imf.org/en/publications/wp/issues/2022/05/20/road-quality-and-mean-speed-score-518200; [v] ITU (International Telecommunication Union). 2024. ITU Statistics: ICT Price Baskets (IPB). [Accessed on 28 April 2026]. https://www.itu.int:443/en/ITU-D/Statistics/Dashboards/Pages/IPB.aspx; [vi] AgIncentives Consortium. 2023. *Global Database on Nominal Rate of Protection (NRP) 2023*. https://doi.org/10.7910/dvn/ckodwf; [vii] Laborde, D., Lallemant, T., Majeed, F., Mamun, A., Martin, W. & Tokgoz, S. 2023. *Introducing the Updated AgIncentives Database*. Washington, DC, IFPRI (International Food Policy Research Institute). https://cgspace.cgiar.org/server/api/core/bitstreams/dabb1110-958c-4b0e-bcc6-01b86fb27525/content; [viii] Arvis, J.-F., Ojala, L., Wiederer, C., Sheperd, B., Raj, A., Dairabayeva, K. & Kiiski, T. 2018. *Connecting to Compete 2018: Trade Logistics in the Global Economy*. Washington, DC, World Bank. https://doi.org/10.1596/29971; [ix] World Bank. 2026. DataBank: Doing Business. [Accessed on 3 March 2026]. https://databank.worldbank.org/source/doing-business; [x] Vittis, Y., Obersteiner, M., Godfray, H.C.J. & Springmann, M. 2025. Labour requirements for healthy and sustainable diets at global, regional, and national levels: a modelling study. *The Lancet Planetary Health*, 9(10). https://doi.org/10.1016/j.lanplh.2025.101342; [xi] UNSD (United Nations Statistics Division). 2026. *SDG indicator metadata*. New York, USA. https://unstats.un.org/sdgs/metadata/files/Metadata-08-05-01.pdf; ILO (International Labour Organization). 2025. ILOSTAT data explorer: SDG indicator 8.5.1 - Average hourly earnings of employees by sex (local currency) - Annual. [Accessed on 14 May 2026]. https://rshiny.ilo.org/dataexplorer36/?lang=en&segment=indicator&id=SDG_0851_SEX_OCU_NB_A&channel=ilostat

FIGURE 3.11 ASSOCIATION BETWEEN THE COST OF A HEALTHY DIET AND SELECTED ECONOMIC VARIABLES

NOTES: GDP = gross domestic product; R&D = research and development; PPP = purchasing power parity. Each cell shows the percentage change in the cost of a healthy diet (CoHD), or in the cost of a given food group, associated with a 10 percent change in the variable. Arrows indicate whether the change is an increase (↑) or a decrease (↓) in the variable. This figure reports all regression coefficients for the overall CoHD. At the food group level, coefficients that are not statistically significant at conventional significance levels (p-values>0.1) are omitted from the table, while n.a. indicates cases where variables at the food group or food item levels are not available. For data sources and variable definitions, see Table 3.4. Standard errors, number of observations and full regression results are reported in the Supplementary material to Chapter 3.

SOURCE: Costlow, L., Yenesew, S., Nakasone, E., Mamidanna, S., Gilbert, R., Martinez, E.M., Jenkins, N. & Masters, W.A. 2026. *Analysis of geographic, structural, and policy associations with global variation in the cost of a healthy diet*. Unpublished.

https://doi.org/10.4060/cd8306en-fig3.11

» in the cost of vegetables, and a 0.4 percent reduction in the cost of oils and fats (Figure 3.11). The extent of the association is consistent with the slow, cumulative nature of returns to research investment, where today's diet costs reflect decades of past spending. Challenges to meet a growing population's nutritional needs will require sustained increases in R&D spending.[122–124]

Countries with higher crop yields have lower costs for some food groups, though the aggregate

association with the total CoHD is weaker. Higher yields increase the quantity of food produced per unit of land, which expands domestic supply and can exert downward pressure on prices. A 10 percent increase in crop yield is associated with a 2.0 percent decrease in the cost of vegetables and a 1.1 percent decrease in the cost of legumes, nuts and seeds (Figure 3.11).

As a complement to domestic production, trade policies can potentially increase availability and reduce the cost of critical food items.[ar] In this section, the association between the CoHD and the nominal rate of protection (NRP) is tested. The NRP is the difference between domestic and international prices and quantifies the extent to which trade barriers (tariffs, quotas, etc.) drive a wedge between them. The results suggest that a 1 percentage point reduction[as] in the NRP in agriculture is associated with a modest (0.3 percent) reduction in the CoHD. This is consistent with Gilbert *et al.* (2024),[129] who find that tariffs and non-tariff measures account, on average, for 0.67 and 2.45 percent of CoHD estimates globally.[at] Perhaps more important than tariff and non-tariff measures is the efficiency with which countries handle imports. Hummels and Schaur (2013)[132] show that an extra day in transit is roughly equivalent to increasing the distance between trading partners by 70 kilometres (km). These findings highlight the importance of trading logistics, which might be even more critical for perishable food items. The results of this section show the association between countries' logistics performance index (a summary measure of the quality of trade-related logistics) and their CoHD. The results suggest that a 10 percent improvement in this index is associated with a 5.4 percent decrease in the CoHD.[au]

Beyond cross-border logistics, road quality within countries is associated with lower costs across several food groups in the HDB. Consumer food prices reflect costs accumulated at every stage of the value chain, from the farm to the retail level. A key determinant of how efficiently these stages operate is the quality of the underlying infrastructure. Roads, in particular, are essential at multiple points: they connect farms to input suppliers, link agricultural producers to processors, and enable the final delivery of food to markets.[134–137] The average travel speed could be particularly important in contexts like sub-Saharan Africa, where staples travel roughly 4 000 km on average from origin to consumer, around four times the distance observed in European supply chains.[138] These long distances reflect poor port infrastructure and sparse transport networks among many others.[138] Evidence from other low- and middle-income settings points in the same direction. High transport costs and poor road quality transmit local supply and demand shocks into higher and more volatile prices in remote markets, and better-connected road networks are associated with smaller price differences across regions and lower price volatility, with effects most pronounced for vegetables and beans.[139, 140] The analysis in this section suggests that a 10 percent increase in mean speed score[av] is

ar For example, Bell *et al.* (2019)[125] show that a reduction in import duties for fruits and vegetables in Fiji led to increased import volumes and availability of these foods. Related research has found that a reduction in tariffs on sugars, confectionery products, oils and fats is associated with a larger prevalence of overweight and obesity rates in low- and middle-income countries, with especially harmful effects among the poor.[126] Glauber and Laborde (2023)[127] simulate the impact of varying agricultural tariffs, taxes and duties on the CoHD. They find that removing border support for selected priority products (such as fruits and vegetables, aquatic foods and dairy), while keeping unchanged support for products that are energy-dense and have minimal nutritional value, would result in an average reduction of 1.7 percent in the CoHD globally.

as The average NRP in agriculture across the 67 countries included in the Ag-Incentives database in 2021 was about 5 percent.[128] Thus, a reduction of 1 percentage point would imply a 20 percent average reduction in NRPs.

at This is also consistent with Schiavo (2025),[130] who analyses the impact of average national import tariffs on primary products (applied for agriculture, hunting, forestry and aquatic foods) on the CoHD. The author finds a positive relationship between them. However, the magnitude of this relationship is rather modest: a 10 percent increase in tariffs is associated with a 0.2 percent increase in the CoHD (Table 13). Reduced transmission of tariffs to prices can be especially low in developing countries. For example, analysing data from Ethiopia and Nigeria, Atkin and Donaldson (2015)[131] investigate whether reductions in international trade barriers would translate into lower retail prices. They find that intermediaries are likely to capture most of the surplus from lower port prices and consumers would only receive a small portion of these gains. Their results also suggest that these effects are more pronounced in locations that are farther away from ports.

au Headey *et al.* (2024)[133] also find that the logistic performance index is negatively associated with the cost of EAT-Lancet diets.

av The mean speed score captures the average travel speed between a country's major cities, calculated using actual road travel times, and serves as a proxy for the quality and connectivity of the inter-city road network.[141]

associated with a 2.5 percent lower total CoHD,[aw] a 3.5 percent lower cost of starchy staples, a 3.7 percent lower cost of vegetables, and a 4.2 percent lower cost of oils and fats (Figure 3.11).

The cost of a basic mobile service is associated with higher costs for several food groups in the HDB. The expansion of information and communications technologies (ICTs) throughout the developing world can mitigate the adverse effects of large transaction costs and asymmetric information that prevail in agricultural markets.[143–145] Previous evidence suggests that the introduction of ICTs can facilitate communication between buyers and sellers to avoid spoilage and food losses.[ax, 147] They can also improve information flows and enhance arbitrage across markets (especially between areas with food surpluses and deficits), increasing food access and efficiency.[148] Based on the cost of ICT bundles across countries (covering calls, text messages and mobile data), the regressions suggest that ICTs are associated with the CoHD: a 10 percent reduction in the cost of ICTs is associated with a 1 percent decrease in the CoHD, with particularly large effects for starchy staples and vegetables.

Input costs, such as labour and electricity, can contribute to the CoHD. Data from FAOSTAT suggest that labour accounts for about 31 percent of the cost of food consumed at home.[ay] The results in this section suggest a positive association between agricultural labour costs (see Table 3.4 for further details about this variable) and the CoHD. Additionally, energy is a major input across agrifood systems, including for on-farm uses such as irrigation. In addition, midstream segments of the agrifood value chains (which include logistics, processing and wholesale markets) play an important role in developing countries.[150] Reardon (2015)[151] estimates that these sectors account for 30 to 40 percent of value added in food value chains and are intrinsically electricity-intensive (due to milling, power in processing facilities, wholesale market operations, cold storage, retail refrigeration, etc.). Thus, where electricity is more expensive, the cost of running these stages of the value chain can be higher, and a larger share of those costs may be passed through to retail prices. Higher electricity prices are associated with higher costs for vegetables and, to a smaller extent, with the total CoHD. A 10 percent higher electricity price is associated with a 1.4 percent higher cost of vegetables and a 0.5 percent higher total cost of a healthy diet (Figure 3.11). ■

aw This is consistent with Bai *et al.* (2021),[142] who find that the cost of nutrient-adequate diets is strongly and positively linked to the average travel time for rural people in each country to reach the nearest city with more than 50 000 people (i.e. the remoteness of rural populations).

ax Food losses are not included in this analysis, as comparable cross-country data are limited. Measuring losses requires tracing specific commodities through each stage of the supply chain, and the cost and complexity of doing so are considerable. As a result, only 39 countries reported data to FAO on an annual basis between 1990 and 2017.[146] Even among the data that are available, coverage is uneven across food groups, so the measurements cannot be matched consistently to the food groups used in this analysis.

ay This estimate comes from FAOSTAT's food value chain domain,[149] which decomposes the total value of food expenditure at purchaser prices into four primary factors: labour, operating surplus, taxes (minus subsidies on production), and imports. The data are available for a set of high- and middle-income countries. More precisely, the estimate captures the average share of labour in food and tobacco at home (FTAH) for 37 countries between 2010 and 2015 (pooling together all the datapoints available for these countries during this period.

THAILAND
A wholesale market: produce from the countryside is distributed to retail outlets.
© FAO/Dan White

CHAPTER 4
HOW TO REDUCE THE COST OF A HEALTHY DIET: TARGETED AND COMPLEMENTARY INTERVENTIONS

KEY MESSAGES

➔ Reducing the cost of a healthy diet (CoHD) requires policies and interventions that target context-specific drivers of high prices, rather than one-size-fits-all solutions.

➔ Policy options fall along two complementary axes: expanding supply (domestic production and trade) and reducing structural per unit costs across the agrifood value chain.

➔ The most effective strategies combine structural investments (research and development, irrigation, roads, cold chains, reduction of food loss) with policy reforms (subsidy repurposing, including through reduced taxation on specific food groups, trade facilitation, competition and regulatory rules) so that markets transmit gains to consumers.

➔ Long-term productivity gains – especially through rebalanced agricultural research and development towards fruits, vegetables and legumes – offer high leverage, but only when enabling systems (seed delivery, water, land tenure, finance, extension) support adoption.

➔ Because post-farmgate activities make up most of what consumers pay, improving value chain efficiency (transport, storage, processing, market information, loss reduction) is essential for lowering prices of perishable, nutritious foods.

➔ Interventions must be tailored by food group and country context and sequenced with demand-side policies to avoid unintended price spikes and to manage distributional and sustainability trade-offs.

➔ Evaluating these agrifood interventions requires advanced modelling to explicitly capture cross-border trade spillovers, demand rebounds, and economy-wide feedback loops. This approach demonstrates that combining interventions across the value chain generates cost-reduction outcomes far greater than the sum of their isolated parts.

➔ Horticulture is the primary lever for CoHD reduction. Technological efficiency shocks and structural upgrades must be explicitly targeted towards highly perishable fruits and vegetables to successfully close the affordability gap. Applying generic productivity upgrades to already low-cost staples inadvertently lowers the cost of the average diet faster than the cost of the healthy diet, widening the relative price gap between average diet and healthy diet.

➔ To reduce the cost of a healthy diet, fiscal subsidies must avoid low-cost starchy staples. Taxpayer resources must be strictly directed towards the highest-cost, most nutritious foods to effectively lower the total “price tag” of a healthy diet.

➔ Implementing cost-reducing reforms is a governance challenge: success depends on managing unintended consequences so that interventions are efficient, equitable and politically feasible.

➔ Price reductions cannot be achieved by neglecting "hidden" costs: lowering the retail CoHD must not shift costs onto society through environmental degradation, compromise on food safety, negative health outcomes or precarious rural livelihoods.

➔ Demand-side programmes – not explicitly discussed in this report but needed to achieve affordability goals, such as targeted social protection, food subsidies and wage and income policies – must be sequenced with supply expansion and efficiency upgrades; otherwise, rapid growth in demand for nutritious foods can raise market prices and reduce affordability.

➔ Because reforms are redistributive, they require transition support and inclusive public–private collaboration to protect vulnerable consumers and enable smallholders, women and youth to benefit.

Reducing the cost of foods that compose healthy diets requires designing interventions that target the specific drivers of cost in each context. This section focuses on interventions along the agrifood supply chain, corresponding to one of the six pathways identified in *The State of Food Security and Nutrition in the World 2021*[1] for transforming agrifood systems, and the one most directly linked to increasing the availability of safe and nutritious foods while lowering their cost. These interventions operate across the different stages of the supply chain, from production to processing, distribution and retail, shaping both availability and price formation.

However, efforts to improve access to a healthy diet through agrifood systems transformation must be embedded in a broader policy agenda and carefully designed to avoid unintended consequences for sustainability, equity and rural livelihoods.[1] This section builds on the associations identified in **Section 3.4** and widens the focus from the factors linked to differences in the CoHD to the interventions and enabling conditions that can lower it, many of which fall outside what the cross-country analysis could measure. It examines these interventions in detail and how their relevance and effectiveness vary across regions. To systematically evaluate available options, the interventions are presented in **Section 4.1**, organized around two principal axes: first, increasing availability by expanding supply; and second, implementing structural cost-reduction measures across the agrifood value chains. **Section 4.2** utilizes the MIRAGRODEP computable general equilibrium framework to rigorously simulate how targeted interventions will propagate through the global agrifood system to reduce the CoHD. Finally, the chapter turns from identifying which interventions can lower the CoHD to the practical question of how to deploy and scale these reforms in real-world settings. It highlights the governance and political-economy challenges of implementation, emphasizing the need to anticipate unintended consequences and keep reforms efficient and equitable.

4.1 WHICH INTERVENTIONS ARE EFFICIENT FOR BRINGING DOWN THE COST OF EXPENSIVE FOOD GROUPS?

Addressing the high cost of foods that compose healthy diets requires targeted, context-specific policy interventions within agrifood systems. To systematically evaluate the available options, we propose a typology of interventions. The interventions are organized around two principal axes: first, through an extensive effect, increasing availability and expanding supply through domestic production or international trade; and second, through an intensive effect, reducing the cost of each unit through interventions across the agrifood value chain.

The extensive effects of supply expansion and the intensive effects of per unit cost reduction are inextricably intertwined by market forces. Productivity-enhancing interventions inherently function as a dual-impact mechanism; by optimizing resource efficiency, they mechanically lower the underlying structural cost of production while simultaneously shifting the supply curve outwards to increase aggregate availability. Due to the double benefits of these measures, prioritizing productivity-enhancing investments remains the most efficient – at each stage of the value chain – high-leverage policy strategy for sustainably lowering the CoHD.

Effectively reducing the CoHD requires a synchronized approach[az] that combines the physical "hardware" of technological investments with the regulatory "software" of policy reform. Beyond the functional distinction between extensive supply expansion and intensive cost reduction, interventions naturally fall into these two complementary domains. The hardware domain encompasses technological solutions and capital-intensive, physical or immaterial, investments, including tangible assets such as cold chain facilities, rural road networks, modern irrigation systems, and the deployment of improved agricultural inputs generated through continuous R&D. Conversely, the software domain represents the institutional frameworks that govern how the system operates. This involves policy interventions – such as subsidy repurposing, tariff reductions, trade facilitation and competition regulations – that shape market incentives and actors' behaviour. Ultimately, policymakers should provide support and optimize the operational rules to strengthen and upgrade the physical capacity of agrifood systems and ensure markets function efficiently, equitably and without artificial distortions.

For each category, this section presents evidence on interventions than can reduce costs; it draws on FAO's Food and Agriculture Policy Decision Analysis Tool (FAPDA) database[3] to describe which policy instruments governments have used, which food groups they have targeted and how the mix varies across regions.[ba]

Axis 1: Increasing the availability of key food group products

The fundamental economic logic underlying the first axis of intervention is straightforward: assuming a constant cost structure (including input prices) and constant demand, i.e. *ceteris paribus*, expanding the aggregate supply of targeted food groups will exert downward pressure on market prices, thereby reducing the overall CoHD. Expanding supply relies on a combination of domestic production enhancement – by either expanding the production frontier or reallocating production towards specific food groups – and international trade integration and access. These interventions must aim to shift the aggregated supply curve outwards of specific products.

Pushing the production frontier in a sustainable way by increasing long-term agricultural productivity

Three interdependent factors shape whether agricultural productivity gains translate into lower costs for the foods that compose healthy diets: research that generates new technology, delivery systems that channel this technology to producers, and the state of natural resources that support greater productivity. Research produces yield-enhancing genetic material, crop varieties and agronomic knowledge. Seed systems, extension services, credit, and secure land tenure determine the extent to which improved technology is adopted at the farm level. Water availability and soil conditions shape the range of feasible production. The evidence reviewed below reflects the interdependence across these three factors.

Investment in agricultural R&D has been among the most effective long-term drivers of lower food costs, yet public spending is slowing in most countries and remains concentrated on starchy staples. R&D-driven productivity growth raised agricultural output and was a principal force behind falling real crop prices in the second half of the twentieth century.[bb, 6, 7] Modelling estimates suggest that an additional USD 4 billion annually in agricultural R&D could reduce global food prices by an estimated 16 percent by 2030.[8] However, over 60 percent of

az The interventions to reduce the CoHD discussed here are supply side, and complement the WHO "best buys" for tackling non-communicable diseases, which primarily aim to reduce the consumption of unhealthy diets through demand-side measures, while also highlighting some supply-side actions such as subsidies for healthy foods.[2]

ba The FAPDA database is maintained by FAO and records discrete government policy decisions related to food and agriculture across 217 countries, compiled from legislation, ministerial decrees and policy announcements. This analysis counts all recorded policy actions without distinguishing between announcements and implemented measures, because both represent government attention to a given instrument and food group, and because announcements alone can shift market expectations and prices.[4] Coverage varies by policy type: trade measures are more comprehensively documented than domestic instruments such as social protection or production subsidies. Longstanding programmes funded through routine budget allocations may be undercounted because they do not generate the discrete decisions the database is designed to capture. The patterns reported here should be read as the recorded policy mix rather than a comprehensive inventory of all government action.

bb As of 2020, CGIAR crop technologies alone were generating an estimated USD 47 billion in annual economic welfare gains.[5]

economies have decelerated public investments in agricultural R&D in recent decades, and almost a third are now cutting spending.[bc, 9] Sub-Saharan Africa, where the CoHD is among the highest, accounts for just 3 percent of global agrifood R&D spending.[9] Agricultural R&D also generates international spillovers, as productivity gains from research in one country can extend to other countries. Developing countries have captured fewer of these gains than developed countries, however, because absorbing spillovers depends on domestic research capacity to adapt innovations to local agroecological conditions.[11] Because agricultural R&D typically takes 20 to 30 years to reach farmers at scale, the consequences of sustained underinvestment compound long before they become visible.

Shifting R&D investment from its traditional focus on staple cereals towards food groups that drive healthy diet costs, such as legumes, vegetables and fruits, could generate substantial returns. Legumes, vegetables and fruits account for large cost shares in healthy diets but have received considerably less funding than cereals.[12–14] Results have been significant where research has been directed at these food groups. Targeted investments in grain legumes across sub-Saharan Africa and South Asia have produced improved varieties which are now planted by millions of smallholder farmers, with high estimated rates of return.[15, 16]

Improved varieties and practices reach farmers and increase production and productivity where complementary conditions are in place, such as functioning seed and input delivery systems, reliable water supply, and secure land tenure. In Asia, seed-sector reforms from the late 1980s enabled private investment in vegetable breeding and distribution, contributing to rapid increases in production and consumption of this food group.[17] In sub-Saharan Africa, by contrast, formal systems still supply less than 10 percent of seed for most crops, limiting the reach of improved varieties.[18, 19]

Combining agricultural R&D, including innovation in irrigation technologies, with investments in physical irrigation infrastructure can improve yields and stabilize production of perishable foods throughout the year Beyond merely expanding aggregate output, coordinated investments in agricultural R&D and physical infrastructure are imperative for mitigating supply volatility induced by by climate variability and extreme weather events. Sustainable management of water resources is essential as expansion continues. Increasing climate variability is widening the yield gap between irrigated and rainfed systems, making irrigation more critical for food production, particularly for legumes, vegetables and fruits, where yield losses under rainfed conditions can exceed 50 percent.[20–22] Yet, less than 4 percent of cultivated area in sub-Saharan Africa is equipped for irrigation.[23] Coordinated, clustered investments in irrigation that allow for shared infrastructure and market development generate larger returns than isolated schemes. In Ethiopia's Central Rift Valley, irrigated vegetable clusters supplied almost three-quarters of the four main vegetables consumed in Addis Ababa in 2020.[24, 25] However, half of recent global irrigation expansion has occurred in already water-stressed regions.[26] Sustainable expansion of irrigation within renewable water limits could increase food production sufficiently to feed an additional 1.4 billion people.[27]

Soil health, secure land tenure, and access to resources including knowledge and finance further shape productivity outcomes. Soil degradation affects roughly 20 percent of global cropland, with the largest gaps in South Asia and sub-Saharan Africa. Reversing just 10 percent of this degradation could restore enough production to feed an additional 154 million people annually.[28] Secure land tenure encourages farmers to invest in longer-term, productivity-enhancing practices such as tree planting and soil conservation: A meta-analysis found that that de jure recognition of tenure has increased agricultural productivity (measured in terms of the monetary value of land productivity) by roughly 40 percent on average.[29] Access to extension services and finance is equally critical, especially for producing perishable crops with higher production costs and risks.

bc Private R&D has increased, but it concentrates on patentable technologies in high-income markets, rather than the neglected food groups and agroecological conditions that drive high costs in low-income settings.[9, 10]

Productivity gains, driven by continuous technical innovation, must permeate the entire agrifood value chain rather than remaining confined to the point of primary production. While enhancing farm-level productivity is fundamental to expanding aggregate supply, increasing effective market availability is inextricably linked to the reduction in post-harvest losses. By preserving a greater proportion of the initial harvest through improved storage, handling and processing technologies, agrifood systems can substantially augment the volume of nutritious foods reaching consumers without requiring additional agricultural inputs. The profound per unit implications of these structural efficiencies – specifically how minimizing aggregate loss mechanically reduces the unit cost of the surviving produce – are examined in detail in the subsequent subsection focusing on efficiency measures along the value chain.

Reducing food loss and waste is another systemic intervention to increase global food supply not only through higher production, but also across agrifood systems. Food losses remain high, especially for perishable foods, particularly in low-income countries, and may lead to higher consumer prices by reducing the effective supply that reaches markets. Globally, an estimated 14 percent of food produced is lost between harvest and retail.[30] An additional 19 percent is wasted at retail and consumer levels[bd] Losses are consistently higher for fruits and vegetables than for cereals and pulses at every stage of the value chain,[30] with aggregate estimates for fruits and vegetables reaching roughly 40 to 50 percent of production on a weight basis.[31] In sub-Saharan Africa, losses for perishable crops often exceed 50 percent in countries with limited storage and cold chain infrastructure.[32, 33] Less than half of food requiring refrigeration worldwide is actually refrigerated, and the lack of effective cold chains resulted in the loss of an estimated 526 million tonnes of food in 2017.[34] Cold chain investment, including refrigerated storage, transport, and processing facilities, can extend the shelf-life and geographical reach of perishable foods, enabling greater market integration. By reducing food loss and waste, countries can increase effective food availability without requiring proportional expansion in agricultural production to reduce the CoHD. Where refrigerated infrastructure is not yet feasible, solar drying and other low-cost preservation methods offer ways to extend year-round availability of fruits and vegetables.[35] Similar approaches apply to animal source foods: low-cost processing technologies, including improved fish smoking and drying systems, reduce post-harvest losses, extend shelf-life and facilitate transport, thereby increasing the effective availability of fisheries and aquaculture products.[36]

Recorded government policy action on productivity varies in composition across regions, in both the instruments used and the food groups targeted. Figure 4.1 shows the five most frequently recorded policy instruments[be] to improve agricultural productivity across all four regions (Africa, Asia, Latin America and the Caribbean, and Northern America, Europe and Oceania) between 2010 and 2025. In Africa, extension, land-use planning, and productive assets each account for roughly similar shares, while R&D and irrigation receive smaller shares. Moreover, irrigation policy actions in Africa reach across a relatively wide range of food groups, including starchy staples, vegetables, fruits, and oils and fats, whereas R&D remains concentrated on starchy staples. In Asia, breeding and varietal improvement programmes and productive assets account for the largest share, with legumes well represented under this policy action. Sustained public investment in legume varietal improvement across the region has produced hundreds of improved varieties which are now planted by millions of smallholder farmers.[15] In Latin America and the Caribbean, extension is the most frequently recorded policy action and is spread across a wider range of crops reaching legumes, fruits, animal source foods and vegetables alongside staples. Across all regions, starchy staples receive the largest share of recorded policy actions directed at productivity, while legumes, vegetables and fruits receive comparatively few.

bd Reducing food waste at the retail level will lower the retail price through reduction in operating costs by economic actors. Reducing food waste at the consumer level will lower the price indirectly by reducing effective demand for food products.

be Interventions linked to processing and post-harvest, relevant for reducing food loss and waste, are displayed in Figure 4.4.

FIGURE 4.1 RECORDED POLICY ACTIONS TO IMPROVE AGRICULTURAL PRODUCTIVITY BY INSTRUMENT, FOOD GROUP AND REGION, 2010–2025

NOTES: The figure shows the five most frequently recorded policy instruments to improve agricultural productivity. The FAPDA database contains 2 457 policy actions to improve agricultural productivity across all four regions. Of these, 399 are tagged to a specific commodity or commodity group, which allows them to be disaggregated by food group; policy actions without a commodity tag are excluded because they cannot be assigned to a food group. Cross-cutting refers to policy actions tagged to more than one crop rather than to a specific commodity. Counts are not weighted by budget size or programme scale

SOURCE: FAO. 2026. FAPDA - Food And Agriculture Policy Decision Analysis Tool. [Accessed on 8 May 2026]. https://fapda.apps.fao.org/fapda

https://doi.org/10.4060/cd8306en-fig4.1

Chapter 3 found that R&D expenditure and crop yields are strongly associated with lower costs for some of these same food groups, suggesting that productivity-oriented policy actions may not yet be directed where they could have the greatest effect on the CoHD.

Reallocating production towards food groups with low availability: Realigning incentives

Production support lowers the cost of foods that compose healthy diets by reducing production costs, and it shifts relative profitability across agricultural production. Production subsidies, procurement, and price support shape which foods farmers find profitable to produce, and historically these policy actions have concentrated on a narrow set of commodities.

Beyond input costs, the structure of government support itself shapes what farmers produce and at what cost. Global support to agricultural producers amounts to approximately USD 540 billion

per year, of which about 70 percent has been tied to the production of specific commodities, predominantly grains, sugar, dairy, beef, and oil crops used in livestock feed.[12, 37] This commodity-specific support has not only made these foods cheaper than non-subsidized alternatives, but has also incentivized the development of processing, logistics and market infrastructure oriented around them, creating self-reinforcing pathways that make it harder for fruits, vegetables and legumes to compete.[38, 39] Producers of fruits and vegetables receive very little subsidy support and are rarely beneficiaries of market incentives. For legumes, subsidies have reinforced agrifood pathways favouring cereals at the expense of legume diversification, innovation and cropping.[38, 39]

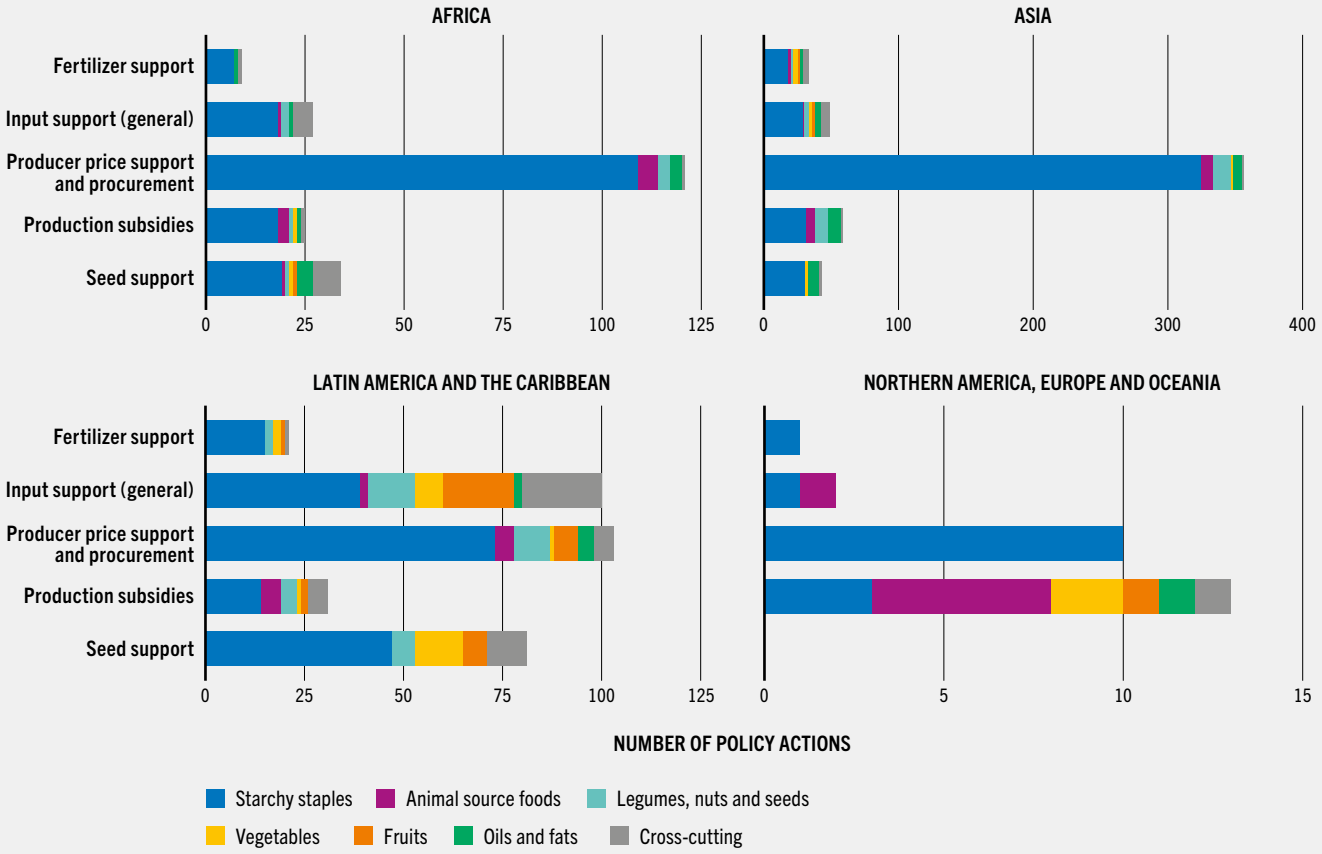
Redistributing existing producer support across food groups, without increasing total spending, could increase fruit and vegetable consumption by an estimated 10 percent in Organisation for Economic Co-operation and Development (OECD) countries and 5 percent in other countries.[40] However, the effects would be greatest in OECD and middle-income countries that currently subsidize domestic production, and much smaller in low-income countries where there is little existing support to repurposing.[12] In low-income countries, the challenge extends beyond the scale of existing support. Where support programmes exist, their effectiveness depends on whether they address the underlying constraints that drive high production costs, such as limited market access and poor infrastructure.[41, 42] In such contexts, optimizing the allocation of limited agricultural fiscal resources becomes central. Modelling across several sub-Saharan African countries indicates that country-specific reallocations of existing public expenditure could improve employment, poverty reduction and the affordability of healthy diets, even under binding budget constraints.[43] Repurposing also carries trade-offs: shifting support away from staple cereals could raise staple prices before lower-cost alternatives become available, placing additional burdens on poor consumers who depend heavily on affordable staples.[38, 44] And embedded budget and regulatory priorities for staple production over dietary diversity may be difficult to reverse.[38]

The five most frequently recorded policy instruments to support agricultural production across all four regions are shown in Figure 4.2. The composition of recorded policy actions to support agricultural production confirms the concentration of support on starchy staples described above. Producer price support and procurement is the most common recorded policy action across Africa, Asia, and Latin America and the Caribbean, and it targets starchy staples almost exclusively. In Asia, staples account for more than 90 percent of price support and procurement records. Input support, seed support and production subsidies follow a similar pattern in Africa and Asia. In contrast, input and seed support in Latin America and the Caribbean reach a wider range of food groups, including fruits, vegetables and legumes alongside staples. Across all other regions, very few recorded policy actions to support agricultural production target fruits, vegetables or legumes – consistent with the broader structure of global agricultural support where these food groups have historically received low policy attention despite their role in driving healthy diet costs.

Improving trade integration and trade policy reforms

Trade policy affects the CoHD by determining the availability and prices of imported foods, although the aggregate effect of tariff barriers is modest compared to domestic factors. Trade liberalization is associated with overall lower food prices.[45] However, tariff and non-tariff measures account for only 0.67 and 2.45 percent of retail prices for least-cost healthy diets on average, because import values represent just 17 to 22 percent of final consumer prices.[46] About half of the cheapest items in the Healthy Diet Basket are domestically sourced and not intensively traded, further limiting the potential of tariff reform alone to reduce costs.[45] The aggregate effect is small, likely because most of what consumers pay could reflect domestic value chain costs accumulated after port of entry. In markets where intermediaries exercise significant market power, trade openness can also reduce consumer prices by introducing import competition, though this effect depends on local market structure.[47] Modelling estimates suggest that removing border support on nutritious products while keeping support unchanged for energy-dense foods of minimal nutritional value could reduce the CoHD by 1.7 percent.[44]

FIGURE 4.2 RECORDED POLICY ACTIONS TO SUPPORT AGRICULTURAL PRODUCTION BY INSTRUMENT, FOOD GROUP AND REGION, 2010–2025



NOTES: The figure shows the five most frequently recorded policy instruments to support agricultural production. The FAPDA database contains 5 173 policy actions to support agricultural production across all four regions. Of these, 1 156 are tagged to a specific commodity or commodity group, which allows them to be disaggregated by food group; policy actions without a commodity tag are excluded because they cannot be assigned to a food group. Cross-cutting refers to policy actions tagged to more than one crop rather than to a specific commodity. Counts are not weighted by budget size or programme scale.

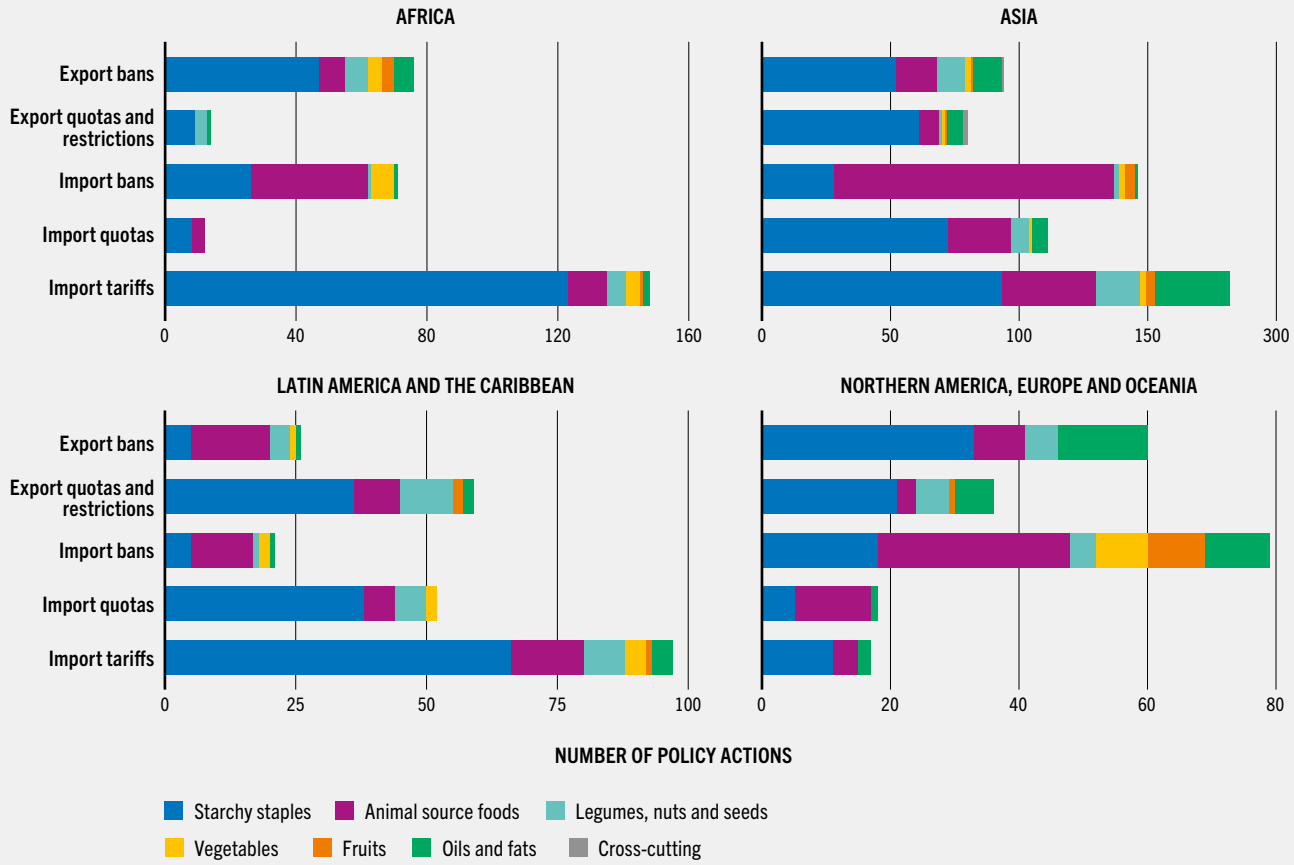
SOURCE: FAO. 2026. FAPDA - Food And Agriculture Policy Decision Analysis Tool. [Accessed on 8 May 2026]. https://fapda.apps.fao.org/fapda

https://doi.org/10.4060/cd8306en-fig4.2

Trade openness also expands the range of foods available domestically, particularly in countries that cannot produce all food groups year round. Where tariffs on nutrient-rich foods have been reduced, as in Fiji, imports and domestic availability have increased.[48] The composition of trade also matters for dietary outcomes. Countries that increased imports of fruits, vegetables, legumes and nuts experienced improved dietary risk profiles, while those that increased imports of red meat experienced negative effects.[49] **Chapter 3** found that higher nominal rates of protection are associated with a higher CoHD, particularly for starchy staples and animal source foods. The modest aggregate effect of trade policy on the CoHD partly reflects the limited tradability of perishable foods. Fruits, vegetables and other perishable items that contribute most to healthy diet costs cannot be cost-effectively traded over long distances, and their prices are largely determined by domestic supply conditions and regional cross-border exchange.

Non-tariff measures and trade logistics often impose higher costs than tariffs, particularly for perishable foods. Sanitary and phytosanitary (SPS)

FIGURE 4.3 RECORDED TRADE POLICY ACTIONS BY INSTRUMENT, FOOD GROUP AND REGION, 2010–2025



NOTES: The figure shows the five most frequently recorded policy instruments for trade. The FAPDA database contains 3 896 policy actions to support trade across all four regions. Of these, 1 399 are tagged to a specific commodity or commodity group, which allows them to be disaggregated by food group; policy actions without a commodity tag are excluded because they cannot be assigned to a food group. Cross-cutting refers to policy actions tagged to more than one crop rather than to a specific commodity. Counts are not weighted by budget size or programme scale.

SOURCE: FAO. 2026. FAPDA - Food And Agriculture Policy Decision Analysis Tool. [Accessed on 8 May 2026]. https://fapda.apps.fao.org/fapda

https://doi.org/10.4060/cd8306en-fig4.3

measures and technical barriers to trade measures can increase import prices of agricultural products by an estimated 15 percent on average, driven largely by registration requirements and special authorization procedures.[50] While SPS measures serve legitimate food safety objectives, their price effects vary across food categories and types of measure; conformity assessment procedures in particular tend to raise costs.[50] Trade delays raise costs for all goods, but perishable foods are especially vulnerable because of spoilage. Across all traded products, each additional day in transit is equivalent to an ad valorem tariff of 0.6 to 2.1 percent,[51] and the effect is likely higher for perishable goods where delays cause direct physical losses. Inadequate port handling capacity, cold storage, and inspection facilities increase transit times and spoilage losses, with the severest effects on perishable exports from countries with weak trade infrastructure.

The five most frequently recorded policy instruments applied in trade policy actions are shown in Figure 4.3**.** A majority of trade policy measures are linked to increase in cost: import tariffs account for the largest share of recorded trade action in Africa, Asia, and Latin America

and the Caribbean, directed primarily at starchy staples. In Northern America, Europe and Oceania, import bans are the most frequently recorded instrument, applied predominantly to animal source foods. Import bans are the second most common instrument in Africa and Asia, again concentrating on animal source foods. Regarding the instruments aimed to reduce domestic food prices, export bans appear frequently in Africa and Asia, directed mostly at starchy staples, while in Latin America and the Caribbean export quotas and restrictions are more common than outright bans. Across all regions, recorded trade action on fruits, vegetables and legumes remains limited relative to staples and animal source foods.

Axis 2: Reducing structural costs along the value chains

Reducing the input costs for producers

Targeted intervention could reduce the costs of specific inputs. The costs of inputs and labour that determine production costs fall unevenly across food groups; fruits, vegetables and animal source foods are structurally more expensive to produce than cereals.

Fruits, vegetables and animal source foods are inherently more labour-intensive to produce than cereals, and mechanization offers limited solutions for most perishable crops. Labour requirements vary by food group and are typically higher in low-income countries than in high-income countries. For example, to produce 1 000 tonnes of animal products the requirement ranges from 17 full-time equivalent workers in high-income countries to 604 in low-income countries. For legumes, the range is 12 to 543. In contrast, wheat requires less labour across all countries, from 2 to 27 workers.[52] These higher labour requirements translate into higher production costs for the foods that compose healthy diets – consistent with the **Chapter 3** finding that higher labour costs are associated with a higher CoHD for vegetables and oils and fats. Moreover, employment in agriculture is declining globally, from over 1 billion workers in 2000 to 892 million in 2022,[53] while by contrast, modelling evidence suggests that producing the additional fruits, vegetables and legumes needed to shift dietary patterns would require 18 to 56 million additional horticultural workers globally.[bf, 52] Managing these transitions will require investment in horticultural production capacity, worker retraining, and redeployment strategies.

Rising input costs, particularly for fertilizer and energy, further raise the cost of producing these foods, with the strongest impacts in low-income countries. During the 2021–2022 crisis, energy and fertilizer price increases contributed more to food price inflation than did grain export disruptions from the war in Ukraine.[54] The 2026 conflict in the Middle East[55] has seen prices of energy, in particular diesel, and fertilizers rising by more than 50 percent in the first quarter, and has also demonstrated the impact of the costs of these products on farmers' margins and production decisions. Energy costs are especially relevant, because they affect multiple stages of agrifood systems, from irrigation and on-farm machinery to processing, cold storage, and transport. **Chapter 3** found that higher electricity prices are associated with a significantly higher CoHD for vegetables, one of the food groups which is dependent on cold chain and energy-intensive post-harvest handling. Fertilizer price shocks can also reduce production directly. In Ethiopia, where fertilizer prices more than tripled between 2019 and 2023, smallholders cut application rates, with 59 percent of them citing prohibitive prices as the main reason for foregoing fertilizer.[56] Farmers were more responsive to fertilizer prices than to output prices, suggesting that input cost shocks translate into reduced production and subsequently higher food costs.

Reducing costs along the value chain

Whether productivity gains translate into lower costs of foods that compose healthy diets depends on how efficiently value chains perform at different stages, from transport and storage to processing, wholesale and retail. Post-farmgate

bf Vittis *et al.* (2025)[52] model four dietary scenarios: flexitarian, pescatarian, vegetarian and vegan, each ranging from modest reductions in animal source food consumption to complete elimination. The 18 million figure corresponds to the flexitarian scenario, the 56 million to the vegan. These scenarios do not map directly onto the CoHD framework used in this report, which includes animal source foods as a component of healthy diets. The labour reallocation estimates should therefore be interpreted as indicative of the direction and scale of workforce shifts that greater emphasis on horticultural production would entail, rather than as precise projections for any specific dietary recommendation.

activities account for 70 to 75 percent of consumer food expenditures globally, and in low- and middle-income countries the middle segments of value chains – processing, logistics and wholesale – account for 30 to 40 percent of agrifood systems costs on their own.[57, 58] These costs fall unevenly across food groups. Staple grains can be stored for months and moved without refrigeration. Fruits, vegetables and animal source foods require cold chains, rapid transport and careful handling at every stage between farm and consumer, or, alternatively, timely processing to preserve them, making their retail prices far more sensitive to value chain performance.

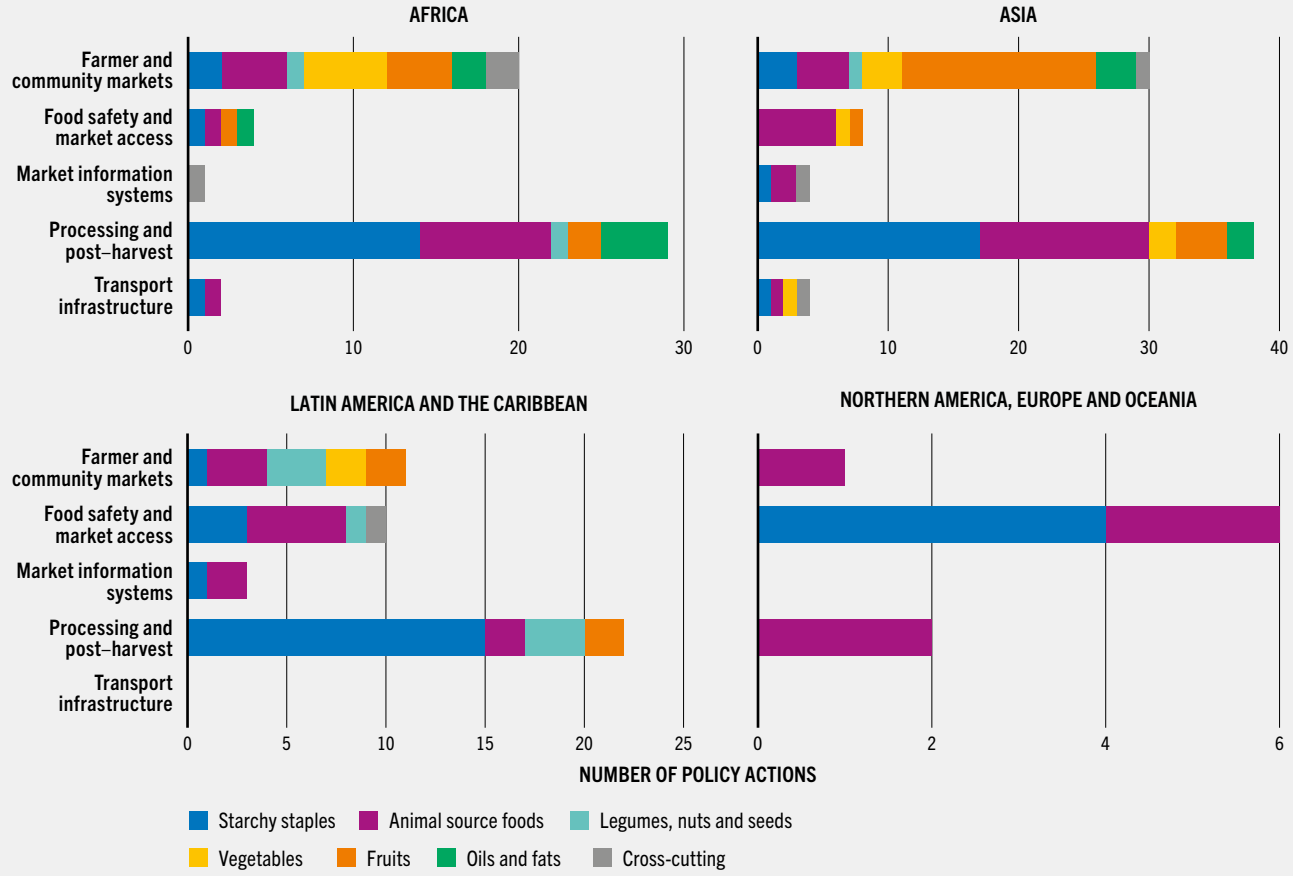
Transport infrastructure reduces prices of perishable foods by shortening delivery times, reducing spoilage, and lowering price differences between regions. A 1 percent improvement in road quality in Indonesia's highway network is associated with an approximate 0.9 to 1 percent decline in perishable food prices, with effects greatest for highly time-sensitive goods.[59] In Ethiopia, rural road expansion narrowed the urban–rural price gap by about 3 percent, allowing rural producers to charge prices closer to urban market levels and reducing consumer prices in deficit areas.[60] Consistent with this, **Chapter 3** results also suggest that domestic road quality is significantly associated with a lower CoHD.

Reducing food loss and waste directly cuts economic costs for agrifood actors – including farmers, traders and processors – who currently must absorb the financial burden of these lost volumes. When a significant percentage of production is spoiled or discarded before reaching the consumers, the overhead and operational costs are distributed across a smaller volume of saleable goods, driving up the per unit cost of the remaining produce. By mitigating these physical losses through improved storage, post-harvest handling, and efficient distribution networks, actors can maximize their marketable yield and directly improve their profit margins. Furthermore, reducing these losses yields substantial upstream savings; by conserving the vital inputs – including land, energy, labour and water – that are embedded in the lost food, the structural cost of production across the entire agrifood system is systematically minimized. To solve this issue, solutions include investments in improved storage, cold chains, transport, digital market systems, post-harvest technologies, processing, packaging and consumer awareness to reduce losses from farm to table. In addition, FAO also supports evidence-based interventions through the Food Loss Index and analytical tools such as the Food Loss App, nicknamed FLAPP, which help identify where losses occur along value chains so targeted technical and investment solutions can be designed.

Beyond physical infrastructure, information gaps along value chains also affect costs of foods that compose healthy diets. Digital market platforms and information systems are emerging tools that can reduce transaction costs and improve price transmission along food value chains, though their impact on consumer prices at scale is not yet well established. Mobile phone coverage has been shown to reduce price differences in agricultural markets by 10 to 16 percent,[61] and online trading platforms can improve the prices farmers receive.[62] Online food delivery platforms have grown rapidly, with global revenues rising from USD 90 billion in 2018 to USD 294 billion in 2021.[63] These platforms could offer new channels for distributing perishable foods, though their implications for nutrition, the environment and employment remain poorly understood. In sub-Saharan Africa and South Asia, digital platforms are beginning to connect smallholders directly with urban buyers, reducing dependence on intermediaries and creating new market access for perishable produce.[64] However, direct evidence that these efficiency gains translate into lower consumer prices for foods that compose healthy diets remains limited.[bg] Effects on final retail prices are likely to depend on many factors, including local market structure, digital infrastructure, and competition among platforms. **Chapter 3** found that higher mobile communication costs

bg A recent meta-analysis of digital information interventions in agriculture found positive effects on technology adoption, agricultural practices and the prices farmers receive, but did not examine effects on consumer prices or the cost of foods that compose healthy diets.[65] Whether producer-level gains pass through to lower retail prices depends on the structure and competitiveness of downstream value chain segments, including processing, wholesale and retail. This pass-through remains largely unmeasured for digital agricultural interventions.

FIGURE 4.4 RECORDED POLICY ACTIONS TO SUPPORT VALUE CHAIN EFFICIENCY BY INSTRUMENT, FOOD GROUP AND REGION, 2010–2025



NOTES: The figure shows the five most frequently recorded policy instruments to support value chain efficiency. The FAPDA database contains 1 144 policy actions to support value chain efficiency across all four regions. Of these, 195 are tagged to a specific commodity or commodity group, which allows them to be disaggregated by food group; policy actions without a commodity tag are excluded because they cannot be assigned to a food group. Cross-cutting refers to policy actions tagged to more than one crop rather than to a specific commodity. Counts are not weighted by budget size or programme scale.

SOURCE: FAO. 2026. FAPDA - Food And Agriculture Policy Decision Analysis Tool. [Accessed on 8 May 2026]. https://fapda.apps.fao.org/fapda

https://doi.org/10.4060/cd8306en-fig4.4

are associated with a higher CoHD, suggesting that the underlying mechanism matters even where direct causal evidence is still emerging. Agricultural market information systems and digital price monitoring may also improve market transparency and help smallholder farmers access more competitive markets. Scaling these tools will require investment in rural digital infrastructure and regulatory frameworks that must also ensure that platforms serve as competitive marketplaces rather than new sources of market concentration.

Figure 4.4 **shows the five most frequently recorded policy instruments to support value chain efficiency, with substantially fewer policy actions recorded than for any other area of intervention.** This lower volume is itself notable, given that post-farmgate activities account for 70 to 75 percent of consumer food prices.[57] Processing and post-harvest investment accounts for the largest share of recorded value chain policy actions in every region, followed by farmer and community markets. Transport infrastructure »

BOX 4.1 WHAT WORKS IN PRACTICE: VALUE CHAIN INVESTMENTS TO REDUCE THE COST OF A HEALTHY DIET

Reducing the cost of a healthy diet (CoHD) depends not only on farm-level productivity gains, but also on competitive, well-functioning value chains that transmit these gains to consumers. Evidence from 34 IFAD-supported value chain projects conducted between 2016 and 2024, spanning Africa, Asia, Europe, and Latin America and the Caribbean, illustrates what this looks like in practice. Across the portfolio, agricultural productivity increased by an average of 43 percent.[66] Where projects addressed complementary constraints along the value chain simultaneously, productivity gains were more likely to translate into expanded market supply and income growth. Two lessons from this evidence are directly relevant for policymakers seeking to reduce the CoHD:

- Bundling complementary interventions across the value chain is essential for translating productivity gains into expanded market supply and lower consumer costs; addressing production constraints alone is insufficient.
- Midstream investments, such as aggregation, storage, post-harvest handling and value addition, are as critical as farm-level productivity gains in expanding market supply. Private sector partnerships are essential for sustaining these midstream functions at scale.

These lessons are illustrated in the following examples, which show how coordinated interventions at different points along the value chain translated productivity gains into improved market outcomes across food groups.

For fruits and vegetables, investments in irrigation when combined with training and market linkages expand supply and stabilize seasonal availability. Because perishable foods cannot be cost-effectively transported over long distances, domestic supply conditions strongly influence local prices, making investments that stabilize and expand local supply particularly consequential for this food group. In Cabo Verde, the Rural Socioeconomic Opportunities Programme invested in water infrastructure and irrigation systems across seven islands, enabling year-round production. Crop production value rose by 77 percent and market sales by 161 percent among participating households.[67] In Ethiopia, the Participatory Small-scale Irrigation Development Programme similarly stabilized vegetable supply during dry seasons, limiting seasonal price spikes that are a primary driver of high average annual costs for perishable foods in water-scarce contexts.[68]

In dairy and livestock systems, combining production support with value chain investment and market linkages generated substantial gains. In Uzbekistan, the Dairy Value Chains Development Project combined access to finance with targeted technical training. As a result, the project raised crop production by 77 percent per hectare.[69] In Montenegro, the Rural Clustering and Transformation Project found that cold chain gaps and poor road access constrained market reach for remote livestock producers. Matching grants for improved breeds, paired with road rehabilitation and water infrastructure, led to 83 percent higher livestock production and 92 percent higher sales.[70] In both cases, no single investment was sufficient on its own: reducing consumer dairy costs required addressing feed supply, animal productivity, post-harvest handling, cold chains and market access simultaneously.

Across food groups, the depth of private sector engagement was a consistent determinant of positive project outcomes. Projects with strong public–private–producer partnerships generated income gains averaging 64 percent, approximately four times those without such engagement.[71] This points to private sector involvement as a structural condition for sustained market outcomes, and for building the supply-side conditions under which lower consumer costs become possible. Together, these findings suggest that the pathway from farm productivity to affordable healthy diets for domestically supplied foods runs through the full value chain, not through any single node within it.

SOURCES: Authors' (IFAD) own elaboration based on IFAD. 2025. *Transforming Rural Lives: Lessons from IFAD's Impact Assessments.* Rome. https://www.ifad.org/documents/48415603/49810754/ifad12-ia-report.pdf/cecea4ea-1e9e-807f-6df9-54f66ac63bd2?t=1759934971268; IFAD. 2025. *Strategic discussion with the President of IFAD. Pathways out of poverty: Balancing scale and depth of impact.* Rome. https://webapps.ifad.org/members/eb/146/docs/EB-2025-146-R-16.pdf

» and market information systems, the two areas with the most documented evidence for reducing perishable food prices, account for very few recorded policy actions in any region. Farmer and community markets show the broadest food group coverage of any instrument across regions with recorded policy actions reaching vegetables, fruits, legumes and animal source foods alongside staples. Recorded counts may understate actual policy effort in transport and market information, since these are also often developed through broader rural development, public works, or digital infrastructure programmes that fall outside the food and agriculture policy records. Even so, the gap between the scale of post-farmgate costs in agrifood systems and the volume of recorded policy attention to them suggests that value chain efficiency may be an area where additional policy effort could reduce the cost of foods that compose healthy diets. Evidence from IFAD-supported value chain projects illustrates what closing this gap looks like in practice (Box 4.1).

Matching interventions with food groups and regional specificities

Operationalizing the dual axes of supply expansion and structural cost reduction needs to recognize that while some interventions provide systemic, cross-cutting benefits, agrifood systems remain highly heterogeneous. A uniform policy or investment approach is fundamentally insufficient; interventions must be precisely calibrated to the specific biological, logistical and economic constraints governing individual food groups, while addressing regional priorities.

Adapting interventions to the needs of specific value chains

Before addressing commodity-specific constraints, it is critical to acknowledge interventions that deliver systemic benefits across an entire agrifood system. Physical infrastructure investments generate profound, cross-cutting dividends. Improving logistics is not a single-commodity endeavour; upgrading a rural road network or establishing a regional cold storage facility provides systemic benefits that simultaneously reduce transport friction and post-harvest losses across multiple value chains, from horticulture to dairy. Furthermore, addressing broad macroeconomic factor costs – such as energy tariffs and agricultural wages – impacts the entire system. However, the sensitivity to these costs varies significantly across food groups, depending on the specific technology and production model utilized. For instance, a highly capital-intensive indoor poultry facility will be acutely sensitive to energy prices, whereas traditional, small-scale horticultural production remains highly responsive to labour costs.

While foundational investments in systemic public goods provide an essential baseline for agrifood systems transformation, they are fundamentally insufficient in isolation. The profound heterogeneity of nutritious foods, characterized by distinct biological perishability, varying production intensities, and divergent historical policy biases, necessitates highly differentiated policy responses. To effectively lower the CoHD at scale, overarching systemic measures must be actively complemented by precision-targeted, commodity-specific interventions. Table 4.1 synthesizes these complex market realities, mapping the dominant structural constraints and corresponding priority interventions across key food groups to provide a tailored, operational framework for policymakers.

Agricultural R&D is a foundational requirement across all food groups to sustainably expand supply and reduce per unit costs, but it has highly concentrated outcomes. As established in **Chapter 3**, sustained investment in agricultural R&D is a foundational requirement for sustainably expanding supply and reducing per unit costs across an entire agrifood system. However, the benefits of agricultural innovation are highly commodity-specific, with limited transferability of technological breakthroughs across different products. Because productivity gains in one sector – such as staple cereals – do not naturally cascade to unrelated crops, R&D cannot be treated as a generic, fungible input. It must be deployed across the board, but with precise targeting towards priority foods. Historically, global funding allocations have been vastly disproportionate, systematically favouring major grains while structurally neglecting nutritious commodities, particularly legumes, nuts and seeds. Correcting this historical imbalance requires highly targeted, crop-specific R&D investments tailored to the

TABLE 4.1 CONSTRAINTS AND INTERVENTIONS BY VALUE CHAIN

Food group	Dominant structural constraints	Reasons	Priority interventions
Fruits and vegetables	Pre-harvest residues left in the field, post-harvest losses, cold chain gaps, seasonal production.	Highly perishable, cannot be traded cost-effectively except regionally, prices set locally.	Cold chain investment, storage infrastructure, irrigation for year-round production, local R&D, agroforestry.
Dairy	Cold chain gaps, feed costs, standards compliance, production scale.	Highly perishable, requires unbroken cold chain from farm to retail, feed is a major input, lack of quality/food safety compliance.	Cold chain investment, feed supply chains, production intensification, processing facilities, improved incorporation of standards at production and market level.
Fisheries and aquaculture products	Cold chain gaps, feed costs, transportation from coast/ waterbodies, aquaculture productivity in some regions.	Highly perishable, feed is a major input, production often far from consumption centres, wild catch is constrained.	Cold chain investment, food supply chains, processing and preservation including drying, transport infrastructure, aquaculture R&D.
Eggs	Production system intensity, feed costs.	Semi-perishable, capital-intensive systems achieve lower costs.	Production system investment, feed supply chains, R&D for smallholder intensification.
Meat	Feed costs, production efficiency, processing.	Can be frozen and traded, feed is a major input, retail prices affected by processing.	Feed supply chains, R&D, processing investment, competition policy in processing.
Legumes, nuts and seeds	R&D underfunding, processing.	Shelf-stable but underfunded by research, processing adds value.	R&D investment, processing facilities, hermetic storage, trade facilitation.
Starchy staples	Policy distortions.	Decades of R&D and policy support, prices already relatively low.	Repurposing support towards healthy foods, efficiency gains rather than expansion.

NOTE: R&D = research and development.

SOURCE: Authors' (FAO) own elaboration.

distinct biological and agronomic needs of these underfunded value chains.

The infrastructure deficit for highly perishable foods must be addressed to increase domestic availability and market connectivity. Highly perishable, nutritious commodities – namely fruits, vegetables, dairy and aquatic foods – share a fundamental vulnerability to post-harvest losses and rely heavily on localized or regional price-setting mechanisms. Because these items cannot always be cost-effectively traded over long distances without unbroken cold chains, their market availability and affordability are tightly constrained by the quality of local infrastructure.[bh] For fruits and vegetables, seasonal production cycles create supply gaps that drive periodic price spikes. Consequently, overcoming these bottlenecks requires localized R&D for climate-resilient varieties, and physical hardware investments such as widespread irrigation to ensure year-round production – in addition to improvements in logistics and domestic and international trade. Agroforestry and integrated landscape approaches offer a sustainable, land-efficient way to expand the local supply of fruits. With over 1.5 billion hectares of degraded land suited to mosaic restoration and a further billion hectares of cropland open to tree integration,[72] such systems can bring tree-based fruit supply closer to consumers – reducing reliance on long-distance supply chains – while improving rural livelihoods.[73]

Animal source food products need to benefit from optimized inputs use and enhanced processing facilities. Livestock and fed aquaculture are

bh Fisheries and aquaculture products are a partial exception: where fish is processed into preserved forms – for example, through drying or smoking – cold chains are not always required, and such low-cost preservation can itself improve access for low-income consumers.

characterized by input-intensive production systems in which feed represents a major share of total production costs. While meat and aquatic products can be processed or frozen and traded internationally – easing localized supply constraints – their retail price remains highly sensitive to processing efficiencies and global feed market volatility. There is clear evidence that capital-intensive, modernized production systems achieve lower per unit costs.[bi] Therefore, interventions targeting these food groups must prioritize investment in sustainable intensification of production, particularly for smallholders, alongside the systemic optimization of feed supply chains. Additionally, implementing robust competition policies in the meat processing sector is essential to prevent market concentration from artificially inflating retail costs.

Historical policy distortions across commodities, especially within legumes compared to starchy staples, need to be corrected. The constraints facing shelf-stable plant-based foods are largely driven by historical investment imbalances. Legumes, nuts and seeds are critical components of a healthy diet, yet their value chains suffer from chronic R&D underfunding and processing bottlenecks. Current technological innovations and yield improvements for leguminous crops appear limited precisely because this sector has been systematically neglected by historical agricultural policies; rectifying this R&D imbalance, therefore, is an urgent priority. Lowering the cost of legumes requires dedicated research investments, combined with the deployment of hermetic storage and expanded processing facilities. This historical neglect of nutrient-dense plant proteins stands in stark contrast to the treatment of starchy staples. Benefiting from decades of entrenched policy support, heavy public subsidies, and focused technological research, the market prices for staples are already structurally low. For these commodities, the policy imperative is no longer a supply expansion. Instead, the critical intervention is the strategic repurposing of existing agricultural support away from staples and towards underfunded, healthy food groups, focusing solely on marginal efficiency gains within the staple sector rather than footprint expansion.

Prioritizing interventions by region

Value chain specificities should not replace regional diagnosis and prioritization.[bj] While the intrinsic characteristics of distinct food groups dictate the general typology of necessary interventions, the relative priority and sequencing of these measures are profoundly heterogeneous across geographic regions. Both the underlying cost structures of specific food groups and the binding constraints within their individual value chains vary significantly depending on local baseline conditions, infrastructural deficits, and fiscal capacities. Consequently, achieving a global reduction in the CoHD precludes a universal blueprint; policymakers must meticulously adapt commodity-specific interventions to the distinct economic and structural realities of each region. A salient example of this regional divergence is the animal source food sector in Europe compared to Africa. In Europe, the market prices for meat and dairy are already structurally low, driven by decades of concentrated policy support and the widespread adoption of highly capital-intensive, technologically advanced livestock systems. There is no reason to accelerate the intensification of this sector in this context, while the African situation is fundamentally different.

In Africa, reducing the CoHD must prioritize structural transformation of the animal source food sector to overcome high retail prices. Animal source foods represent the most expensive food group in the region, with 69 percent of African countries falling into the highest-cost tercile globally. The prohibitive cost of these nutrient-dense products is largely driven by low baseline productivity and high input expenses, particularly for feed. To address these bottlenecks, interventions must focus on reducing feed costs, scaling up veterinary services – including accessible vaccination programmes to mitigate disease – and investing in production intensification for smallholders. Sustainable aquaculture, still largely untapped

bi The externalities of these systems and the risk of a pure economic cost-driven approach are discussed in **Section 4.3**.

bj The prioritization presented in this subsection is based on the food groups with a cost share higher than the global average for a given region – presented in **Chapter 3** and the main reason identified in the literature for this high cost.

across much of Africa, represents an additional lever: scaling it will require supportive policy, technology transfer, capacity building and investment, particularly as the region's per capita fisheries and aquaculture product food supply – already the world's lowest – is set to fall further as production lags behind population growth.[74] Furthermore, because these animal source foods are highly perishable and often travel long distances, establishing reliable cold chain infrastructure is essential to increase market availability and lower per unit costs to reduce food losses. Estimates[30] show that losses for fruits, vegetables, fisheries and aquaculture products and dairy can exceed 30–40 percent due to weak cold chains, inadequate rural infrastructure, and limited processing capacity in the region. Cold chain investments are especially critical for perishable foods.

In Asia, the strategic priority must be to strengthen rural–urban linkages and invest in post-harvest handling to bring down the cost of fruits. Fruits stand out as one of the highest-cost food groups in the region, reflecting significant supply chain inefficiencies. The market availability of fruits is often hindered by high levels of perishability and inadequate infrastructure for transport and preservation, leading to substantial post-harvest losses. To structurally reduce costs, interventions should prioritize horticultural R&D alongside investments in packhouses, cold storage, and transport infrastructure. Enhancing the efficiency of these midstream segments is vital, as they can account for 30–40 percent of value added in food value chains and are essential for connecting rural producers to expanding urban consumer centres.

In Northern America, Europe and Oceania, interventions should focus on managing high labour costs through technological innovation to maintain the affordability of fruits and vegetables. While these regions benefit from structurally lower costs for starchy staples and animal source foods, the horticultural sector remains highly sensitive to macroeconomic factor costs. Agricultural labour costs are positively associated with the CoHD, particularly for vegetables, which are often more expensive in high-income settings due to high standard wages. In these mature markets, further cost reductions are unlikely to come from traditional intensification. Instead, the policy imperative must pivot towards labour-saving technologies, such as mechanization and automation, and the repurposing of existing agricultural support to favour nutrient-dense food groups over already low-cost staples.

In Latin America and the Caribbean, the primary policy objective must be to alleviate logistical frictions and transport costs that disproportionately inflate the price of vegetables. This region faces the highest average CoHD globally at 4.89 purchasing power parity (PPP) dollars, with vegetables alone being significantly more expensive than in other regions. High vegetable costs are not an artifact of a few outliers, as 66 percent of the region's countries are in the highest-cost tercile for this group. Addressing this requires a focus on midstream value chain efficiency; improving travel speeds on roads, while expanding rail networks, is a critical lever.

Beyond these regional trends, it is imperative to recognize that significant heterogeneity exists within each geographical area, necessitating a granular, country-level approach to policy and investment design. While regional averages provide a useful diagnostic starting point, the CoHD and the specific constraints of individual value chains can vary substantially between neighbouring nations. For instance, within Africa, some countries face costs primarily driven by temporal shocks and food inflation, while others are dominated by persistent geographical disparities. Furthermore, a structural factor such as a country's status as a landlocked developing state can nearly double import logistics costs compared to coastal neighbours anywhere in the world, fundamentally altering the priority of trade versus domestic production interventions. National and subnational data from **Chapter 3** reveal that these localized variations – driven by differing agroecological conditions, infrastructure quality and domestic policy environments – can often outweigh broad regional patterns. Therefore, regional priorities must be viewed as flexible frameworks that require careful adaptation to the specific economic and structural realities of each individual country to ensure that interventions are both well timed and accurately targeted. This underscores the need

for context-specific packages of interventions, drawing on a broad evidence base – including policy insights from low- and middle-income contexts[73] – and complemented by evidence on cost-effective actions, such as those identified in the WHO "best buys".[2]

4.2 QUANTIFYING THE EFFECTS OF INTERVENTIONS AIMED TO REDUCE THE COST OF A HEALTHY DIET

Assessing a portfolio of interventions

To rigorously evaluate the impact of targeted agrifood interventions, it is necessary to employ advanced simulation modelling capable of capturing the complex, interlinked dynamics of global and domestic markets. Given the profound heterogeneity in the drivers of the CoHD and the varied economic structures of countries (see **Chapter 3**), a static analysis is insufficient to predict how specific policy shifts will manifest in retail prices. Using simulations uniquely resolves both the "extensive" effects of supply expansion and the "intensive" effects of per unit cost reduction within a single, coherent framework.

Quantifying direct and indirect effects in a global economy

A multiregion, multisector framework allows for a systematic assessment of how supply-side interventions, such as productivity gains or trade reforms, propagate through the global agrifood system. To rigorously simulate how different investment and policy packages affect the CoHD, this report utilizes the MIRAGRODEP computable general equilibrium (CGE) model. It captures changes not only at the point of primary production, but also at the final consumer level, through a full structural representation of the economy. The technical details of this modelling framework are summarized in Box 4.2.[75]

A primary advantage of the MIRAGRODEP framework is its ability to account for the market-mediated impacts and cross-border spillovers that occur through international trade. As established in **Chapter 3**, while many nutrient-dense foods are highly perishable and prices are often set locally, trade integration remains a vital release valve for stabilizing supply and lowering costs. Domestic policies do not operate in a vacuum; a subsidy reform in a major producing region or a reduction in nominal rates of protection can trigger shifts in global commodity prices that affect import-dependent nations. Simulation modelling captures these dynamics, ensuring that the estimated reductions in the CoHD account for both domestic capacity and the stabilizing role of global agrifood trade.

Beyond direct food price changes, simulation modelling captures the indirect, economy-wide impacts of policy shifts on the broader price structure of critical inputs. Interventions aimed at reducing the CoHD – such as large-scale infrastructure investments or energy subsidies for cold chains – inevitably alter the demand for and costs of labour, energy, and transport services. For instance, a policy that successfully incentivizes labour-intensive horticultural production may inadvertently put upward pressure on agricultural wages, while increased mechanization or processing may raise baseline electricity demand. A CGE assessment provides a holistic view of these "second-round" effects, allowing policymakers to first identify where input cost increases might offset agricultural productivity gains and then design complementary measures to maintain overall economic stability.

As discussed in previous sections, expanding the total volume of specific food groups (the extensive effect) and reducing the structural cost of their production (the intensive effect) are fundamentally intertwined. MIRAGRODEP allows us to simulate these concurrent shifts, providing a quantitative estimate of how the total CoHD changes when supply curves move both horizontally and vertically. This ensures that the policy recommendations in this report are not merely theoretical but are grounded in an empirically calibrated assessment of how agrifood systems respond to real-world investments. »

BOX 4.2 MODELLING INTERVENTIONS AT THE GLOBAL LEVEL: THE MIRAGRODEP MODEL

The MIRAGRODEP model is a dynamic multiregion, multisector computable general equilibrium (CGE) model developed and maintained by leading research institutions (notably FAO and the International Food Policy Research Institute). It builds on MIRAGE, a multisector CGE model of the global economy[76] and is specifically designed for the analysis of agrifood systems. MIRAGRODEP is the modelling framework used for FAO projections of the prevalence of undernourishment to 2030 presented in successive editions of *The State of Food Security and Nutrition in the World*.

Model structure and global data framework

MIRAGRODEP is based on a global input–output framework representing production, consumption and trade linkages across countries and sectors. The behaviour of economic agents, including households and firms, is described through structural equations capturing optimizing behaviours, resource constraints and market interactions.

As a CGE model, MIRAGRODEP computes unique market equilibria across goods, services, and factors of production, ensuring internal consistency throughout the system. This means there are no leakages, "free lunches", or unaccounted elements. By capturing international economic linkages through international trade in goods and services, as well as capital flows, this model provides a comprehensive and consistent representation of economic and trade relations between countries.

MIRAGRODEP can be linked to complementary modules to assess impacts on poverty, food security, nutrition, land use, and greenhouse gas emissions, making it particularly suitable for the assessment of agrifood system reforms. See details in the complete documentation.[77]

The model relies primarily on the GTAP 12 database,[78] a global social accounting database for the reference year 2023. It covers 145 countries or regions and 65 sectors, including detailed information on production, intermediate use, household consumption, bilateral trade flows, transport margins and protection measures.

Policy applications and link to *The State of Food Security and Nutrition in the World 2026* modelling

In addition to projecting the evolution of the prevalence of undernourishment, MIRAGRODEP has been widely used to analyse how policies and shocks affect food security, poverty and diet affordability. In particular, it has been applied to:

- determine the cost of ending hunger;[79]
- assess the cost and affordability of a healthy diet, including the impact of structural interventions;[80] and
- analyse the effects of global disruptions, such as the impacts of the COVID-19 pandemic on food prices, poverty and access to healthy diets.[81]

MIRAGRODEP has been extensively used to inform and evaluate the repurposing of agricultural support policies,[37, 82] notably to inform how those reforms could improve the affordability of a healthy diet.[44] Its findings informed, in particular, *The State of Food Security and Nutrition in the World 2022*.[12]

The modelling in this 2026 edition of the report builds on the established framework used for the 2022 edition.[12] The same model is employed, updated to reflect recent data, including the latest cost and affordability of a healthy diet dataset. Similar policy interventions are considered. In contrast with the 2022 edition,[12] the focus of this report is not on repurposing scenarios (and therefore does not impose constraints on budgetary support), but on analysing the impacts of different interventions on the cost of a healthy diet across food groups.

Consistent with previous findings and economic theory – highlighting that combining interventions is more effective in achieving multiple policy objectives while limiting trade-offs – a scenario combining all interventions is also modelled and assessed.

SOURCE: Authors' (FAO) own elaboration.

» **Moving beyond simplified, single-intervention analyses, the model explicitly captures the complex, interactive market mechanisms that define the global agrifood system.** Because the agrifood sector is highly interactive, isolated policy shocks inevitably trigger cascading effects across borders, across sectors, and between supply and demand.

The prices of food products in interconnected economies do not depend on local policies and investments alone. The model accounts for the reality of global trade integration, demonstrating that domestic supply expansions in open economies only partially impact local retail prices. The extreme illustration of this dynamic is a small, fully open economy acting as a "price taker" in international markets. In such contexts, local production shifts for highly traded commodities have virtually no impact on baseline market prices, which are determined globally. Instead, variations in the local CoHD are predominantly driven by changes in domestic distribution logistics, trade friction, and the cost of imports. To capture this dynamic, the simulations assess interventions methodically: initially by implementing them one region at a time to isolate localized effects, and subsequently through scenarios of synchronized, global collective effort to demonstrate the compounded impacts of international market shifts.

With cost reduction, endogenous consumer demand rebounds and increasing marginal costs naturally moderate the final price decreases achieved by supply-side interventions.[bk] In simplified models, a policy that reduces production costs translates directly into an equivalent, linear drop in retail prices. However, in a general equilibrium framework, interventions that successfully lower the cost of nutrient-dense foods mechanically trigger an increase in consumer demand as these diets become more affordable. Because agricultural production is subject to increasing marginal costs as constraints on land, labour and inputs are resolved, the resulting surge in production volume exerts upward pressure on prices. This moderation is not a policy failure; rather, it accurately reflects a new, healthier market equilibrium characterized by vastly increased consumption volumes and a realistic pricing structure.

By modelling policies simultaneously, the framework captures the powerful structural synergies where combined interventions generate cost-reduction outcomes far greater than the sum of their individual parts. Interventions modelled in isolation fail to capture these compounding efficiencies. For instance, successfully implementing technological innovations to increase farm-level productivity will yield limited cost-reduction benefits if the additional volume is subsequently lost due to inadequate storage. However, when farm-level productivity enhancements are coupled with structural reductions in post-harvest losses and improved logistics, the downward pressure on final consumer prices is substantially magnified. Therefore, the simulations highlight the effects of combined intervention packages, illustrating how coordinated action across the value chain is necessary to achieve meaningful scale. The scenarios presented in this section assume simultaneous implementation across countries, reflecting a global approach that allows the full effects of these synergies to materialize.[bl]

Ultimately, these simulated mechanisms formally quantify the qualitative reality that lowering the CoHD requires integrated, multisectoral responses. Effective policy packages must account for global trade dependencies, anticipate shifting consumer demand, and explicitly leverage the powerful synergies of concurrent supply-chain upgrades to ensure sustainable, long-term affordability.

A portfolio of interventions

To systematically evaluate policy options, the simulated interventions are grouped into two broad categories that reflect the conceptual distinction between hardware and software investments, as well as the structural capabilities of the modelling framework. The first category

bk This rebound effect is independent of demand-side policies and interventions. **Section 4.3** addresses this issue.

bl A forthcoming background paper[75] examines country-level or regional implementation of these interventions and compares the resulting impacts with those obtained through unilateral implementation vs global implementation.

TABLE 4.2 TYPOLOGY OF MODELLED POLICY SCENARIOS TO REDUCE THE COST OF A HEALTHY DIET

Scope	Drivers of high cost	Model representation: technological interventions (category 1)	Model representation: fiscal instruments/subsidies (category 2)
Production	Low baseline yields, high input expenses (e.g. feed for animal source foods).	▸ Increase in TFP. ▸ Increase in MFP.	▸ Subsidy on overall production costs. ▸ Subsidy on specific input costs.
Labour	High agricultural wages and labour intensity, particularly affecting horticultural sectors in high- and upper-middle-income countries.	▸ Increase in labour productivity (targeted); also impacted by TFP and MFP.	▸ Subsidy on labour costs.
Energy and utilities	High electricity prices required for midstream processing, cold chain refrigeration and on-farm irrigation.	▸ Reduction in energy consumption.	▸ Subsidy on energy.
Post-harvest handling and storage	High perishability, storage deficits, physical volume loss before reaching markets.	▸ Reduction in post-harvest losses.	▸ Not applicable (physical food losses cannot be directly mitigated through a price subsidy within the model).
Domestic logistics and transport	Infrastructure deficits, poor road quality (mean travel speeds), geographical distances between rural farms and urban centres.	▸ Reduction in the consumption of transportation sectors (increased domestic movement efficiency).	▸ Subsidy on domestic transportation.
Midstream distribution and markets	Inefficiencies, high transaction costs, fragmentation in processing, wholesale and retail segments.	▸ Reduction in trade margins.	▸ Subsidy on distribution and trade margin costs.
International trade and borders	High nominal rates of protection, cross-border logistical friction, tariffs limiting the rebalancing role of global markets.	▸ Reduction in international trade costs (tariffs and logistics).	▸ Subsidy on international trade costs.

NOTE: TFP = total factor productivity; MFP = multifactor productivity.

SOURCE: Authors' (FAO) own elaboration.

models physical, technological and structural efficiencies (the hardware), where the economic benefits are clear but the exact fiscal implementation costs are exogenous to the model. The second category focuses on explicit fiscal transfers and subsidies (the software), where the financial cost to the taxpayer is fully transparent and endogenous to the simulation. This dual approach allows policymakers to assess both the theoretical potential of technological transformation and the practical fiscal efficiency of market interventions.

To provide a clear, operational framework for this dual simulation strategy, Table 4.2 synthesizes the modelled interventions and maps them directly against the primary structural constraints identified across the agrifood value chain. By systematically pairing the core drivers of high food costs – ranging from on-farm productivity deficits to international trade friction – with their corresponding technological efficiency shocks (hardware) and explicit public subsidies (software), this matrix allows for the simulated impacts to be traced back to distinct, real-world vulnerabilities, offering a comprehensive menu of interventions designed to systematically lower the CoHD from farm to retail.

The first category models technological[bm] and structural improvements across agrifood systems by applying standardized 10 percent efficiency shocks to individual, or all, food sectors. These simulated (hardware) upgrades target specific bottlenecks to increase productivity both on the farm and throughout the midstream value chain. The individual interventions modelled include reductions in energy consumption, distribution and trade margins, domestic transportation inefficiencies, and international trade costs (including both tariffs and logistical friction). Concurrently, the model simulates 10 percent improvements in total factor productivity (TFP), or in multifactor productivity (MFP) or in labour productivity, alongside a 10 percent structural reduction in post-harvest losses.

While these standardized 10 percent technological shocks reveal the potential impacts of individual value chain upgrades, their effects are not strictly comparable in magnitude. Because of differing baseline scales and economic structures, a 10 percent improvement in MFP, covering all factors of production and inputs, will naturally exert a much larger downward pressure on prices than a 10 percent reduction in post-harvest losses. Furthermore, when simulating a consolidated "package" of interventions, redundant measures are excluded to avoid double counting; the combined technological shock strictly integrates only MFP gains, reductions in post-harvest losses, and the lowering of international trade costs. Crucially, a limitation of this category is that the model lacks detailed, localized data on the exact fiscal cost required to achieve these 10 percent technological leaps across varying regional contexts. Consequently, these simulations successfully capture the marginal benefits of structural transformation, but they cannot normalize them against their marginal implementation costs.

To overcome the limitation of unquantified implementation costs, the second category evaluates fiscal (software) interventions – specifically, targeted 10 percent public subsidies – which have explicit and transparent financial costs within the model. These simulated fiscal measures operate in a similar, though not identical, economic space to the technological shocks, allowing for a direct assessment of taxpayer efficiency. The modelled interventions include the application of 10 percent subsidies on energy usage, distribution and trade margins, domestic transportation, international trade costs, agricultural input costs, and overall production costs. The main missing element in this fiscal category is post-harvest food loss; unlike energy or transport, physical food losses cannot be directly or mechanically mitigated through a simple price subsidy within the model's structure. In these simulations, subsidies are modelled as changes in price incentives and do not raise productivity directly. They affect the cost of using inputs, labour, energy and services, and thereby alter intensification choices and investment decisions, with secondary impacts on productivity. However, they do not in themselves generate direct technological improvement or TFP gains within the model. Those technological and TFP effects – including the long-term returns to R&D – are captured instead through the technological (hardware) interventions.

The uniform subsidy modelled is a stylized assumption designed for cross-country comparison, not a template for country-level reform. A 10 percent rate is applied across countries, abstracting from each country's initial fiscal space for agriculture, which may be limited. When analysing reforms at the country level, it is however essential to account for this initial fiscal space – which may not be possible to expand – and to optimize the allocation of public spending accordingly.[43]

bm Long-term investments in agricultural R&D are mathematically captured within the simulation as direct productivity gains. Because the model requires specific economic parameters to represent technological progress, the broad benefits of R&D are translated into the quantified shocks described in the table. Depending on the nature of the simulated innovation, these investments manifest either as targeted increases in MFP – representing a reduced need for specific physical inputs like water, feed or fertilizer to achieve the same yield – or as broader improvements in total factor productivity that elevate the overarching operational efficiency of the farming sector. Similarly, the economic benefits of physical infrastructure upgrades are modelled as a structural reduction in agrifood systems' consumption of transportation services. When governments invest in better rural roads, paved highways or modernized logistical networks, the physical process of moving food from farm to market becomes inherently less resource-intensive. Within the computable general equilibrium framework, this physical improvement is modelled as an increase in systemic transport efficiency; the agrifood value chain simply requires less transportation input (fewer vehicle hours, less fuel, less mechanical wear) to move the same volume of goods domestically. This mechanism accurately captures how overcoming physical logistical friction structurally lowers the final retail CoHD.

The individual subsidies are also consolidated into a single coordinated package so that comprehensive fiscal support can be assessed. As with the technological scenarios, the subsidy interventions are selectively packaged to prevent redundancy. When executing the consolidated subsidy simulation, overlapping subsector interventions are excluded to maintain double-counting benefits. The packaged fiscal shock focuses exclusively on combining the 10 percent subsidies for distribution and trade margins, domestic transportation, international trade costs, and overall production costs. This structured approach provides policymakers with a rigorous, costed assessment of how a coordinated, multisectoral subsidy framework can systematically drive down the CoHD while maintaining transparent taxpayer accounting.

Impact on the cost of a healthy diet

To evaluate the simulated impact of agrifood interventions, the primary metric utilized is the CoHD, which tracks the direct efficacy of targeted cost-reduction measures.[bn] Built upon the detailed methodology and baseline data established in **Chapter 3**, the CoHD serves as the normative benchmark to measure how effectively supply-side interventions lower the minimum cost of acquiring the required food groups. A key assumption is that all the listed interventions reduce the least-cost item in the same proportion as the average for the food group. By monitoring the projected evolution of the CoHD under various policy scenarios, the simulation provides a precise, standardized measure of how successfully interventions improve structural economic access to nutritious diets across different regions and individual value chains.

Alongside the CoHD, the simulations rigorously track the actual cost of aggregate food consumption to capture broader consumer benefits and identify potential systemic trade-offs. While the CoHD measures a normative, least-cost healthy basket, it does not reflect the realistic, everyday purchasing patterns of populations. Tracking the actual cost of food consumption allows policymakers to see how broad agrifood interventions benefit all consumers in the economy. Crucially, comparing the relative evolution of these two indicators reveals necessary policy trade-offs. For instance, strategically repurposing agricultural support away from heavily subsidized starchy staples towards neglected leguminous crops might successfully lower the CoHD, but it could inadvertently increase the cost of the average consumer's current diet if prices of staples rise. This dual tracking ensures that efforts to promote healthy diets are balanced against the realities of current consumption, preventing sudden shocks to overall food affordability.

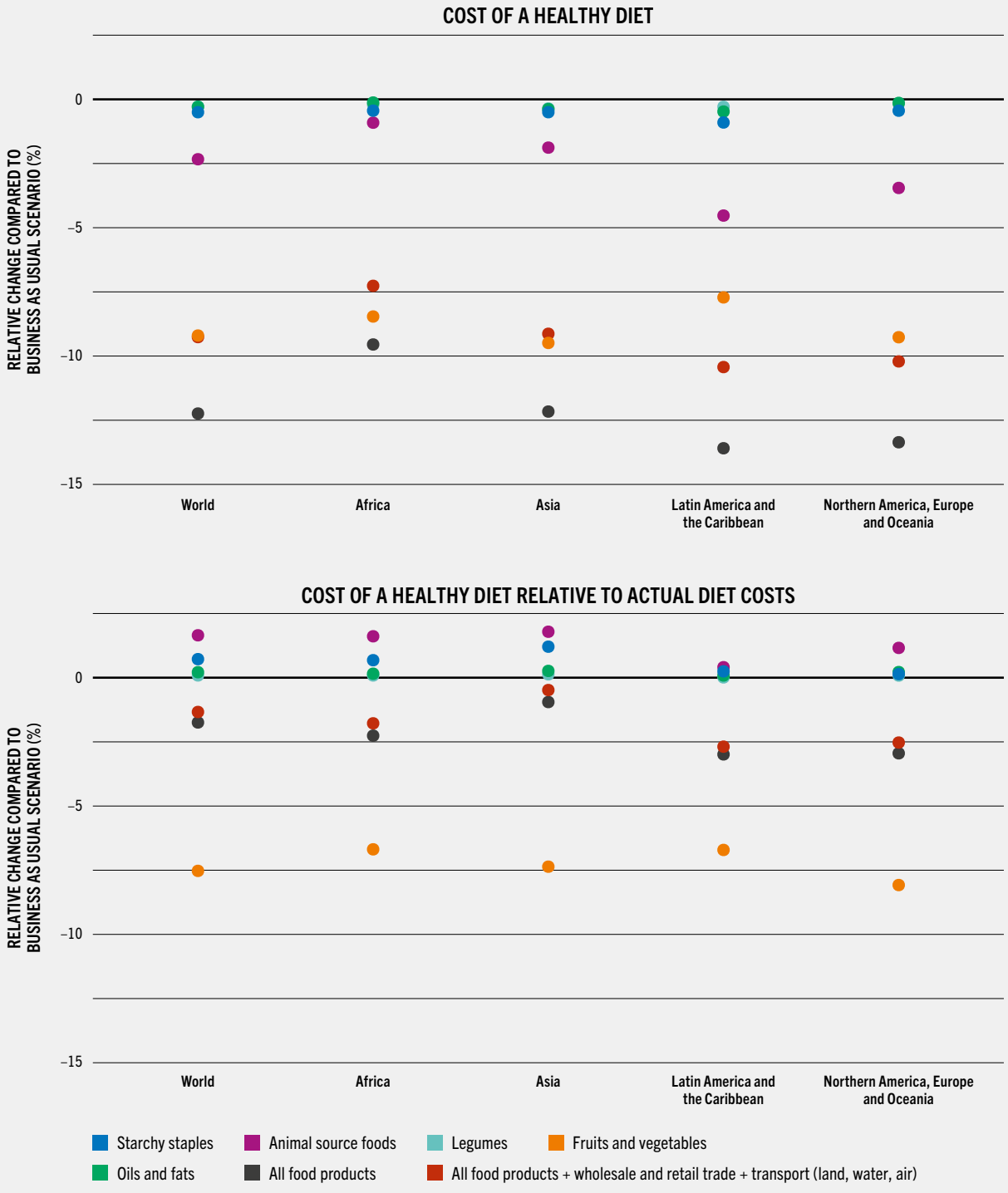
To guarantee the fiscal efficiency of proposed interventions, the analysis evaluates the efficiency of public spending by measuring the reduction in the CoHD per dollar of taxpayer subsidy. Agrifood interventions – whether they are farm-level production subsidies, investments in midstream processing, or logistical upgrades up to the wholesale level – require substantial public financing. By calculating the precise ratio of the CoHD reduction relative to the total fiscal cost of the public subsidies deployed, the simulation identifies the most economically efficient policy levers. This taxpayer efficiency metric is vital for governments operating with constrained budgets, ensuring that scarce fiscal resources are strictly allocated to the interventions that deliver the maximum nutritional affordability per dollar spent.

Impacts of technological interventions and efficiency improvement

A comprehensive 10 percent efficiency shock across all agrifood sectors significantly reduces the absolute CoHD, but this impact is overwhelmingly driven by structural improvements in the fruits and vegetables sector. As shown in Figure 4.5, globally, a simultaneous efficiency shock across all food products lowers the absolute CoHD by 12 percent. However, isolating the efficiency shock to fruits and vegetables achieves a 9 percent global reduction in the CoHD, demonstrating that resolving constraints in the production of highly perishable horticultural crops provides the largest quantitative lever for improving baseline »

bn Due to shifts in quantities and composition within and across food groups between the baseline and the simulations, the Fisher price index is used to minimize, without discarding, such composition effects.

FIGURE 4.5 IMPACTS OF TECHNOLOGICAL INTERVENTIONS ON THE COST OF A HEALTHY DIET AND THE RELATIVE COST OF A HEALTHY DIET COMPARED TO ACTUAL DIETS BY FOOD GROUP AND REGION FOR A 10 PERCENT EFFICIENCY SHOCK



NOTE: Global and regional impacts are computed as population-weighted averages.

SOURCE: Laborde, D. & Olivetti, E. (forthcoming). *Beyond single interventions: A multi-region simulation of structural and subsidies policies to lower the cost of a healthy diet*. FAO Agricultural Development Economics Working Paper. Rome.

https://doi.org/10.4060/cd8306en-fig4.5

» affordability. This dependency is particularly pronounced in Asia and in Northern America, Europe and Oceania, where targeted shocks to fruits and vegetables drive absolute CoHD reductions of 9.5 and 9.3 percent, respectively, capturing the vast majority of the economic benefits of a systemwide upgrade.

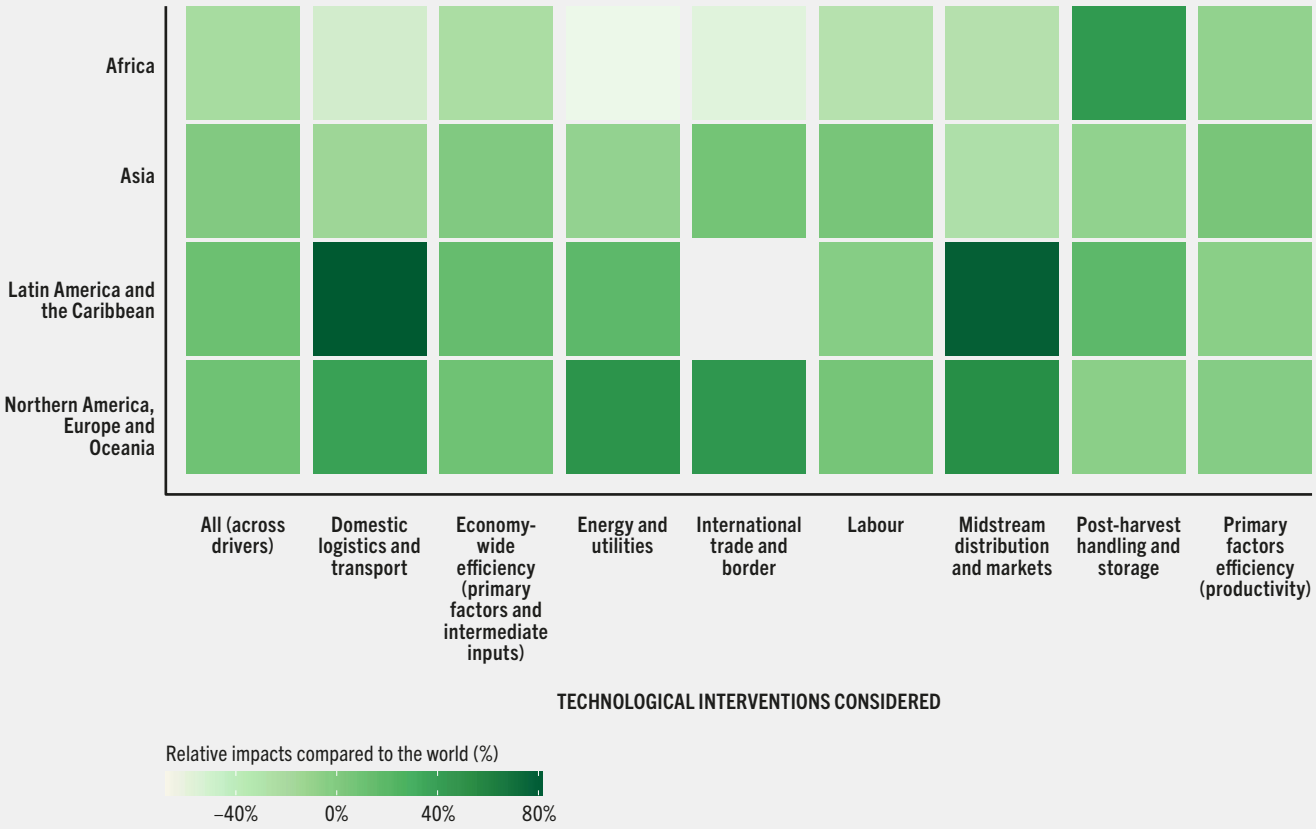
Targeted efficiency shocks in animal source foods yield more modest, highly regionalized reductions in the overall CoHD, while interventions in shelf-stable staples and oils have negligible absolute impacts. Globally, a 10 percent efficiency shock to the animal source food sector reduces the total CoHD by only 2.3 percent. However, in Latin America and the Caribbean, this same sectoral intervention achieves a much more substantial 4.5 percent reduction, reflecting the higher relative cost and consumption weighting of these products in that specific regional basket. Across all regions, shocks to starchy staples, legumes, and oils and fats consistently produce marginal absolute reductions (all registering well under 1.0 percent), reinforcing that these shelf-stable commodities are already structurally low-cost and are not the primary quantitative drivers of the reduction in the CoHD.

When evaluating the relative CoHD compared to actual consumption patterns, interventions targeting nutrient-dense foods successfully close the affordability gap, while generic shocks to staples and animal products inadvertently widen it. Globally, the comprehensive shock reduces the relative CoHD by 1.76 percent, with interventions in fruits and vegetables acting as the decisive catalyst, driving a massive 7.54 percent reduction in the relative cost worldwide. Conversely, efficiency gains applied strictly to animal source foods or starchy staples actually increase the relative CoHD globally by 1.64 percent and 0.71 percent, respectively. This unintended trade-off occurs because untargeted cost reductions in these widely consumed commodities lower the cost of the average actual diet faster than they lower the normative healthy diet. This highlights a critical policy nuance: to shift economic incentives towards better nutrition, investments must be disproportionately targeted towards under-consumed fruits and vegetables rather than evenly distributed across existing agrifood systems.

The simulated impacts of comprehensive agrifood interventions reveal that high-income regions generally experience greater relative price responses across aggregated drivers, while low- and middle-income regions like Africa exhibit highly specific, concentrated vulnerabilities. As shown in Figure 4.6, looking at the comprehensive scenario encompassing all drivers, both Latin America and the Caribbean and the Northern America, Europe and Oceania grouping show relative impacts above the global average when the package of interventions is implemented. In contrast, Africa's overall relative impact appears limited when all interventions are aggregated due to a lower range of entry points in the agrifood systems. However, this average masks a profound sensitivity to specific physical interventions. Most notably, addressing post-harvest measures yields a higher relative impact in Africa (+45 percent compared to the world average) and Latin America and the Caribbean (+18 percent), due to higher initial levels of losses. This affirms that structural deficits in preservation, cold chains, and storage remain the dominant binding constraints for lowering the CoHD in these contexts compared to the rest of the world.

Interventions targeting midstream distribution, domestic logistics, and energy and utilities yield greater benefits in Latin America and the Caribbean, and Northern America, Europe and Oceania. For domestic logistics and transport, Latin America and the Caribbean exhibits an exceptionally high relative impact, aligning with the region's vast geographical distances and high logistical frictions, confirming the previous findings. Similarly, improvements in midstream distribution and markets show massive relative efficacy in Latin America and the Caribbean (+78 percent compared to the world average) and in high-income countries (+53 percent). Because these regions feature highly formalized, extended value chains that rely heavily on continuous refrigeration and processing, their food prices are also highly responsive to energy and utilities upgrades (+19 and +48 percent, respectively). In low- and middle-income regions like Africa and Asia, these midstream transport and energy interventions show much lower relative impacts (e.g. in Africa, half of the world average impact for logistics and one-third for energy), reflecting a baseline where these

FIGURE 4.6 REGIONS MOST IMPACTED BY TECHNOLOGICAL INTERVENTIONS IN RELATIVE TERMS



NOTES: Regional impacts have been normalized by the world average impact for each intervention. Impacts are computed as population-weighted averages.

SOURCE: Laborde, D. & Olivetti, E. (forthcoming). *Beyond single interventions: A multi-region simulation of structural and subsidies policies to lower the cost of a healthy diet.* FAO Agricultural Development Economics Working Paper. Rome

https://doi.org/10.4060/cd8306en-fig4.6

formal, energy-intensive value chain structures are currently less dominant in setting final consumer prices.

Enhancements in primary factor productivity and labour efficiency deliver the biggest relative advantages in Asia, while interventions in international trade heavily favour regions with highly integrated cross-border markets. Asia is the only region to notably exceed the global average in the primary factors efficiency scenario, reflecting the region's critical reliance on intensifying on-farm production and optimizing labour to feed large, dense populations on limited arable land. Additionally, interventions reducing international trade and border costs show profound relative impacts in Northern America, Europe and Oceania, illustrating the highly integrated nature of their regional markets and the high volume of cross-border agrifood trade. Conversely, Africa shows a uniquely low relative impact from international trade interventions (half of the world average), reinforcing the narrative that overcoming domestic supply bottlenecks and massive post-harvest losses must precede or accompany

trade liberalization to effectively lower the local CoHD. Due to its status as a major agrifood exporter, Latin America and the Caribbean will see a domestic increase in the CoHD when international trade expands due to reduced international trade costs and the stimulation of global demand. This reinforces the need to combine interventions to mitigate side effects and allow for domestic supply expansion while external demand grows.

Reducing costs through subsidies

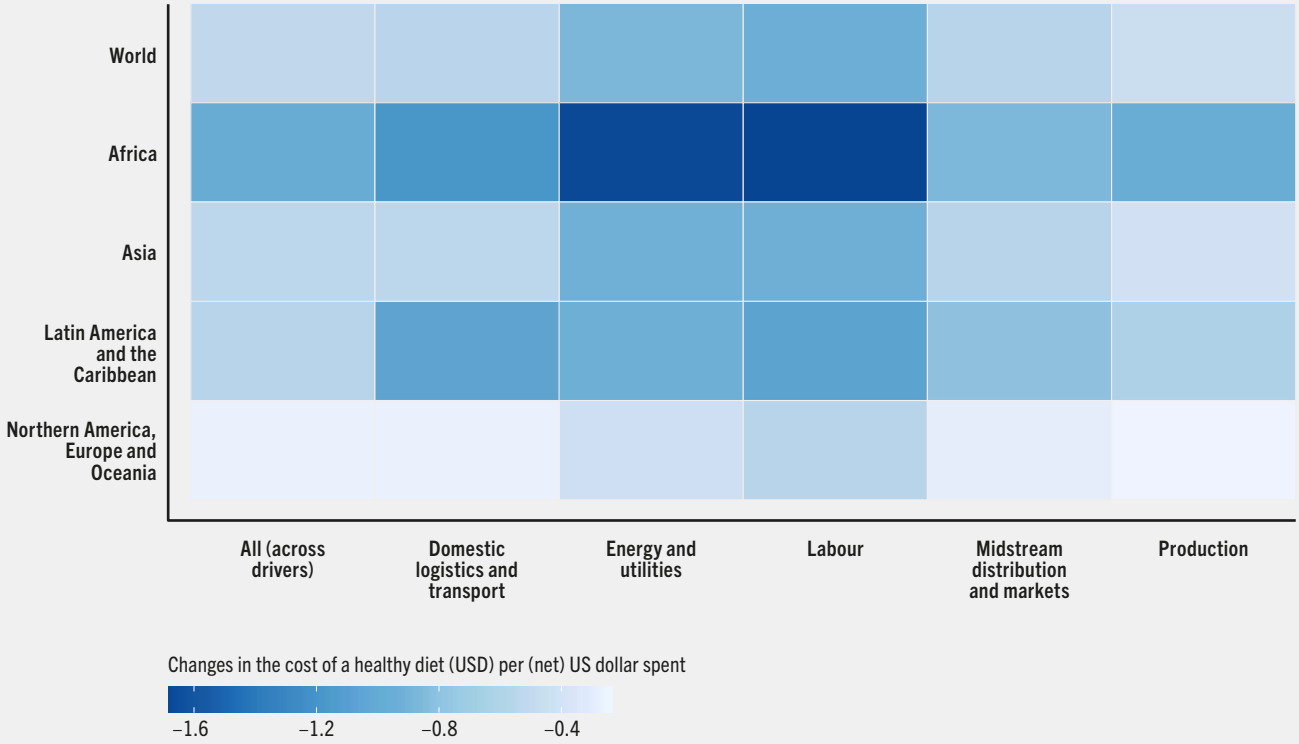
As expected, subsidizing overall primary production costs provides the most substantial reduction in the cost of a healthy diet across all regions, quantitatively dwarfing the effects of subsidizing specific downstream logistical or utility components. Globally, applying a targeted 10 percent fiscal subsidy to overall production costs reduces the CoHD by a highly significant 5.6 percent. In stark contrast, applying the exact same 10 percent subsidy rate to domestic transportation or energy and utilities generates negligible global CoHD reductions of just 0.1 and 0.2 percent, respectively, due to their smaller individual shares in the cost structure. Even subsidizing midstream distribution results in a modest global drop of just 0.4 percent. This disparity clearly indicates that, within a direct fiscal transfer framework, the sheer volume of aggregate costs embedded at the primary production level dictates the final consumer price of a healthy diet far more heavily than downstream distribution friction.

The efficacy of these targeted fiscal subsidies varies profoundly by geography, with mature, formalized agrifood systems demonstrating much higher sensitivity to production and labour subsidies than systems in developing regions. A 10 percent production subsidy reduces the CoHD by a massive 8.1 percent in Latin America and the Caribbean, and by 7.5 percent in Northern America, Europe and Oceania, compared to much more muted reductions of 4.4 percent in Africa and 4.7 percent in Asia. A similar structural divide is visible with labour: a 10 percent subsidy on agricultural labour costs lowers the global CoHD by nearly 2.0 percent, but its impact is significantly smaller in Africa (1.6 percent) compared to Europe (2.1 percent) and Latin America (2 percent). This reflects the structural realities of these economies: regions with highly formalized, wage-reliant and capital-intensive agriculture sectors experience greater price relief from direct fiscal subsidies, whereas regions like Africa, which often rely more heavily on less expensive, informal labour and face severe physical infrastructure deficits, are less responsive to these specific fiscal instruments.

Directing comprehensive fiscal subsidies towards the fruits and vegetables sector delivers by far the largest reduction in the global CoHD, reaffirming horticulture as the primary lever. Globally, subsidizing all components of the fruits and vegetables supply chain reduces the overall CoHD by a massive 9.6 percent. This effect is especially pronounced in formalized, labour-intensive regions, reaching a 12 percent reduction in Northern America, Europe and Oceania, and a 9 percent reduction in Asia. By contrast, an identical comprehensive subsidy applied exclusively to the animal source food sector yields only a 1.1 percent global reduction. However, animal source foods remain a structurally significant lever in Latin America and the Caribbean, where targeted subsidies achieve a much more notable 3.6 percent reduction in the regional CoHD.

Applying comprehensive fiscal subsidies to already low-cost commodity groups like starchy staples yields negligible affordability benefits and can inadvertently trigger slight increases in the total CoHD by diverting the production factor away from other value chains. Globally, subsidizing starchy staples results in a 0.4 percent increase in the total CoHD, driven by general equilibrium cross-price effects and market-mediated reallocation of resources in Asia (+0.7 percent) and Northern America, Europe and Oceania (+0.2 percent). Similarly, comprehensive subsidies on legumes and vegetable oils produce near-zero global CoHD reductions and even generate marginal cost increases in specific regions like Latin America and Europe. This demonstrates that broad-based subsidy programmes targeting baseline caloric staples fail to improve nutritional economic access; to effectively reduce the overall "price tag" of a healthy diet, taxpayer resources must be strictly targeted towards the highest-cost and under-consumed food groups.

FIGURE 4.7 REDUCTION IN THE COST OF A HEALTHY DIET BY US DOLLAR SPENT – GLOBAL SCENARIOS



NOTE: Net subsidies impacts include the raw value of the new subsidies and the indirect impacts on indirect tax rates in the model, excluding household level taxes.

SOURCE: Laborde, D. & Olivetti, E. (forthcoming). *Beyond single interventions: A multi-region simulation of structural and subsidies policies to lower the cost of a healthy diet.* FAO Agricultural Development Economics Working Paper. Rome.

https://doi.org/10.4060/cd8306en-fig4.7

In a context of constrained public resources, fiscal subsidies should be evaluated not only by their effect on reducing the CoHD, but also by the reduction achieved per unit of public expenditure. This allows the identification of the most cost-effective subsidy interventions.

The fiscal efficiency of agrifood subsidies varies drastically across regions, with taxpayer funds delivering substantially higher price-reduction returns in developing economies compared to mature markets. When evaluating the reduction in the CoHD per US dollar of net subsidy, as shown in Figure 4.7, Northern America, Europe and Oceania consistently demonstrate the lowest fiscal returns, achieving a reduction of only USD 0.2–0.6 in the CoHD for every US dollar spent. In these highly formalized, high-income systems, subsidies often face diminishing marginal returns and are heavily diluted by complex midstream value chain structures. Conversely, regions like Latin America and the Caribbean, and Asia exhibit much stronger fiscal efficiency, frequently clustering around the global averages of USD 0.4–0.9 in CoHD reduction per taxpayer US dollar, indicating that fiscal transfers in these regions translate more directly into tangible consumer price relief.

Crucially, when the fiscal return of a supply-side intervention falls below 1, it demonstrates that these measures are fiscally inferior to demand-side support if they lack accompanying structural improvements. From a purely fiscal perspective, deploying supply-side subsidies that are not strictly coupled with genuine technological or efficiency gains represents a suboptimal allocation of public resources, as a significant portion of the taxpayer investment is absorbed by value chain intermediaries rather than passed on to the consumer. In these low-return scenarios, governments would achieve a superior reduction in the effective CoHD by redirecting those funds towards targeted income transfers or properly calibrated consumer food subsidies, which bypass midstream leakages and directly enhance vulnerable households' purchasing power.

In Africa, the global subsidy scenario generates an exceptional multiplier effect, consistently achieving CoHD reductions that are substantially greater than the actual fiscal US dollars spent due to indirect transfer to this region. As the results illustrate, Africa's fiscal return dramatically outperforms all other regions, reaching up to a USD 1.7 reduction in the CoHD for every single US dollar of net subsidy. This counterintuitive result – where the consumer benefit exceeds the direct fiscal input – arises specifically because the simulation models a synchronized, global intervention scenario. Because Africa operates as a structural net importer of food, the region effectively imports the price reductions generated and subsidized by taxpayers in other major global producing regions.

To maximize the impact of constrained public budgets on global nutritional affordability, international fiscal resources must be strategically targeted towards systems that demonstrate these highest multiplier effects. The simulation results clearly prove that a uniform, untargeted approach to agricultural subsidies is highly inefficient. Deploying additional public funds into mature regions with low transmission efficiency yields only marginal improvements in consumer affordability. By contrast, leveraging the structural trade dynamics and high market responsiveness of developing regions ensures that fiscal interventions operate at maximum efficiency. Consequently, global agrifood policy must prioritize public spending in contexts where every US dollar invested structurally guarantees the highest corresponding reduction in the price tag of a healthy diet.

4.3 REDUCING THE COST OF A HEALTHY DIET: IMPLICATIONS FOR DEPLOYING AND SCALING UP REFORMS

The practical implementation of the proposed reforms introduces complex governance challenges. While the preceding sections have identified the structural interventions necessary to reduce the CoHD and quantified their potential impacts, the successful implementation, financing and execution of this transition requires more than mere capital mobilization – it demands the rigorous management of unintended consequences to ensure efficient, equitable delivery across agrifood systems.

These structural reforms must be firmly anchored in the three foundational dimensions of sustainability: environmental, social and economic. On the environmental front, supply-side interventions must meticulously mitigate negative externalities – particularly those originating at the production level – ensuring the highly efficient use of natural resources and strictly avoiding the depletion of natural capital. Socially, the transition must remain fundamentally inclusive within and across borders; this is also a necessary condition to address the political economy tensions arising from these reforms. It is therefore essential to cushion the economic shocks for stakeholders who are disadvantaged by shifting incentives; and to take decisive action to prevent the market exclusion of vulnerable consumers resulting from poorly sequenced, mistimed policy implementation. Finally, guaranteeing the economic sustainability of these interventions is paramount. If the proposed structural measures do not translate into viable, profitable operational models for agrifood actors throughout the

value chain, the transition will fail to scale beyond initial public subsidization. Achieving enduring economic resilience necessitates strong, institutionalized complementarity between public and private actors.

Financial and non-financial costs of selected interventions

The final price paid by consumers at the market does not necessarily reflect the true, overarching societal cost of producing, processing and distributing the food purchased. Heretofore, *The State of Food Security and Nutrition in the World* has conceptualized the CoHD strictly through the lens of retail market prices, adhering to the established, standardized methodology. Consequently, the interventions and structural reforms outlined in the preceding sections have been evaluated primarily on their efficacy in exerting downward pressure on the final consumer prices of key food groups. However, market prices fundamentally fail to capture the full spectrum of costs associated with the world's agrifood systems. Relying solely on market valuations provides an incomplete, and potentially distorted, economic picture of agrifood transitions. Thus, as policymakers evaluate and finance interventions to reduce the CoHD, they must expand their analytical framework beyond market prices to incorporate the broader economic, environmental and social externalities generated by these structural shifts.

The true cost accounting framework systematically quantifies the "hidden costs" of agrifood systems – profound negative externalities and market failures that are ultimately borne by society rather than reflected in the retail price of food. To avoid creating additional hidden costs while reducing the market-based CoHD, the transition towards affordable healthy diets must be grounded in the principles of true cost accounting, as comprehensively detailed in the 2023 and 2024 editions of *The State of Food and Agriculture*.[83, 84] While these assessments establish that diet-related health costs, driven largely by non-communicable diseases, constitute the largest single share of these hidden global burdens, interventions aimed at lowering the CoHD must not inadvertently exacerbate other critical externalities and market failures. Hidden burdens notably include the severe environmental toll of agricultural expansion and intensification, such as unsustainable groundwater depletion, greenhouse gas emissions, nitrogen runoff, and the widespread damage to vital ecosystem services. Furthermore, hidden social costs, particularly those manifesting as enduring rural poverty, inequitable land tenure, and precarious livelihoods among agrifood workers, must be centrally accounted for when assessing the true impact of any cost-reduction strategy. Equally, efforts to lower the cost of a healthy diet must not come at the expense of food safety: the perishable foods that healthy diets depend on – fruits, vegetables, animal source foods – are among those most prone to contamination, while foodborne diseases already impose a major global health and economic burden.[85]

Pursuing the reduction of food prices without mitigating these hidden costs risks creating a dangerous illusion of success. Achieving low market prices by actively degrading natural capital – for example, harming soil health without integrating regenerative agricultural practices, or rapidly intensifying livestock and aquaculture production through systematic reliance on antimicrobials – leads to short-term gains and generates profound systemic vulnerabilities. These extractive models are fundamentally incompatible with the development of mature, resilient agrifood markets. Similarly, reducing costs by pushing down workers' earnings and rights is incompatible with long-term, inclusive development. Over time, the accumulated environmental degradation and unaddressed social deficits will inevitably erode the very resource base upon which sustainable agricultural productivity depends, triggering subsequent, more severe price shocks and undermining the long-term viability of the food supply itself, especially for the essential food groups.

Avoiding these critical pitfalls demands a paradigm shift towards integrated policy responses that rigorously navigate the complex nexus of market affordability and systemic sustainability. Interventions designed to lower

the CoHD must be subjected to detailed, context-specific trade-off analyses before large-scale financing is deployed. These analyses must explicitly weigh anticipated short-term retail price reductions against long-term ecological and social imperatives. By ensuring that supply-side investments firmly prioritize resource efficiency, decent rural employment, and the strict preservation of natural capital, policymakers can guarantee the long-term sustainability of agricultural productivity gains. This holistic, structurally sound approach not only safeguards agrifood systems against future climate and economic shocks, but also paves the way for larger, more stable consumer markets capable of sustainably absorbing increased nutritional demand. Crucially, proactively managing these trade-offs is essential for minimizing the political and social tensions inherent in agrifood transitions, ensuring that the global drive towards nutritional affordability does not come at the ultimate expense of the planet or its producer communities.

How to reduce the cost of a healthy diet in the context of rising demand at scale

Achieving global dietary targets does not rely on supply-side measures alone. So far, the analytical focus of this report has been squarely on supply-side interventions designed to reduce the CoHD. The preceding estimates and policy frameworks have concentrated on two primary economic mechanisms: shifting the supply curve horizontally to increase overall market availability at constant costs, and shifting it vertically to directly reduce the structural and logistical costs of existing agrifood production. A substantial portion of the global and domestic agenda to promote the consumption of healthy diets relies heavily on demand-stimulating interventions. These include targeted social protection programmes, enhanced public procurement initiatives such as large-scale school feeding programmes, and widespread behavioural change campaigns designed to shift consumer preferences towards improved dietary choices.[88]

The transition towards healthier agrifood systems fundamentally involves creating and expanding new markets for diverse, nutritious foods. While demand-side incentives are intended to trigger a robust market response and stimulate private-sector investment, the pacing of these policies is critical. If demand-stimulating policies are implemented too rapidly, outpacing the physical and technological capacity of local supply chains to respond, the fundamental CoHD on the open market will inevitably spike. This dynamic creates a paradoxical situation where policies intended to increase the consumption of healthy diets inadvertently increase their prices on the market, potentially undermining the broader dietary objectives of agrifood systems transformation.

Demand-side interventions should be sequenced with supply-side actions to avoid price increases. While these demand-side measures are critical for improving nutritional outcomes, they introduce a complex challenge: mechanically, boosting aggregate demand for specific food groups will inevitably exert upward pressure on their market prices. If the supply of perishable, nutrient-dense foods is relatively inelastic in the short term, sudden increases in demand will translate directly into price inflation rather than volume growth. Consequently, it is imperative that supply interventions are explicitly designed to accommodate not only current market constraints and population sizes, but also these anticipated future demand shifts. Policymakers must carefully calibrate the timing and sequencing of their interventions, ensuring that agricultural productivity investments and logistical upgrades are firmly in place to absorb demand-side stimulus.

Unmitigated price increases carry drastic, negative pecuniary externalities, particularly for vulnerable populations. When the market price of nutritious foods spikes due to sudden demand shocks, it disproportionately harms consumers who are not the direct beneficiaries of the demand-side interventions, effectively pricing them out of healthy diets. This exclusionary effect can manifest both domestically and internationally. A salient historical example of this dynamic is the global quinoa market boom during the 2000s and early 2010s. As behavioural shifts and marketing campaigns in high-income countries rapidly elevated quinoa to a highly sought-after dietary

staple, the massive international demand shock drove prices to historic highs. While this generated a temporary economic windfall for certain Andean producers, it simultaneously raised severe concerns regarding the affordability and accessibility of quinoa for traditional, lower-income consumers in the Plurinational State of Bolivia and Peru, who suddenly found their indigenous staple priced as a luxury commodity.[86] Considering the role of trade openness, international externalities of domestic policies must be fully captured and mitigated. Therefore, any comprehensive strategy to lower the CoHD must internalize the global footprint of demand shifts, ensuring that policies designed to improve nutrition in one demographic or region do not inadvertently export nutritional insecurity to another. In a symmetric manner, export restrictions aimed at reducing the prices for domestic consumers will hurt foreign consumers, especially during episodes of global price volatility.[bo] This illustrates the risk of design policies and interventions at the unilateral level and calls for coordinated actions across countries to scale up supply and demand in a synergetic manner.

Redistributive impacts of the proposed interventions and reforms

Reducing the CoHD requires structural changes in agrifood systems whose distributional outcomes depend on how reforms are designed, sequenced and accompanied by transition support. Reforms that shift production, prices and incentives across food groups generate gains and adjustment costs that are unevenly distributed across consumers, producers, regions and demographic groups. Consumers benefit from lower prices for the food groups that compose healthy diets, but the magnitude and timing of these benefits may vary by income group, location and access to efficient markets. Reforms that reallocate production towards food groups which drive the CoHD, including fruits and vegetables, legumes, nuts and seeds, and animal source foods, can generate gains for producers of these foods and adjustment costs for producers of staple crops that vary across countries and regions, depending on the depth of existing support, the speed of reform, and the availability of transition support. Smallholder farmers, women, and youth, who together account for a substantial share of agrifood systems livelihoods in low- and middle-income countries, face both opportunities and risks, depending on whether reforms are accompanied by access to technologies, markets and finance, including investments in credit availability, land access, infrastructure and skills development, among many others. The paragraphs that follow examine these distributional dimensions in turn, drawing on evidence from model-based simulations, and country experiences with agrifood systems transformation.

Women and youth, who account for a substantial share of agrifood systems employment in low- and middle-income countries, can benefit from reforms that expand markets for nutrient-dense foods, but only when accompanying interventions address persistent gaps in land tenure, credit access, technology adoption, and time-use constraints. Closing the productivity gap between women and men on farms of equal size (currently 24 percent globally) could act as a supply-side lever for reducing the CoHD.[87] Women in low- and middle-income countries manage a large share of the value chains of horticulture, small livestock, dairy production, fisheries and aquaculture – i.e. value chains including food groups with high costs.[88–90] Their capacity to benefit from reforms that expand these markets depends on closing the access gaps in finance, technology and land that constrain their productivity. FAO estimates that closing the productivity gap between women and men together with the agricultural wage gap would raise global GDP by approximately 1 percent and reduce the number of food-insecure people by 45 million.[87] Reform pathways nonetheless reach women and youth unevenly. Reallocation of fiscal support towards horticulture, dairy and pulses value chains reaches women in production

bo During the 2006–2008 food price crisis, insulating policies by major producers raised international prices by an estimated 45 percent for rice and 30 percent for wheat.[66] Modelling results on the collective impact of such price-insulating policies suggest they roughly double the initial price shock and quadruple the variance of world prices for wheat and rice; in addition, they increase domestic price volatility in many of the countries that impose them.[30]

and processing directly; on the other hand, productivity-driven consolidation in midstream segments documented across African and Asian agrifood systems can displace women from informal processing and trading roles – unless the reform package incorporates transition support, including equitable cooperative arrangements, access to processing technologies, and contract-farming intermediation.[25, 91] Rural youth face an analogous pattern: new entrants contend with intensified land scarcity, and employment in agrifood systems created by the growth of midstream **small and medium-sized enterprises (SMEs)** offers a path to productive livelihoods only where access to land, finance, markets, technologies and skills training accompanies reform, particularly in sub-Saharan Africa, where approximately 14 million young people enter the labour market each year.[92, 93]

Managing the transition across producers is required to address the political economy of the reform. Interventions designed to reduce the CoHD through supply-side structural reforms and the repurposing of agricultural support are inherently redistributive, with a potential to fundamentally alter the profitability landscape across different agrifood sectors. Agricultural producers are not a homogenous entity, and macroeconomic policies that systematically shift incentives away from traditional staples towards nutrient-dense foods will inevitably generate distinct winners and losers. For instance, redirecting public investments towards cold chain infrastructure and targeted R&D may significantly elevate the market access and profitability of coastal fishers and commercial fruit growers. However, these populations and their geographical centres of production are entirely distinct from the pastoralists relying on extensive livestock systems in arid zones, or the smallholder cereal producers in traditional arable heartlands. This profound heterogeneity of producers dictates that the spatial and socioeconomic impacts of agrifood transitions will be highly uneven, risking the economic disenfranchisement of regions reliant on legacy production systems. Consequently, managing the regional implications of these market shifts is just as critical as achieving the nutritional objectives. Policymakers must design comprehensive, equitable transition pathways that integrate targeted social protection, technical re-skilling, and value chain finance for smallholders disadvantaged by shifting subsidies or sudden exposure to new competitive standards. Ultimately, the successful implementation of these transformative reforms depends not merely on sound economic modelling, but on the capacity and willingness to astutely manage the political economy: governments must actively negotiate with entrenched vested interests, financially cushion vulnerable agricultural communities during the transition, and ensure that the vital pivot towards affordable healthy diets does not systematically marginalize traditional producer populations.

The role of public and private sectors

Reducing the CoHD at scale requires public and private actors to perform complementary functions. Governments shape the incentives, public goods and regulatory architecture within which agrifood systems operate; on the other hand, private firms, from smallholder producers to multinational processors and retailers, carry the bulk of day-to-day production, processing and distribution.[12] The two are structurally interdependent: public investment in rural roads and cold chain infrastructure lowers private logistics costs, shifting the business case for investment in perishable value chains; private delivery capacity, in turn, determines whether public policy changes translate into lower consumer prices.[94, 95] The sections that follow set out three policy priorities, covering action by the public sector, by the private sector, and through collaborative mechanisms; together they define what a reform package capable of reducing the CoHD looks like.

Public action establishes the enabling environment for affordable healthy diets through fiscal incentives, public goods, regulation, and social protection that cushions reform transitions. Current agricultural support shapes producer incentives. Global economic modelling indicates that reallocating current fiscal subsidies towards nutrient-dense foods lowers the CoHD, with the largest reductions reaching 3.34 percent by 2030 relative to baseline.[44] Beyond fiscal reform, public investment in rural roads, cold chain

infrastructure, wholesale markets, agricultural research and digital public infrastructure addresses the post-farmgate costs that account for most of the consumer price of nutritious foods.[96] Regulation and oversight, including food safety standards, competition policy and environmental safeguards, shape the structural conditions under which nutritious foods are produced, processed and distributed.[97, 98]

Private investment and innovation bring down the cost of nutritious foods at scale by expanding processing, logistics and distribution, and by adopting practices that reduce losses and improve resource efficiency. Most food consumed in low- and middle-income countries is produced, processed, transported and sold by SMEs, which face persistent constraints on access to finance, equipment, technical skills and quality assurance.[95, 99] Empirical evidence from sub-Saharan Africa shows that domestic production of fruits, vegetables and animal products grew by 36 percent, 43 percent and 29 percent, respectively, between 2010 and 2020 – growth driven largely by spontaneous clusters of SMEs in the midstream of value chains.[25] The estimated global SME financing gap of USD 5.7 trillion is particularly binding for agrifood enterprises, which fall into a "missing middle" between microfinance and commercial banking and face strict collateral requirements due to thin margins and exposure to climate and price shocks.[94] Targeted investment by larger firms in cold chain logistics, processing capacity and proximity distribution models has been shown in selected cases to extend shelf-life, reduce post-harvest losses in perishable value chains, and lower the unit cost of nutritious foods reaching low-income consumers.[99, 100] Adoption of resource-efficient and loss-reducing practices remains uneven, however, and rigorous economic evaluation of firm-level decisions to invest in such practices in low- and middle-income contexts is limited, leaving a gap that public co-financing and technical assistance can help close.[30, 95]

Recent commitments from both public and private actors signal growing alignment around the reform priorities identified in this chapter. At the 2025 Nutrition for Growth Summit in Paris, 106 governments and multilateral institutions registered over 580 commitments and mobilized close to USD 27.55 billion in nutrition financing, including USD 5 billion pledged by the World Bank and USD 9.5 billion by the African Development Bank through to 2030.[101] On the private sector side, the Paris Declaration on Business and Nutrition 2030, launched by the Access to Nutrition initiative (ATNi), the Global Alliance for Improved Nutrition (GAIN) and the Paris Peace Forum on the eve of the summit, sets out a 2030 roadmap in which agrifood systems actors from agribusinesses to retailers commit to redirecting investment towards affordable nutritious foods. The declaration calls explicitly on development finance institutions to build concessional lending mechanisms for SMEs – instruments currently lacking in the sector – and on governments to create the enabling policy environment that makes such investment viable.[102] Together, these commitments provide the financial and political foundation on which the collaborative mechanisms described in the section that follows can operate.

Collaborative mechanisms, including well-defined and transparent public–private partnerships and multistakeholder platforms, deliver results when design principles align incentives, allocate risks, and protect the inclusion of smallholders and SMEs. Public–private partnerships in infrastructure, agricultural research and digital platforms can mobilize private capital and capacity for objectives the public sector alone cannot finance, while addressing market failures the private sector alone will not resolve.[103] Evidence from agricultural value chains indicates that partnership effectiveness depends on the strength of underlying state capacity and on transparent disclosure of partnership terms.[103] Multistakeholder platforms, including financing platforms such as the Nutritious Foods Financing Facility, the Power of Nutrition and the Global Financing Facility, can align donor, government and private investment around national priorities and provide a structured space for shared accountability.[94, 104] Their effectiveness depends on transparent governance, balanced representation of public and private actors, and protection against capture by any single stakeholder. Realizing the potential of these mechanisms also depends in

part on closing the data gaps in policy support estimates – gaps that currently limit the ability to track whether commitments translate into policy actions. Existing tools point the way: WHO's Global database on the Implementation of Food and Nutrition Action (GIFNA)[105] monitors and publishes updates on nutrition policy actions across countries, offering a model for the kind of systematic tracking that a broader monitoring framework for food and agricultural support commitments would require.[105] ■

CHAPTER 5
WAY FORWARD: ACCELERATING PROGRESS TOWARDS SUSTAINABLE DEVELOPMENT GOAL 2 THROUGH MORE AFFORDABLE HEALTHY DIETS

The findings in this report underscore that, while access to a healthy diet is central to both food security and nutritional outcomes, it remains unattainable for a large share of the global population, particularly in low-income countries. The persistence of the high cost of a healthy diet (CoHD) reflects deep structural constraints across agrifood systems, ranging from low productivity and inefficient value chains to policy distortions and unequal access to markets and services.

Reducing the CoHD therefore is not only a food security and nutrition objective but a strategic entry point for broader agrifood systems transformation. While lowering prices alone will not fully eliminate all forms of malnutrition, it is a necessary condition to improve economic access to a healthy diet, and ensure that cost does not remain a binding constraint for households. Beyond cost, improving affordability also requires strengthening households' purchasing power. Policies that raise incomes – particularly for low-income and vulnerable population groups – are a critical complement to efforts to lower food prices. These include social protection programmes (such as cash transfers and food assistance), labour market policies that support decent wages and employment opportunities, and investments in rural livelihoods and non-farm income diversification. When well designed, such measures enable households to access healthier diets without compromising other essential expenditures. The way forward requires combining interventions that act simultaneously on supply, demand – considering economic and non-economic factors – and the functioning of markets and institutions, while recognizing that priorities will differ across countries and contexts.

CHALLENGES: STRUCTURAL CONSTRAINTS AND UNEVEN PROGRESS

Progress towards global nutrition targets has been uneven and insufficient, with persistent disparities across regions and population groups. Structural factors – such as low agricultural productivity, high input costs, weak infrastructure and limited market integration – continue to drive high food prices in many low-income settings.

Impacted by a lot of these structural factors, Africa represents a critical focal point in the global effort to achieve SDG 2. It is the region with both the highest share of the population and the largest number of people facing hunger, while demographic projections

indicate that population growth will further increase pressure on agrifood systems. Without accelerated progress, the combined effect of rapid population growth and existing vulnerabilities risks widening the gap between the availability of food and the ability of households to afford diets that meet nutritional needs. These challenges are further compounded by increasing exposure to climate variability and extreme events, including the growing frequency and intensity of shocks such as El Niño episodes. Such shocks can disrupt production, affect yields and increase price volatility, with particularly severe consequences for vulnerable populations and net food buyers. In this context, strengthening resilience must be a central component of the policy response in Africa.

In addition, recent shocks, including food price inflation and broader cost-of-living pressures, have further constrained households' purchasing power. These shocks highlight the vulnerability of agrifood systems to external disruptions and the need for policies that enhance resilience and stabilize prices over time. The recent tensions affecting the Strait of Hormuz highlight an additional layer of vulnerability for global food security. As a major point of transit for global energy flows, disruptions in this corridor have led to increases in oil and gas prices, raising production, processing and transportation costs across agrifood systems. Such energy price shocks can rapidly translate into higher food prices, particularly in countries that are highly dependent on imported fuel, fertilizers and food products. These dynamics reinforce the exposure of agrifood systems to geopolitical risks and underline the importance of considering energy–food linkages when assessing the drivers of food insecurity, including the CoHD.

Healthy diets are particularly sensitive to energy price fluctuations because of their composition. Foods that contribute most to the cost of a healthy diet – such as animal source foods and vegetables – often have higher energy intensity due to cold chains, processing, storage and transportation requirements. As a result, increases in energy prices can disproportionately raise the cost of these nutrient-dense foods relative to staple crops, widening the affordability gap for healthy diets.

Another critical challenge lies in policy fragmentation. Interventions affecting the cost of a healthy diet often cut across sectors – agriculture, trade, social protection, health and education – but are frequently implemented in silos. Without coordination, policy efforts may fail to address the full set of constraints shaping access to healthy diets.

OPPORTUNITIES: LEVERAGING SYSTEM-WIDE TRANSFORMATIONS

There are important opportunities to accelerate progress. First, the increasing availability of data on food prices, dietary patterns and nutrition outcomes provides an unprecedented foundation for evidence-based policymaking. The ongoing integration of CoHD measurement into national statistical systems allows countries to monitor affordability more frequently and with greater granularity, enabling more responsive and targeted interventions.

Second, advances in agricultural technologies and innovations in value chains offer pathways to increase the supply and reduce the cost of nutrient-dense foods, particularly fruits, vegetables and animal source foods, which account for a large share of the CoHD. Improvements in logistics, storage and processing can reduce food losses and inefficiencies, lowering costs along the value chain and stabilizing prices for consumers.

Third, growing recognition of the link between agrifood systems, health and environmental objectives creates opportunities for policy coherence. Interventions that improve productivity, reduce losses and promote sustainable practices can simultaneously enhance nutrition outcomes, strengthen resilience and contribute to environmental goals.

PRIORITY INTERVENTIONS: TARGETED AND COMPLEMENTARY ACTIONS

Given the multidimensional nature of the CoHD, a combination of targeted and complementary interventions is required:

1. Boosting supply of nutrient-dense foods
Policies should prioritize investments in productivity and efficiency for foods that drive the cost of a healthy diet, notably fruits, vegetables and animal source foods. This includes support for research and development, improved access to inputs and services, and incentives for diversification towards nutrient-rich production systems.

2. Strengthening value chains and market efficiency
Reducing transaction costs along value chains is essential. Investments in rural infrastructure, cold chains, storage and processing can reduce food losses and improve market functioning, lowering costs for consumers. Enhancing competition and transparency in markets can further support price efficiency. This also helps address commercial determinants of diets, including market concentration and pricing practices that influence the relative affordability of nutritious versus less healthy foods. Importantly, abuse of dominant position could also reinforce pervasive marketing targeting vulnerable groups (e.g. children) or limit the availability of healthy foods in a given environment, to favour high profit margins for unhealthier options.

3. Integrating markets
Trade plays a critical role in improving access to healthy diets by increasing the availability, diversity and affordability of nutritious foods, especially in countries where domestic production is insufficient. Ensuring that trade supports better nutritional outcomes requires coherent policies that promote access to healthy foods, while limiting the expansion of unhealthy dietary patterns. Trade policies can play a critical role in stabilizing prices and ensuring availability of diverse foods. Reducing barriers to the import of nutrient-dense foods where domestic production is constrained can help moderate costs and improve accessibility.

4. Implementing targeted social protection and demand-side measures
Ensuring that vulnerable populations can afford healthy diets requires well-designed social protection programmes, including cash transfers, food assistance and nutrition-sensitive interventions. These should be aligned with dietary objectives to promote the consumption of nutritious foods. Beyond affordability, healthy foods should be widely available for these populations and easier to obtain than unhealthy food products.

5. Repurposing public support
Reforming agricultural support to better align with nutritional outcomes can create incentives to produce and supply nutrient-dense foods. This includes shifting resources away from policy instruments that disproportionately support staple production towards more diversified and nutrition-sensitive systems. It will increase the value of taxpayer money and should motivate higher spending in this part of the economy.

6. Strengthening policy coherence and governance
Integrated policy frameworks that link agriculture, nutrition, health and social protection are essential. This also requires integrated land use management to take advantage of synergies between forestry and agriculture. Strengthening institutional coordination can ensure that interventions complement each other and maximize impact. This requires ensuring that policy design and implementation are safeguarded from conflicts of interest and undue influence, in order to maintain integrity, transparency and public trust.

These actions will not only reduce the CoHD, but will also improve food security by reducing the cost of food overall, a critical outcome for the most food-insecure people today, and a rising concern for many consumers around the world.

Healthy diets and sustainability are deeply interconnected. Unsustainable agrifood systems

generate hidden environmental, health and social costs through pollution, biodiversity loss, diet-related diseases, and inefficient resource use. Investing in sustainable production, reducing food loss and waste, and improving supply chain efficiency can lower these hidden costs while making nutritious foods more affordable and accessible.

Sustainable agrifood systems therefore not only protect natural resources and climate resilience, but also reduce long-term healthcare and environmental burdens. In this sense, reducing the cost of a healthy diet and reducing hidden costs are mutually reinforcing objectives.

THE CENTRAL ROLE OF BETTER DATA FOR TARGETING AND ACCOUNTABILITY

A critical enabler of all these interventions is improved data. While global indicators such as the CoHD provide valuable benchmarks, they must be complemented by estimates based on more granular national and subnational food price data to guide policy decisions effectively. Disaggregated estimates of the CoHD can significantly enhance policymakers' ability to identify where healthy diets are least affordable and which food groups drive costs. This, in turn, allows for more precise targeting of interventions, whether in specific regions, countries, markets, or value chains.

Moreover, linking CoHD data with information on income, poverty, dietary diversity score and nutrition outcomes can help identify the populations most at risk of unaffordability and monitor the effectiveness of policy responses. Strengthening data systems also enhances accountability, enabling governments and the international community to track progress towards SDG 2 more accurately.

At the same time, investments are needed to build statistical capacity at the country level, ensure data quality and comparability, and promote transparency in methodologies. The application of standardized protocols for CoHD estimation and their integration into regular statistical production will be key to sustaining progress.

BETTER COORDINATION FOR A BETTER FUTURE

Improving access to healthy diets poses a formidable global challenge – one that requires sustained, coordinated action from governments, the private sector, civil society and international partners. This report sets out an initial broad agenda to rise to this challenge and make progress to realize SDG 2 and achieve affordable healthy diets for all. The work that lies ahead over the years to 2030 is immense. However, a world in which a healthy diet is no longer out of reach for nearly one in three people is a world worth building. ■

SERBIA
A retailer selling organic produce.
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ANNEXES

ANNEX 1A
Statistical tables to Chapter 2 124

ANNEX 1B
Methodological notes for the food security and nutrition indicators 171

ANNEX 2
Glossary 194

The supplementary material to *The State of Food Security and Nutrition in the World 2026* is available at: https://doi.org/10.4060/cd8306en-supplementary

ANNEX 1A
STATISTICAL TABLES TO CHAPTER 2

TABLE A1.1 PROGRESS TOWARDS THE SUSTAINABLE DEVELOPMENT GOALS AND GLOBAL NUTRITION TARGETS: PREVALENCE OF UNDERNOURISHMENT, MODERATE OR SEVERE FOOD INSECURITY, SELECTED FORMS OF MALNUTRITION, EXCLUSIVE BREASTFEEDING, LOW BIRTHWEIGHT AND MINIMUM DIETARY DIVERSITY

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	PREVALENCE OF UNDERNOURISHMENT IN THE TOTAL POPULATION[1]		PREVALENCE OF SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1, 2, 3]		PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1, 2, 3]		PREVALENCE OF WASTING IN CHILDREN (<5 YEARS)	PREVALENCE OF STUNTING IN CHILDREN (<5 YEARS)		PREVALENCE OF OVERWEIGHT IN CHILDREN (<5 YEARS)		PREVALENCE OF OBESITY IN THE ADULT POPULATION (≥18 YEARS)		PREVALENCE OF ANAEMIA IN WOMEN (15–49 YEARS)		PREVALENCE OF EXCLUSIVE BREASTFEEDING AMONG INFANTS (0–5 MONTHS)		PREVALENCE OF LOW BIRTHWEIGHT		PERCENTAGE OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	PERCENTAGE OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (%)	2023–25[4] (%)	2014–16 (%)	2023–25 (%)	2014–16 (%)	2023–25 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2023 (%)	2012[6] (%)	2024[7] (%)	2012 (%)	2020 (%)	2024[7] (%)	2021–25[8] (%)
WORLD	11.9	8.1	7.5	9.8	21.6	26.8	6.6	26.4	23.2	5.3	5.5	12.1	16.2	27.6	30.7	37.0	47.4	15.0	14.7	30.8	62.7
Least Developed Countries	24.9	21.2	18.7	20.8	49.8	55.8	6.7	38.5	33.9	3.0	3.3	4.9	8.6	35.1	37.2	45.5	51.7	16.1	15.3	20.6	40.4
Landlocked Developing Countries	24.0	17.0	15.4	16.3	44.1	49.2	5.2	35.5	29.1	4.1	4.1	9.6	14.1	29.4	32.2	45.2	49.9	15.2	14.7	23.8	45.8
Small Island Developing States	17.0	16.6	23.0	21.0	49.8	48.4	4.0	21.0	21.3	6.9	8.6	18.7	24.9	24.5	28.7	37.0	n.a.	14.0	14.4	n.a.	n.a.
Low-income countries	25.2	30.3	22.6	27.5	55.1	64.3	6.4	39.6	35.8	3.7	3.5	6.5	10.1	33.2	35.7	42.9	50.9	15.4	14.9	17.1	32.1
Lower-middle-income countries	18.7	11.6	12.1	15.9	29.4	39.1	9.5	36.6	28.9	3.5	4.0	7.2	12.0	42.0	43.8	39.9	51.0	21.2	19.4	26.4	49.3
Upper-middle-income countries	8.4	2.6	2.8	2.7	12.8	12.5	2.1	13.3	10.8	8.0	8.6	10.6	16.7	19.0	20.1	31.0	37.0	8.0	8.4	57.7	82.7
High-income countries	<2.5	<2.5	1.4	1.7	7.9	7.9	0.4	3.9	4.0	7.5	8.4	22.1	24.7	14.1	17.4	n.a.	n.a.	7.9	8.0	n.a.	n.a.
Low-income food-deficit countries	25.9	26.1	20.5	24.9	53.4	62.1	6.4	37.5	33.3	3.8	3.9	6.9	10.8	34.0	36.3	41.2	50.2	15.1	14.6	19.4	39.2

TABLE A1.1 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	PREVALENCE OF UNDERNOURISHMENT IN THE TOTAL POPULATION[1]		PREVALENCE OF SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1,2,3]		PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1,2,3]		PREVALENCE OF WASTING IN CHILDREN (<5 YEARS)	PREVALENCE OF STUNTING IN CHILDREN (<5 YEARS)		PREVALENCE OF OVERWEIGHT IN CHILDREN (<5 YEARS)		PREVALENCE OF OBESITY IN THE ADULT POPULATION (≥18 YEARS)		PREVALENCE OF ANAEMIA IN WOMEN (15–49 YEARS)		PREVALENCE OF EXCLUSIVE BREASTFEEDING AMONG INFANTS (0–5 MONTHS)		PREVALENCE OF LOW BIRTHWEIGHT		PERCENTAGE OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	PERCENTAGE OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (%)	2023–25[4] (%)	2014–16 (%)	2023–25 (%)	2014–16 (%)	2023–25 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2023 (%)	2012[6] (%)	2024[7] (%)	2012 (%)	2020 (%)	2024[7] (%)	2021–25[8] (%)
AFRICA	**19.0**	**20.1**	**17.2**	**21.1**	**46.2**	**57.4**	**5.4**	**34.0**	**30.3**	**4.9**	**4.5**	**12.7**	**16.6**	**34.9**	**35.9**	**35.2**	**44.8**	**14.5**	**13.9**	**20.5**	**43.0**
Northern Africa*	**6.7**	**10.0**	**9.8**	**11.8**	**28.7**	**33.5**	**5.2**	**23.1**	**18.1**	**11.3**	**8.5**	**26.0**	**31.5**	**29.5**	**32.0**	**40.9**	**36.2**	**14.0**	**14.1**	**42.1**	**78.3**
Algeria	6.1	<2.5	13.0	4.9	22.9	17.6	2.7	12.0	8.9	13.7	13.3	18.8	23.6	30.2	31.6	25.4	28.6	6.9	7.2	39.4	79.3
Egypt	5.8	8.4	8.4	11.7	27.8	29.9	3.3	23.5	12.9	14.5	11.2	37.5	43.9	29.0	32.7	52.8	40.2	n.a.	n.a.	41.6	77.5
Libya	4.9	18.7	11.2	15.1	29.1	31.6	3.5[d]	25.8	9.2	23.0	4.7	31.1	33.7	28.3	29.3	n.a.	n.a.	n.a.	n.a.	n.a.	76.4
Morocco	4.8	6.5	n.r.	n.r.	n.r.	n.r.	2.4[d]	15.6	13.7	12.4	11.2	16.8	21.6	28.6	29.5	27.8	n.a.	16.1	14.8	n.a.	75.6
Sudan	–	n.a.	n.r.	n.r.	n.r.	n.r.	n.a.	35.9	35.4	2.5	2.6	11.4	17.8	32.3	34.0	41.0	n.a.	n.a.	n.a.	n.a.	n.a.
Tunisia	4.0	2.8	9.1	7.7	18.2	24.2	2.1	8.9	8.9	13.6	17.5	21.9	26.1	26.5	27.7	8.5	17.8	8.1	8.2	63.8	90.8
Sub-Saharan Africa	**22.1**	**22.3**	**18.9**	**23.1**	**50.4**	**62.7**	**5.5**	**36.0**	**32.2**	**3.7**	**3.9**	**8.4**	**12.1**	**36.3**	**36.8**	**34.2**	**45.6**	**14.5**	**13.9**	**18.5**	**36.4**
Eastern Africa	**31.7**	**25.8**	**21.9**	**23.4**	**58.5**	**62.9**	**4.8**	**38.7**	**31.2**	**3.9**	**3.9**	**4.8**	**8.1**	**27.3**	**31.4**	**48.5**	**59.1**	**14.7**	**14.0**	**19.4**	**34.5**
Burundi	n.a.	n.a.	n.a.	20.9[a]	n.a.	70.8[a]	7.8[d]	55.4	55.3	2.0	2.4	2.9	5.2	26.8	39.0	69.3	83.3	15.1	14.8	28.6	19.4
Comoros	16.3	16.5	n.a.	n.a.	n.a.	n.a.	5.1	31.6	17.4	10.6	3.9	10.8	16.8	26.3	29.9	11.4	22.6	24.1	23.0	16.1	32.0
Djibouti	28.9	14.7	n.a.	n.a.	n.a.	n.a.	12.1[d]	27.8	20.9	1.2	5.5	7.1	11.7	27.2	31.8	12.4	n.a.	n.a.	n.a.	n.a.	n.a.
Eritrea	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	51.5	48.0	1.9	2.8	2.3	4.3	31.5	35.6	68.7	n.a.	15.4	15.2	n.a.	n.a.
Ethiopia	36.4	19.9	14.5[c]	16.6[c]	56.2[c]	60.1[c]	6.8	42.1	35.5	2.7	3.3	1.5	2.9	18.1	23.1	52.0	58.8	n.a.	n.a.	16.2	24.1
Kenya	28.2	34.9	15.0[a, b]	26.5[b]	50.7[a, b]	71.7[b]	4.5	29.0	17.9	5.0	4.3	7.5	11.3	27.2	32.2	31.9	59.7	10.8	10.0	36.9	48.5
Madagascar	32.9	41.8	n.a.	16.9[b]	n.a.	61.1[b]	7.2	48.2	38.4	1.6	2.3	2.3	4.5	32.2	37.2	41.9	54.4	19.5	18.7	21.1	40.3
Malawi	21.5	24.5	47.7[a, b]	58.1[b]	78.1[a, b]	81.6[b]	2.6	43.5	33.2	4.8	4.4	4.5	8.0	26.4	32.4	70.8	64.1	15.8	15.6	17.3	31.6
Mauritius	5.4	4.9	5.2	12.2	13.0	28.2	n.a.	8.2[e]	7.8[e]	5.1[e]	4.8[e]	16.6	21.1	20.8	32.8	n.a.	n.a.	19.1	18.7	n.a.	80.7
Mozambique	29.2	22.3	n.r.	n.r.	n.r.	n.r.	3.8	42.6	37.0	5.7	4.4	6.0	10.6	45.1	47.0	40.0	55.5	18.1	17.8	14.4	20.8
Rwanda	31.8	22.6	n.r.	n.r.	n.r.	n.r.	1.1	41.3	29.8	6.2	5.1	2.5	5.6	14.1	16.1	83.8	80.9	9.3	9.4	34.4	32.0
Seychelles	2.8	<2.5	3.2[a]	n.a.	14.3[a]	n.a.	n.a.	7.8	6.2	10.0	10.9	25.8	33.9	21.5	25.8	n.a.	n.a.	12.3	12.5	n.a.	n.a.

TABLE A1.1 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	PREVALENCE OF UNDERNOURISHMENT IN THE TOTAL POPULATION[1]		PREVALENCE OF SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1, 2, 3]		PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1, 2, 3]		PREVALENCE OF WASTING IN CHILDREN (<5 YEARS)	PREVALENCE OF STUNTING IN CHILDREN (<5 YEARS)		PREVALENCE OF OVERWEIGHT IN CHILDREN (<5 YEARS)		PREVALENCE OF OBESITY IN THE ADULT POPULATION (≥18 YEARS)		PREVALENCE OF ANAEMIA IN WOMEN (15–49 YEARS)		PREVALENCE OF EXCLUSIVE BREASTFEEDING AMONG INFANTS (0–5 MONTHS)		PREVALENCE OF LOW BIRTHWEIGHT		PERCENTAGE OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	PERCENTAGE OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (%)	2023–25[4] (%)	2014–16 (%)	2023–25 (%)	2014–16 (%)	2023–25 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2023 (%)	2012[6] (%)	2024[7] (%)	2012 (%)	2020 (%)	2024[7] (%)	2021–25[8] (%)
Somalia	69.7	56.5	n.r.	n.r.	n.r.	n.r.	n.a.	29.4	23.9	2.7	2.5	9.5	14.9	41.9	46.2	5.3	33.7	n.a.	n.a.	13.0	52.7
South Sudan	–	19.1	n.a.	62.9[a]	n.a.	88.8[a]	n.a.	31.0	30.0	5.9	4.3	5.3	8.9	29.4	35.0	44.5	n.a.	n.a.	n.a.	n.a.	n.a.
Uganda	18.8	20.9	21.5[b]	12.7[b]	66.3[b]	51.6[b]	3.2	33.4	23.5	4.0	4.2	4.6	9.5	24.3	27.2	62.2	n.a.	n.a.	n.a.	10.0	58.8
United Republic of Tanzania	28.5	19.1	20.6[b]	22.9[b]	48.8[b]	57.0[b]	3.1	37.7	29.9	4.3	4.7	6.9	11.5	36.7	38.8	48.7	64.3	10.5	9.7	18.8	25.0
Zambia	49.4	41.0	22.4[b]	17.2[b]	51.2[b]	45.8[b]	4.2	40.8	32.3	6.4	6.3	6.9	11.6	26.5	27.1	59.9	64.1	12.0	11.2	22.1	27.0
Zimbabwe	29.5	18.4	35.5	25.3	64.7	70.1	5.1	31.0	23.7	4.5	4.0	10.1	14.7	25.9	27.5	31.3	42.4	12.2	11.8	24.7	53.6
Middle Africa	**28.4**	**29.3**	**n.a.**	**34.6**	**n.a.**	**76.2**	**5.5**	**37.8**	**40.1**	**4.7**	**5.2**	**6.5**	**9.9**	**44.1**	**41.7**	**28.4**	**41.7**	**12.8**	**12.2**	**17.4**	**30.8**
Angola	42.9	17.4	n.a.	16.2[a]	n.a.	75.4[a]	n.a.	31.4	47.7	3.1	4.7	8.5	12.7	45.2	43.8	n.a.	32.7	15.7	15.5	19.9	32.1
Cameroon	13.8	4.9	22.3	23.9	49.9	60.9	4.3	32.3	27.2	8.1	13.6	11.7	16.0	37.4	38.9	19.9	39.4	12.9	12.5	19.8	52.6
Central African Republic	34.8	29.8	n.a.	n.a.	n.a.	n.a.	5.2[d]	39.6	38.9	2.6	2.3	6.0	10.9	44.0	43.4	33.0	36.2	15.9	16.4	n.a.	n.a.
Chad	30.9	33.6	32.4[b]	25.2[b]	67.9[b]	65.0[b]	7.8	37.4	31.5	2.3	2.5	4.4	7.4	50.1	46.5	3.2	7.4	n.a.	n.a.	27.9	58.8
Congo	28.4	25.0	n.r.	n.r.	n.r.	n.r.	n.a.	23.1	16.3	5.1	5.3	8.1	12.2	50.9	46.7	20.2	n.a.	11.6	11.9	n.a.	44.5
Democratic Republic of the Congo	27.3	39.5	n.a.	43.9	n.a.	81.7	7.2	42.9	44.1	4.7	4.2	4.2	6.7	43.7	40.0	36.4	52.3	11.0	10.2	13.9	17.2
Equatorial Guinea	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	24.9	17.1	8.6	7.5	14.0	19.2	43.1	41.3	7.4	n.a.	n.a.	n.a.	n.a.	n.a.
Gabon	14.3	23.3	n.r.	n.r.	n.r.	n.r.	3.4	17.2	13.7	6.5	6.1	15.7	22.7	60.0	59.9	5.1	19.4	14.9	14.6	26.3	56.3
Sao Tome and Principe	10.4	23.0	n.a.	n.a.	n.a.	n.a.	4.1	18.6	10.0	3.1	6.4	11.7	17.9	41.3	39.7	50.3	63.1	10.6	11.1	32.3	n.a.
Southern Africa	**4.9**	**11.9**	**9.1**	**10.4**	**21.5**	**25.3**	**3.0**	**23.2**	**24.1**	**12.3**	**12.1**	**27.3**	**30.7**	**26.0**	**31.0**	**n.a.**	**n.a.**	**16.4**	**16.4**	**n.a.**	**68.4**
Botswana	26.9	18.2	18.4[b]	20.4[a, b]	46.4[b]	52.0[a, b]	n.a.	24.7	21.0	10.6	11.5	14.7	19.8	27.0	30.9	20.3	n.a.	17.3	16.8	n.a.	n.r.

TABLE A1.1 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	PREVALENCE OF UNDERNOURISHMENT IN THE TOTAL POPULATION[1]		PREVALENCE OF SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1, 2, 3]		PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1, 2, 3]		PREVALENCE OF WASTING IN CHILDREN (<5 YEARS)	PREVALENCE OF STUNTING IN CHILDREN (<5 YEARS)		PREVALENCE OF OVERWEIGHT IN CHILDREN (<5 YEARS)		PREVALENCE OF OBESITY IN THE ADULT POPULATION (≥18 YEARS)		PREVALENCE OF ANAEMIA IN WOMEN (15–49 YEARS)		PREVALENCE OF EXCLUSIVE BREASTFEEDING AMONG INFANTS (0–5 MONTHS)		PREVALENCE OF LOW BIRTHWEIGHT		PERCENTAGE OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	PERCENTAGE OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (%)	2023–25[4] (%)	2014–16 (%)	2023–25 (%)	2014–16 (%)	2023–25 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2023 (%)	2012[6] (%)	2024[7] (%)	2012 (%)	2020 (%)	2024[7] (%)	2021–25[8] (%)
Eswatini	12.0	15.1	n.a.	25.0[a, b]	n.a.	61.7[a, b]	1.8	27.9	18.9	10.2	10.2	23.0	29.6	23.8	28.3	43.8	54.0	10.6	10.2	29.6	n.a.
Lesotho	n.a.	n.a.	n.a.	24.3[a, b]	n.a.	61.6[a, b]	1.6	37.5	35.0	7.0	7.5	16.3	22.2	23.6	34.2	52.9	60.7	14.8	14.4	15.0	18.3
Namibia	19.9	20.1	28.9[b]	28.1[b]	53.2[b]	54.0[b]	n.a.	24.0	16.4	4.2	5.8	14.2	18.3	18.9	24.9	22.1	n.a.	15.9	15.6	n.a.	62.6
South Africa	3.3	11.2	n.a.	8.4[a]	n.a.	20.9[a]	3.6[d]	22.3	24.4	13.1	12.8	28.6	31.8	26.4	31.2	n.a.	n.a.	16.6	16.6	n.a.	n.r.
Western Africa	**12.8**	**16.9**	**11.2**	**19.6**	**39.5**	**62.0**	**6.5**	**33.8**	**29.7**	**2.1**	**2.2**	**8.2**	**12.8**	**45.2**	**41.9**	**22.0**	**34.6**	**14.9**	**14.3**	**18.0**	**35.0**
Benin	11.9	11.1	10.4[b]	13.1[b]	55.0[b]	65.6[b]	8.3	34.2	33.2	1.8	3.7	8.0	12.2	50.2	50.0	32.5	44.9	17.5	16.4	22.0	41.8
Burkina Faso	17.0	11.7	n.a.	7.3[b]	n.a.	41.2[b]	9.3	32.0	19.5	1.0	2.8	3.6	7.7	46.9	44.3	38.2	51.3	19.1	18.5	19.0	17.5
Cabo Verde	14.3	8.1	n.a.	6.4[a]	n.a.	32.1[a]	2.4	8.4	5.3	5.5	8.4	11.1	16.7	42.6	40.6	59.6	41.8	n.a.	n.a.	n.a.	n.a.
Côte d'Ivoire	17.6	11.4	6.2[b]	7.9[b]	34.1[b]	37.9[b]	8.1	28.7	20.3	2.3	3.5	8.1	12.8	50.0	51.4	11.8	34.0	19.1	18.3	28.4	40.5
Gambia	17.6	17.5	n.a.	17.6	n.a.	47.2	5.1	22.5	14.0	1.9	2.7	7.6	12.4	53.1	46.1	33.2	53.6	13.7	13.2	22.8	n.a.
Ghana	11.1	6.4	5.1[a, b]	8.8[b]	38.3[a, b]	43.5[b]	5.8	22.3	15.6	2.6	1.8	10.1	14.5	41.3	36.0	45.7	52.6	14.9	14.4	41.4	49.9
Guinea	16.4	8.7	n.r.	n.r.	n.r.	n.r.	6.4	33.6	26.6	4.2	4.4	5.8	10.6	46.1	45.7	20.4	43.7	n.a.	n.a.	11.1	39.3
Guinea-Bissau	16.3	20.0	n.a.	n.a.	n.a.	n.a.	7.8	28.0	28.3	2.2	3.6	7.7	12.7	46.1	45.7	38.3	59.3	21.8	19.5	8.1	n.a.
Liberia	35.7	37.3	38.6	35.5	79.7	79.0	3.4	34.6	26.9	3.1	6.1	8.2	17.8	40.8	42.5	27.8	55.2	19.7	19.9	8.6	33.9
Mali	11.7	12.1	n.a.	2.4[b]	n.a.	20.6[b]	5.4	29.2	23.2	1.3	1.3	7.6	13.3	54.1	56.5	20.2	40.4	n.a.	n.a.	17.3	33.5
Mauritania	10.3	11.0	4.6[b]	12.5[b]	26.3[b]	65.1[b]	13.6[d]	25.2	21.5	1.5	1.6	17.3	24.1	52.5	54.5	26.7	40.9	n.a.	n.a.	20.0	53.4
Niger	18.0	12.9	n.a.	7.4[b]	n.a.	50.3[b]	10.9	45.0	48.3	0.6	2.6	3.9	6.8	44.4	47.1	23.3	24.5	n.a.	n.a.	13.1	33.6
Nigeria	9.1	22.2	11.0[a, b]	26.4[b]	34.7[a, b]	76.5[b]	11.6[d]	36.9	33.8	2.3	1.6	8.8	13.7	43.5	37.9	14.7	28.8	n.a.	n.a.	14.0	29.6
Senegal	15.8	5.3	7.5[b]	3.5[b]	39.0[b]	27.7[b]	10.2	18.2	17.2	1.4	2.1	7.4	11.6	49.6	43.1	39.0	34.4	19.1	17.2	26.5	62.8
Sierra Leone	39.8	25.3	26.7[a, b]	31.9	75.8[a, b]	88.1	6.3	33.3	25.2	2.6	5.4	5.7	8.2	45.7	44.6	31.2	50.9	11.4	10.3	24.4	45.1
Togo	24.6	10.2	16.1[b]	9.2[b]	60.4[b]	56.3[b]	5.7	26.4	23.0	1.3	3.6	7.3	13.4	42.0	41.5	62.1	n.a.	15.1	14.3	n.a.	n.r.
ASIA	**13.7**	**6.5**	**6.6**	**8.6**	**17.7**	**21.8**	**9.1**	**28.4**	**23.3**	**4.7**	**5.0**	**6.4**	**11.2**	**30.6**	**33.6**	**39.1**	**51.4**	**17.2**	**17.2**	**34.9**	**65.0**
Central Asia	**13.5**	**2.9**	**1.7**	**3.0**	**9.2**	**16.1**	**2.1**	**14.8**	**7.4**	**7.7**	**6.4**	**18.1**	**26.0**	**32.3**	**32.0**	**29.1**	**33.1**	**6.3**	**6.0**	**54.4**	**88.3**

TABLE A1.1 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	PREVALENCE OF UNDERNOURISHMENT IN THE TOTAL POPULATION[1]		PREVALENCE OF SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1, 2, 3]		PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1, 2, 3]		PREVALENCE OF WASTING IN CHILDREN (<5 YEARS)	PREVALENCE OF STUNTING IN CHILDREN (<5 YEARS)		PREVALENCE OF OVERWEIGHT IN CHILDREN (<5 YEARS)		PREVALENCE OF OBESITY IN THE ADULT POPULATION (≥18 YEARS)		PREVALENCE OF ANAEMIA IN WOMEN (15–49 YEARS)		PREVALENCE OF EXCLUSIVE BREASTFEEDING AMONG INFANTS (0–5 MONTHS)		PREVALENCE OF LOW BIRTHWEIGHT		PERCENTAGE OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	PERCENTAGE OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (%)	2023–25[4] (%)	2014–16 (%)	2023–25 (%)	2014–16 (%)	2023–25 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2023 (%)	2012[6] (%)	2024[7] (%)	2012 (%)	2020 (%)	2024[7] (%)	2021–25[8] (%)
Kazakhstan	9.1	<2.5	n.a.	<0.5[a, b]	n.a.	1.4[a, b]	n.a.	11.2	4.4	11.8	8.7	16.4	21.1	29.0	30.5	31.8	n.a.	5.7	5.3	n.a.	88.0
Kyrgyzstan	7.3	4.8	n.a.	0.6[a]	n.a.	7.4[a]	3.0	15.9	11.0	7.5	9.9	14.4	22.0	33.8	32.9	56.0	44.3	6.4	6.0	65.7	87.9
Tajikistan	38.0	8.0	4.9	4.9	19.1	24.0	6.4	25.7	13.1	5.2	4.6	16.2	23.1	36.1	37.3	32.6	40.8	9.3	8.7	27.8	86.9
Turkmenistan	4.3	4.1	n.a.	n.a.	n.a.	n.a.	4.1	12.6	6.5	4.9	4.8	16.9	22.2	34.0	34.8	10.9	56.5	4.9	4.3	79.0	n.a.
Uzbekistan	12.8	<2.5	n.r.	n.r.	n.r.	n.r.	2.4	13.2	6.7	6.8	5.5	20.6	31.2	32.5	30.4	23.8	25.2	5.8	5.8	56.1	88.9
Eastern Asia	**6.6**	**<2.5**	**1.0**	**1.0**	**6.0**	**6.3**	**1.4**	**7.6**	**4.8**	**6.5**	**10.1**	**4.4**	**9.1**	**15.9**	**16.0**	**28.5**	**35.2**	**5.5**	**5.5**	**60.5**	**86.2**
China	6.8	<2.5	n.r.	n.r.	n.r.	n.r.	1.9	7.5	4.5	6.9	11.1	4.5	9.3	15.5	15.6	27.6	35.1	5.1	5.0	60.6	86.2
China, mainland	6.9	<2.5	n.r.	n.r.	n.r.	n.r.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Taiwan Province of China	4.5	3.6	n.r.	n.r.	n.r.	n.r.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
China, Hong Kong SAR	n.a.	n.a.	n.r.	n.r.	n.r.	n.r.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
China, Macao SAR	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Democratic People's Republic of Korea	34.5	n.a.	n.a.	n.a.	n.a.	n.a.	2.5	25.8	16.6	1.6	3.3	6.6	12.0	28.0	27.5	68.9	n.a.	n.a.	n.a.	n.a.	n.a.
Japan	<2.5	<2.5	<0.5	1.4	2.6	6.1	n.a.	6.6	5.2	1.5	2.0	3.9	5.9	19.5	18.7	n.a.	n.a.	11.1	11.3	n.a.	n.a.
Mongolia	28.4	<2.5	n.a.	0.6[a]	n.a.	4.7[a]	2.7	12.3	7.1	10.2	12.3	17.1	25.1	19.9	19.1	65.7	51.1	5.7	4.9	45.2	55.1
Republic of Korea	<2.5	<2.5	<0.5[a]	1.3	4.8[a]	5.8	0.2[d]	1.9	1.8	6.7	5.5	4.1	8.4	13.9	15.7	n.a.	n.a.	6.3	7.5	n.a.	n.a.
South-eastern Asia	**16.7**	**5.3**	**1.7**	**1.9**	**14.6**	**13.7**	**7.0**	**30.4**	**22.7**	**5.9**	**4.3**	**5.8**	**10.7**	**26.0**	**24.2**	**33.5**	**n.a.**	**12.8**	**12.5**	**50.7**	**79.4**
Brunei Darussalam	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	17.1	9.9	8.5	9.5	24.1	37.1	15.1	18.3	n.a.	n.a.	13.2	13.6	n.a.	n.a.
Cambodia	15.5	4.7	4.6	2.9	39.6	36.4	9.6	34.0	22.0	2.1	5.7	2.3	4.9	39.5	38.0	72.8	50.3	12.7	11.4	48.6	57.3

TABLE A1.1 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	PREVALENCE OF UNDERNOURISHMENT IN THE TOTAL POPULATION[1]		PREVALENCE OF SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1,2,3]		PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1,2,3]		PREVALENCE OF WASTING IN CHILDREN (<5 YEARS)	PREVALENCE OF STUNTING IN CHILDREN (<5 YEARS)		PREVALENCE OF OVERWEIGHT IN CHILDREN (<5 YEARS)		PREVALENCE OF OBESITY IN THE ADULT POPULATION (≥18 YEARS)		PREVALENCE OF ANAEMIA IN WOMEN (15–49 YEARS)		PREVALENCE OF EXCLUSIVE BREASTFEEDING AMONG INFANTS (0–5 MONTHS)		PREVALENCE OF LOW BIRTHWEIGHT		PERCENTAGE OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	PERCENTAGE OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (%)	2023–25[4] (%)	2014–16 (%)	2023–25 (%)	2014–16 (%)	2023–25 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2023 (%)	2012[6] (%)	2024[7] (%)	2012 (%)	2020 (%)	2024[7] (%)	2021–25[8] (%)
Indonesia	18.4	6.3	0.7[a]	<0.5[a]	6.0[a]	4.2[a]	8.4	34.6	22.6	8.3	2.6	5.5	11.8	29.1	26.7	40.9	n.a.	10.5	9.9	n.a.	86.1
Lao People's Democratic Republic	20.2	10.0	n.a.	5.5	n.a.	34.4	10.7	40.5	29.9	2.2	3.7	4.8	9.2	30.6	28.6	39.7	50.3	17.2	16.7	41.0	73.4
Malaysia	3.2	<2.5	7.8	5.2	17.4	15.4	11.0	18.1	24.3	6.2	5.3	16.0	23.3	32.9	31.3	n.a.	n.a.	13.0	13.8	n.a.	62.9
Myanmar	24.8	4.6	n.a.	7.9	n.a.	31.3	7.4[d]	31.2	24.5	1.8	0.6	5.2	8.1	36.0	39.7	23.6	n.a.	12.7	12.5	n.a.	n.r.
Philippines	17.3	3.4	n.a.	3.1[a]	n.a.	32.7[a]	5.4	31.9	27.7	3.3	3.3	5.8	9.6	18.7	12.0	33.0	40.9	21.2	21.1	47.2	n.r.
Singapore	n.a.	n.a.	1.0	3.7	2.9	10.1	n.a.	3.2	2.8	2.7	3.8	8.4	17.0	13.0	16.6	n.a.	n.a.	10.6	11.0	n.a.	n.a.
Thailand	11.8	5.4	n.a.	0.6[a, b]	n.a.	4.5[a, b]	7.2	14.1	12.3	9.1	9.9	9.1	16.4	22.5	20.7	12.3	28.6	10.5	10.3	72.1	80.3
Timor-Leste	28.8	16.9	n.a.	n.a.	n.a.	n.a.	8.3	52.7	45.4	2.4	1.2	1.3	3.6	28.1	29.7	50.8	65.0	16.8	18.2	39.8	n.a.
Viet Nam	15.2	6.1	n.a.	1.8	n.a.	9.4	4.4	25.5	19.2	4.3	10.5	0.8	2.4	18.6	20.5	17.0	45.4	7.6	6.3	55.7	88.7
Southern Asia	**19.5**	**10.6**	**12.9**	**16.2**	**27.4**	**34.9**	**13.6**	**40.2**	**31.4**	**2.6**	**3.2**	**5.6**	**10.5**	**45.9**	**49.3**	**47.2**	**59.5**	**26.1**	**24.4**	**23.4**	**46.1**
Afghanistan	30.6	27.8	14.8	30.2	45.1	77.8	3.6	43.5	42.0	4.8	4.4	10.3	20.6	36.5	45.4	n.a.	63.3	n.a.	n.a.	14.8	30.3
Bangladesh	15.1	8.2	n.a.	n.a.	30.6[b]	26.2[a, b]	10.7	38.3	25.1	1.7	1.6	2.5	5.8	34.5	37.6	64.1	53.3	24.3	23.0	37.6	58.8
Bhutan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	5.1	29.1	17.9	7.1	8.0	7.0	13.1	28.3	33.8	48.7	69.4	11.7	11.4	n.a.	n.a.
India	21.1	9.8	n.r.	n.r.	n.r.	n.r.	18.7	41.7	32.9	2.1	3.7	4.0	8.0	50.1	53.7	46.4	63.7	29.5	27.4[f]	23.6	n.r.
Iran (Islamic Republic of)	6.4	6.7	9.5	4.8	48.0	37.7	4.3	5.6	4.8	4.1	2.7	20.2	24.6	20.8	25.5	53.1	n.a.	n.a.	n.a.	n.a.	81.3
Maldives	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	9.1	16.3	14.2	5.8	3.0	11.1	17.9	44.2	43.4	45.3	n.a.	13.8	13.7	n.a.	n.a.
Nepal	16.9	5.2	10.4	12.3	29.5	35.0	7.0	39.7	26.0	1.3	1.8	3.5	8.0	31.5	33.2	69.6	56.4	20.9	19.7	48.2	55.7
Pakistan	16.9	16.1	0.9[b]	5.5[a, b]	14.1[b]	22.9[a, b]	7.1	43.9	33.6	4.6	2.1	12.8	24.5	45.3	46.5	37.0	47.8	n.a.	n.a.	15.0	54.0
Sri Lanka	14.2	4.9	0.7[b]	1.1[b]	5.9[b]	10.1[b]	9.3	15.9	10.1	1.2	0.9	5.8	11.2	25.5	20.9	75.8	n.a.	18.5	18.0	n.a.	n.r.
Western Asia*	**13.4**	**12.5**	**9.7**	**14.7**	**30.7**	**36.6**	**3.5**	**20.0**	**18.0**	**9.1**	**6.2**	**28.9**	**31.6**	**28.0**	**28.7**	**31.8**	**31.0**	**12.2**	**12.2**	**34.3**	**74.5**
Armenia	14.6	<2.5	n.a.	<0.5[a, b]	n.a.	7.1[a, b]	n.a.	14.2	6.2	14.8	12.9	19.9	25.0	18.7	18.7	34.1	n.a.	8.3	8.3	n.a.	83.1

TABLE A1.1 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	PREVALENCE OF UNDERNOURISHMENT IN THE TOTAL POPULATION[1]		PREVALENCE OF SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1, 2, 3]		PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1, 2, 3]		PREVALENCE OF WASTING IN CHILDREN (<5 YEARS)	PREVALENCE OF STUNTING IN CHILDREN (<5 YEARS)		PREVALENCE OF OVERWEIGHT IN CHILDREN (<5 YEARS)		PREVALENCE OF OBESITY IN THE ADULT POPULATION (≥18 YEARS)		PREVALENCE OF ANAEMIA IN WOMEN (15–49 YEARS)		PREVALENCE OF EXCLUSIVE BREASTFEEDING AMONG INFANTS (0–5 MONTHS)		PREVALENCE OF LOW BIRTHWEIGHT		PERCENTAGE OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	PERCENTAGE OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (%)	2023–25[4] (%)	2014–16 (%)	2023–25 (%)	2014–16 (%)	2023–25 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2023 (%)	2012[6] (%)	2024[7] (%)	2012 (%)	2020 (%)	2024[7] (%)	2021–25[8] (%)
Azerbaijan	5.3	<2.5	<0.5	1.5	5.9	14.6	3.5	16.4	6.8	11.3	4.2	21.3	27.6	35.6	35.6	10.8	18.4	11.0	11.0	57.5	n.r.
Bahrain	n.a.	n.a.	n.r.	n.r.	n.r.	n.r.	n.a.	6.5[e]	4.6[e]	n.a.	n.a.	31.5	34.9	39.6	38.4	n.a.	n.a.	11.6	12.4	n.a.	n.a.
Cyprus	4.7	<2.5	n.a.	<0.5[a]	n.a.	1.4[a]	n.a.	n.a.	n.a.	n.a.	n.a.	21.6	21.6	12.5	16.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Georgia	4.8	<2.5	7.0	5.1	31.8	22.8	0.6	8.9	4.7	13.7	4.1	26.9	35.7	30.1	30.2	54.8	20.4	6.9	7.4	52.6	72.3
Iraq	16.5	13.4	n.r.	n.r.	n.r.	n.r.	3.0	19.8	9.4	10.3	4.6	34.5	39.7	26.9	27.1	19.4	25.8	10.8	10.9	44.6	91.2
Israel	<2.5	<2.5	1.3[a, b]	0.7[b]	11.6[a, b]	8.9[b]	n.a.	n.a.	n.a.	n.a.	n.a.	22.6	22.2	11.7	14.6	n.a.	n.a.	9.4	9.0	n.a.	n.r.
Jordan	5.4	12.2	n.r.	n.r.	n.r.	n.r.	2.3	7.8	7.7	6.1	10.6	36.0	35.4	28.5	33.0	22.7	23.9	17.0	18.9	42.4	76.4
Kuwait	<2.5	<2.5	4.9	3.8	12.6	9.4	3.5	4.9	4.5	8.8	10.1	40.6	40.4	26.2	27.7	n.a.	n.a.	12.4	14.4	n.a.	n.a.
Lebanon	7.1	11.1	n.a.	10.2	n.a.	44.3	1.3	11.4	10.1	6.6	4.5	26.7	30.7	28.8	34.0	n.a.	22.7	12.2	12.6	25.8	56.2
Oman	9.4	7.1	n.r.	n.r.	n.r.	n.r.	9.3	11.2	12.9	2.8	8.8	24.9	30.5	33.9	34.4	n.a.	n.a.	13.3	13.2	n.a.	n.a.
Palestine	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1.3	10.3	8.0	8.0	8.8	34.5	37.4	24.1	24.8	28.7	38.9	9.8	10.4	44.7	n.r.
Qatar	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1.6[d]	6.3	5.4	10.3	8.6	36.0	42.0	25.4	23.6	29.3	45.4	9.9	10.0	63.5	n.a.
Saudi Arabia	4.2	<2.5	n.r.	n.r.	n.r.	n.r.	3.9[d]	12.5	11.1	9.5	8.4	35.1	40.1	19.2	17.6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Syrian Arab Republic	6.2	40.8	n.r.	n.r.	n.r.	n.r.	n.a.	26.5	23.5	16.6	11.0	29.1	33.0	29.0	31.0	42.6	28.5	n.a.	n.a.	26.8	n.a.
Türkiye	18.9	<2.5	n.r.	n.r.	n.r.	n.r.	1.7	9.2	5.5	10.0	7.7	29.1	28.8	29.1	29.3	41.6	40.7	14.0	12.9	n.a.	n.r.
United Arab Emirates	3.1	<2.5	n.a.	0.9[a, b]	n.a.	4.2[a, b]	n.a.	n.a.	n.a.	n.a.	n.a.	31.2	31.6	28.3	28.2	n.a.	n.a.	13.9	13.9	n.a.	n.a.
Yemen	n.a.	n.a.	n.a.	n.a.	45.7	74.4	16.8	48.5	47.4	2.4	1.7	9.1	13.3	34.6	36.4	n.a.	n.a.	n.a.	n.a.	23.0	n.r.
Central Asia and Southern Asia	**19.2**	**10.3**	**12.5**	**15.7**	**26.8**	**34.2**	**13.0**	**39.3**	**30.2**	**2.8**	**3.3**	**6.1**	**11.1**	**45.4**	**48.7**	**46.5**	**58.4**	**25.4**	**23.5**	**24.7**	**47.5**
Eastern Asia and South-eastern Asia	**9.3**	**<2.5**	**1.2**	**1.3**	**8.5**	**8.5**	**4.0**	**16.0**	**13.1**	**6.3**	**7.5**	**4.8**	**9.5**	**18.8**	**18.7**	**30.3**	**37.4**	**8.1**	**8.7**	**55.7**	**83.7**
Western Asia and Northern Africa	**10.2**	**11.3**	**9.8**	**13.3**	**29.8**	**35.2**	**4.4**	**21.5**	**18.1**	**10.2**	**7.4**	**27.6**	**31.6**	**28.7**	**30.2**	**37.3**	**33.6**	**13.1**	**13.1**	**38.1**	**76.4**

TABLE A1.1 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	PREVALENCE OF UNDERNOURISHMENT IN THE TOTAL POPULATION[1]		PREVALENCE OF SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1,2,3]		PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1,2,3]		PREVALENCE OF WASTING IN CHILDREN (<5 YEARS)	PREVALENCE OF STUNTING IN CHILDREN (<5 YEARS)		PREVALENCE OF OVERWEIGHT IN CHILDREN (<5 YEARS)		PREVALENCE OF OBESITY IN THE ADULT POPULATION (≥18 YEARS)		PREVALENCE OF ANAEMIA IN WOMEN (15–49 YEARS)		PREVALENCE OF EXCLUSIVE BREASTFEEDING AMONG INFANTS (0–5 MONTHS)		PREVALENCE OF LOW BIRTHWEIGHT		PERCENTAGE OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	PERCENTAGE OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (%)	2023–25[4] (%)	2014–16 (%)	2023–25 (%)	2014–16 (%)	2023–25 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2023 (%)	2012[6] (%)	2024[7] (%)	2012 (%)	2020 (%)	2024[7] (%)	2021–25[8] (%)
LATIN AMERICA AND THE CARIBBEAN	**8.5**	**5.1**	**6.1**	**6.7**	**24.0**	**24.2**	**1.3**	**12.8**	**12.4**	**7.3**	**8.8**	**22.5**	**31.5**	**17.7**	**19.9**	**34.0**	**43.2**	**9.5**	**9.6**	**n.a.**	**77.5**
Caribbean	**17.8**	**16.7**	**n.a.**	**24.5**	**n.a.**	**52.6**	**2.9**	**12.9**	**12.2**	**6.4**	**6.7**	**19.5**	**25.6**	**24.6**	**29.1**	**29.5**	**25.0**	**11.4**	**11.7**	**61.3**	**n.a.**
Antigua and Barbuda	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	26.7	34.6	17.6	20.3	n.a.	n.a.	15.1	15.4	n.a.	n.a.
Bahamas	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	39.7	48.3	16.4	18.8	n.a.	n.a.	15.3	15.4	n.a.	n.a.
Barbados	4.7	5.0	n.a.	n.a.	n.a.	n.a.	n.a.	7.5	5.8	11.9	13.0	30.9	39.4	17.5	20.1	19.7	n.a.	n.a.	n.a.	n.a.	n.a.
Cuba	<2.5	n.a.	n.a.	n.a.	n.a.	n.a.	2.0	7.2	7.3	9.2	10.6	16.3	23.0	19.3	22.2	48.6	40.6	7.2	7.1	57.9	n.a.
Dominica	5.2	3.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	24.7	32.5	18.9	22.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dominican Republic	21.3	<2.5	24.3[a]	16.4[b]	54.2[a]	41.3[b]	2.2	8.0	5.6	7.7	7.5	22.4	30.8	19.2	22.4	8.0	15.8	12.1	13.4	65.8	n.r.
Grenada	n.a.	n.a.	n.a.	4.4[a]	n.a.	16.5[a]	n.a.	n.a.	n.a.	n.a.	n.a.	23.8	31.5	18.4	20.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Haiti	47.7	51.4	n.a.	45.4	n.a.	83.5	5.0	23.1	21.6	3.5	3.9	8.0	11.1	41.8	45.9	39.3	n.a.	n.a.	n.a.	n.a.	n.a.
Jamaica	7.1	8.0	25.3	27.4	48.3	55.8	3.2	6.1	6.9	7.0	5.1	26.4	35.2	18.3	21.5	23.8	33.0	14.3	13.7	51.4	n.a.
Puerto Rico	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	34.7	42.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Saint Kitts and Nevis	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	38.9	46.7	16.8	19.4	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Saint Lucia	n.a.	n.a.	4.5[a]	n.a.	22.2[a]	n.a.	n.a.	2.3	2.8	6.0	6.8	26.1	34.8	16.3	19.9	3.5	n.a.	15.9	16.3	n.a.	n.a.
Saint Vincent and the Grenadines	7.4	4.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	26.5	34.6	16.6	18.8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Trinidad and Tobago	11.1	10.4	n.a.	6.9[a]	n.a.	27.6[a]	n.a.	8.5	7.8	10.7	15.0	25.3	30.9	18.6	22.1	21.5	30.5	15.9	16.3	45.5	n.a.
Central America	**7.2**	**5.4**	**6.3**	**6.8**	**28.8**	**23.8**	**0.9**	**18.1**	**17.2**	**6.5**	**7.0**	**27.9**	**35.8**	**10.6**	**13.8**	**21.6**	**37.9**	**10.9**	**10.9**	**n.a.**	**83.3**
Belize	5.0	4.4	n.a.	2.7[a]	n.a.	12.8[a]	n.a.	17.5	11.7	8.7	5.6	35.2	43.4	17.9	21.3	14.7	n.a.	11.3	11.6	n.a.	n.a.
Costa Rica	3.8	<2.5	1.8[b]	2.3[b]	12.2[b]	13.9[b]	1.8	6.7	10.6	7.6	7.9	25.0	32.7	10.1	13.7	32.5	25.3	8.5	8.7	75.7	71.4

TABLE A1.1 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	PREVALENCE OF UNDERNOURISHMENT IN THE TOTAL POPULATION[1]		PREVALENCE OF SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1, 2, 3]		PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1, 2, 3]		PREVALENCE OF WASTING IN CHILDREN (<5 YEARS)	PREVALENCE OF STUNTING IN CHILDREN (<5 YEARS)		PREVALENCE OF OVERWEIGHT IN CHILDREN (<5 YEARS)		PREVALENCE OF OBESITY IN THE ADULT POPULATION (≥18 YEARS)		PREVALENCE OF ANAEMIA IN WOMEN (15–49 YEARS)		PREVALENCE OF EXCLUSIVE BREASTFEEDING AMONG INFANTS (0–5 MONTHS)		PREVALENCE OF LOW BIRTHWEIGHT		PERCENTAGE OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	PERCENTAGE OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (%)	2023–25[4] (%)	2014–16 (%)	2023–25 (%)	2014–16 (%)	2023–25 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2023 (%)	2012[6] (%)	2024[7] (%)	2012 (%)	2020 (%)	2024[7] (%)	2021–25[8] (%)
El Salvador	8.9	5.3	13.8	12.3	42.2	41.7	2.9	15.5	9.4	6.5	8.5	25.3	32.2	10.2	14.4	31.4	45.3	10.4	10.2	54.8	n.a.
Guatemala	19.3	12.7	16.1	22.4	42.7	49.0	0.8	47.7	44.6	4.4	3.7	19.4	28.0	8.6	10.5	49.6	58.5	14.4	14.5	n.a.	77.8
Honduras	18.1	14.3	14.2[b]	14.3[a, b]	41.6[b]	39.3[a, b]	1.9	21.8	17.9	5.1	4.2	22.9	31.8	13.8	18.8	30.7	30.2	12.5	13.1	57.3	72.8
Mexico	4.0	3.1	3.4[a, b]	2.7[a]	24.9[a, b]	16.5[a]	1.0	13.2	13.1	6.8	7.4	29.4	37.4	10.2	13.2	14.4	35.0	10.2	10.2	n.a.	85.8
Nicaragua	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.r.
Panama	14.8	4.7	n.r.	n.r.	n.r.	n.r.	1.1	20.2	14.0	11.0	10.9	26.8	37.7	22.6	25.5	n.a.	n.a.	10.7	10.3	n.a.	n.a.
South America	**8.0**	**3.8**	**3.7**	**4.8**	**18.7**	**21.5**	**1.3**	**10.1**	**9.9**	**7.8**	**9.9**	**20.8**	**30.2**	**20.0**	**21.8**	**42.1**	**49.8**	**8.6**	**8.8**	**68.3**	**75.4**
Argentina	3.6	2.8	5.8	11.0	19.2	31.7	1.7	7.0	10.7	10.9	14.3	26.3	37.2	20.4	23.5	32.0	n.a.	7.2	7.4	n.a.	n.a.
Bolivia (Plurinational State of)	27.6	19.5	n.a.	5.0[a, b]	n.a.	29.6[a, b]	n.a.	20.0	10.7	8.9	9.9	20.9	29.7	25.5	24.9	64.3	n.a.	8.3	7.9	74.2	87.1
Brazil	5.7	<2.5	0.7[a, b]	0.6[a, b]	13.3[a, b]	9.6[a, b]	3.4	6.6	8.9	7.7	10.9	19.1	30.1	21.5	21.3	38.6	45.8	8.3	8.7	63.3	n.r.
Chile	2.6	<2.5	2.9[b]	3.3[a, b]	10.8[b]	16.0[a, b]	n.a.	1.8	1.7	9.9	8.7	29.6	40.5	9.6	15.7	n.a.	n.a.	6.1	6.8	n.a.	n.r.
Colombia	11.0	4.1	4.9[b]	5.2[a, b]	19.9[b]	28.0[a, b]	n.a.	12.7	11.6	5.1	6.8	18.2	24.9	17.9	22.4	42.9	n.a.	10.5	11.0	n.a.	n.r.
Ecuador	17.4	10.8	6.0[a, b]	11.0[b]	20.7[a, b]	31.1[b]	0.7	24.3	17.7	6.9	4.7	20.5	28.9	18.1	20.2	n.a.	n.a.	10.9	10.6	79.7	n.r.
Guyana	7.1	<2.5	n.a.	4.7	n.a.	25.5	6.5	14.8	7.1	6.4	5.0	21.3	30.1	37.2	37.5	31.3	28.5	17.0	17.2	40.3	n.a.
Paraguay	7.4	4.1	1.2[b]	7.0[b]	8.3[b]	25.8[b]	n.a.	9.4	3.2	10.5	15.4	25.0	34.7	19.4	23.2	24.4	n.a.	10.0	10.0	n.a.	80.0
Peru	17.9	5.7	3.0[b]	3.7[a, b]	26.6[b]	33.6[a, b]	0.6	18.1	10.6	8.3	9.0	18.6	29.2	18.0	21.0	67.4	70.1	8.3	7.5	84.8	76.5
Suriname	8.8	12.7	n.a.	n.a.	n.a.	n.a.	5.5	8.3	8.0	3.8	3.7	23.1	30.8	19.0	22.2	2.8	8.9	15.7	16.5	28.1	n.a.
Uruguay	<2.5	<2.5	n.a.	2.4[a]	n.a.	15.5[a]	1.4	9.0	6.5	9.3	13.5	25.0	34.9	19.7	24.5	n.a.	51.3	8.0	7.8	79.4	n.a.
Venezuela (Bolivarian Republic of)	7.8	5.3	n.r.	n.r.	n.r.	n.r.	n.a.	12.2	11.7	6.4	7.3	22.7	23.0	19.1	25.2	n.a.	n.a.	9.0	9.3	n.a.	63.1

TABLE A1.1 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	PREVALENCE OF UNDERNOURISHMENT IN THE TOTAL POPULATION[1]		PREVALENCE OF SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1,2,3]		PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1,2,3]		PREVALENCE OF WASTING IN CHILDREN (<5 YEARS)	PREVALENCE OF STUNTING IN CHILDREN (<5 YEARS)		PREVALENCE OF OVERWEIGHT IN CHILDREN (<5 YEARS)		PREVALENCE OF OBESITY IN THE ADULT POPULATION (≥18 YEARS)		PREVALENCE OF ANAEMIA IN WOMEN (15–49 YEARS)		PREVALENCE OF EXCLUSIVE BREASTFEEDING AMONG INFANTS (0–5 MONTHS)		PREVALENCE OF LOW BIRTHWEIGHT		PERCENTAGE OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	PERCENTAGE OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (%)	2023–25[4] (%)	2014–16 (%)	2023–25 (%)	2014–16 (%)	2023–25 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2023 (%)	2012[6] (%)	2024[7] (%)	2012 (%)	2020 (%)	2024[7] (%)	2021–25[8] (%)
OCEANIA	**6.5**	**8.2**	**8.6**	**10.3**	**22.2**	**26.7**	**n.a.**	**19.8**	**20.8**	**11.4**	**20.0**	**26.5**	**31.2**	**12.6**	**16.8**	**n.a.**	**n.a.**	**11.3**	**11.8**	**n.a.**	**n.a.**
Australia and New Zealand	**<2.5**	**<2.5**	**2.8**	**4.5**	**10.6**	**15.6**	**0.5**	**3.5**	**3.1**	**12.4**	**23.4**	**26.3**	**31.1**	**7.4**	**11.3**	**n.a.**	**n.a.**	**6.4**	**6.4**	**n.a.**	**n.a.**
Australia	<2.5	<2.5	2.8	4.4	10.8	15.1	n.a.	3.4	3.1	13.5	26.4	25.8	30.6	6.9	11.1	n.a.	n.a.	6.4	6.6	n.a.	n.a.
New Zealand	<2.5	<2.5	2.8	4.9	10.0	17.9	n.a.	n.a.	n.a.	n.a.	n.a.	29.4	34.0	9.6	12.4	n.a.	n.a.	6.0	5.9	n.a.	n.a.
Oceania excluding Australia and New Zealand	**21.1**	**25.3**	**22.3**	**23.4**	**49.6**	**51.7**	**8.4**	**40.6**	**41.5**	**10.3**	**16.0**	**25.8**	**30.7**	**25.4**	**28.8**	**56.6**	**n.a.**	**17.4**	**17.9**	**n.a.**	**n.a.**
Melanesia	**23.5**	**27.4**	**n.a.**	**24.8**	**n.a.**	**54.1**	**n.a.**	**43.0**	**43.6**	**10.6**	**16.6**	**23.1**	**28.5**	**25.8**	**29.1**	**56.9**	**n.a.**	**17.6**	**18.0**	**n.a.**	**n.a.**
Fiji	4.5	7.2	n.a.	n.a.	n.a.	n.a.	4.6	7.0	7.2	6.5	7.3	29.5	39.0	28.5	29.9	n.a.	42.9	7.4	7.4	59.2	n.a.
New Caledonia	8.9	4.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Papua New Guinea	27.9	30.5	n.a.	n.a.	n.a.	n.a.	n.a.	47.7	47.6	11.7	18.5	22.5	28.0	25.2	28.8	56.1	n.a.	19.0	19.4	n.a.	n.a.
Solomon Islands	12.4	27.0	n.a.	n.a.	n.a.	n.a.	n.a.	31.9	29.8	3.6	6.2	18.3	21.8	29.5	32.6	73.7	n.a.	13.2	13.2	n.a.	n.a.
Vanuatu	7.5	5.8	n.a.	n.a.	n.a.	n.a.	n.a.	26.9	31.0	4.9	5.5	18.6	22.6	26.0	30.4	39.5	75.9	12.7	13.1	25.2	61.3
Micronesia	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**16.3**	**13.6**	**4.5**	**5.1**	**43.0**	**46.8**	**21.6**	**24.5**	**55.7**	**62.7**	**12.4**	**12.3**	**12.6**	**n.a.**
Kiribati	4.5	3.8	n.a.	4.8[a]	n.a.	43.9[a]	3.5	16.3	14.7	2.0	2.1	43.0	45.6	24.7	26.9	66.4	63.6	9.3	9.0	9.3	n.a.
Marshall Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3.5	37.8	30.0	4.0	4.6	40.4	42.0	21.8	23.5	27.3	n.a.	n.a.	n.a.	n.a.	n.a.
Micronesia (Federated States of)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	43.0	48.6	18.1	22.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Naoero	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1.3	20.9	16.0	4.3	8.2	67.7	71.4	19.3	22.5	67.2	52.8	n.a.	n.a.	49.6	n.a.
Palau	n.a.	n.a.	n.a.	6.9[a]	n.a.	28.1[a]	n.a.	n.a.	n.a.	n.a.	n.a.	39.0	40.5	22.8	25.9	n.a.	n.a.	13.7	13.5	n.a.	n.a.
Polynesia	**4.4**	**2.9**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**7.1**	**7.0**	**8.2**	**8.9**	**52.6**	**59.1**	**18.7**	**21.6**	**51.1**	**47.9**	**16.3**	**16.8**	**30.2**	**n.a.**
American Samoa	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	72.4	75.9	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

TABLE A1.1 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	PREVALENCE OF UNDERNOURISHMENT IN THE TOTAL POPULATION[1]		PREVALENCE OF SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1, 2, 3]		PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1, 2, 3]		PREVALENCE OF WASTING IN CHILDREN (<5 YEARS)	PREVALENCE OF STUNTING IN CHILDREN (<5 YEARS)		PREVALENCE OF OVERWEIGHT IN CHILDREN (<5 YEARS)		PREVALENCE OF OBESITY IN THE ADULT POPULATION (≥18 YEARS)		PREVALENCE OF ANAEMIA IN WOMEN (15–49 YEARS)		PREVALENCE OF EXCLUSIVE BREASTFEEDING AMONG INFANTS (0–5 MONTHS)		PREVALENCE OF LOW BIRTHWEIGHT		PERCENTAGE OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	PERCENTAGE OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (%)	2023–25[4] (%)	2014–16 (%)	2023–25 (%)	2014–16 (%)	2023–25 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2023 (%)	2012[6] (%)	2024[7] (%)	2012 (%)	2020 (%)	2024[7] (%)	2021–25[8] (%)
Cook Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	63.3	72.4	21.1	23.9	n.a.	n.a.	10.1	10.3	n.a.	n.a.
French Polynesia	4.8	2.6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	43.2	49.2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Niue	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	61.1	66.9	21.2	24.0	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Samoa	3.7	3.4	n.a.	4.5[a, b]	n.a.	18.2[a, b]	3.1	5.0	8.4	6.0	9.4	55.9	64.3	18.8	21.9	51.3	51.7	n.a.	n.a.	20.0	n.a.
Tokelau (Associate Member)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	65.3	70.7	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tonga	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1.1	7.1	1.6	15.0	9.5	63.1	73.8	17.9	20.7	52.2	39.6	n.a.	n.a.	53.5	n.a.
Tuvalu	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2.8	7.9	5.3	5.2	4.1	59.1	65.1	19.6	23.2	34.7	43.8	n.a.	n.a.	29.3	n.a.
NORTHERN AMERICA AND EUROPE	**<2.5**	**<2.5**	**1.3**	**1.7**	**8.7**	**8.5**	**n.a.**	**3.9**	**3.8**	**8.4**	**8.6**	**24.6**	**26.5**	**13.2**	**17.3**	**n.a.**	**n.a.**	**7.4**	**7.4**	**n.a.**	**79.8**
Northern America	**<2.5**	**<2.5**	**1.0**	**1.1**	**9.9**	**10.7**	**0.2**	**2.6**	**4.1**	**8.5**	**9.8**	**35.6**	**39.4**	**10.3**	**14.9**	**25.5**	**25.8**	**8.0**	**8.1**	**n.a.**	**84.1**
Bermuda	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	26.2	34.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Canada	<2.5	<2.5	0.6[a]	1.9[b]	5.0[a]	10.5[b]	n.a.	n.a.	n.a.	11.0	11.4	24.7	26.0	7.7	14.0	n.a.	n.a.	6.2	6.6	n.a.	n.a.
Greenland	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	23.2	28.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
United States of America	<2.5	<2.5	1.1[a]	1.1[a]	10.5[a]	10.7[a]	0.1	2.5	4.2	8.2	9.7	36.9	41.0	10.6	15.0	25.5	25.8	8.2	8.3	n.a.	n.r.
Europe	**<2.5**	**<2.5**	**1.4**	**1.9**	**8.1**	**7.4**	**n.a.**	**4.7**	**3.6**	**8.4**	**7.9**	**19.4**	**19.6**	**14.5**	**18.6**	**n.a.**	**n.a.**	**7.1**	**7.0**	**n.a.**	**73.4**
Eastern Europe	**<2.5**	**<2.5**	**1.4**	**1.6**	**10.9**	**8.6**	**n.a.**	**6.8**	**4.6**	**10.7**	**9.1**	**20.9**	**21.1**	**19.0**	**23.5**	**n.a.**	**n.a.**	**7.1**	**7.0**	**n.a.**	**71.8**
Belarus	4.0	<2.5	n.a.	<0.5[a]	n.a.	1.0[a]	1.3	2.4	1.1	5.5	3.4	21.7	20.6	18.1	22.1	19.0	21.7	5.0	5.1	69.6	n.a.
Bulgaria	6.1	<2.5	1.9	1.7	14.9	10.5	n.a.	7.2	5.5	6.4	5.5	18.0	20.3	21.5	25.8	n.a.	n.a.	11.0	11.4	n.a.	n.a.
Czechia	<2.5	<2.5	0.7	1.7	5.8	9.1	n.a.	2.4	2.4	4.9	6.6	22.0	26.3	21.0	24.6	n.a.	n.a.	7.3	7.6	n.a.	n.a.
Hungary	2.5	<2.5	1.4	4.9	11.3	16.9	n.a.	n.a.	n.a.	n.a.	n.a.	25.3	31.4	20.1	24.1	n.a.	n.a.	8.4	8.3	n.a.	n.a.

TABLE A1.1 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	PREVALENCE OF UNDERNOURISHMENT IN THE TOTAL POPULATION[1]		PREVALENCE OF SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1,2,3]		PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1,2,3]		PREVALENCE OF WASTING IN CHILDREN (<5 YEARS)	PREVALENCE OF STUNTING IN CHILDREN (<5 YEARS)		PREVALENCE OF OVERWEIGHT IN CHILDREN (<5 YEARS)		PREVALENCE OF OBESITY IN THE ADULT POPULATION (≥18 YEARS)		PREVALENCE OF ANAEMIA IN WOMEN (15–49 YEARS)		PREVALENCE OF EXCLUSIVE BREASTFEEDING AMONG INFANTS (0–5 MONTHS)		PREVALENCE OF LOW BIRTHWEIGHT		PERCENTAGE OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	PERCENTAGE OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (%)	2023–25[4] (%)	2014–16 (%)	2023–25 (%)	2014–16 (%)	2023–25 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2023 (%)	2012[6] (%)	2024[7] (%)	2012 (%)	2020 (%)	2024[7] (%)	2021–25[8] (%)
Poland	<2.5	<2.5	1.8	<0.5	8.9	2.7	0.8	1.9	1.0	6.0	8.6	21.1	21.8	19.5	23.4	n.a.	n.a.	5.8	5.6	n.a.	n.a.
Republic of Moldova	29.5	<2.5	1.6	6.0	19.3	26.4	n.a.	6.8	4.2	5.1	4.1	23.4	22.3	24.8	28.5	36.4	n.a.	6.5	6.5	n.a.	79.0
Romania	<2.5	<2.5	5.6	5.3	19.3	15.2	n.a.	8.8	7.0	6.8	4.8	21.8	32.4	20.9	24.3	n.a.	n.a.	9.5	8.8	n.a.	n.a.
Russian Federation	<2.5	<2.5	0.7	<0.5[a]	8.2	2.6[a]	n.a.	n.a.	n.a.	10.4	9.5	20.0	17.6	20.0	24.1	n.a.	n.a.	7.3	7.3	n.a.	n.r.
Slovakia	n.a.	n.a.	1.1	1.3	6.2	7.3	n.a.	n.a.	n.a.	n.a.	n.a.	20.6	26.1	21.6	25.3	n.a.	n.a.	7.5	7.8	n.a.	n.a.
Ukraine	<2.5	10.8	2.0	5.4	19.8	32.0	n.a.	18.0	11.7	21.4	16.0	22.4	22.8	13.0	19.4	19.7	n.a.	6.0	5.7	n.a.	71.1
Northern Europe	**<2.5**	**<2.5**	**1.8**	**3.4**	**6.7**	**7.8**	**n.a.**	**2.7**	**3.0**	**7.4**	**7.8**	**22.4**	**24.8**	**11.6**	**14.8**	**n.a.**	**n.a.**	**6.3**	**6.0**	**n.a.**	**n.a.**
Denmark	<2.5	<2.5	1.0	1.9	5.9	6.2	n.a.	n.a.	n.a.	n.a.	n.a.	12.7	14.3	13.1	17.0	n.a.	n.a.	5.1	4.8	n.a.	n.a.
Estonia	<2.5	<2.5	0.9	1.9	9.5	13.1	n.a.	1.3	1.3	4.9	5.6	20.7	20.3	20.8	24.7	n.a.	n.a.	4.5	4.2	n.a.	n.a.
Finland	<2.5	<2.5	2.4	2.9	9.3	13.3	1.6	1.6	1.7	3.9	4.7	19.6	24.2	9.4	13.6	n.a.	n.a.	4.1	4.1	n.a.	n.a.
Iceland	<2.5	<2.5	1.7	1.8	6.4	7.9	n.a.	n.a.	n.a.	n.a.	n.a.	19.0	22.2	11.2	14.7	n.a.	n.a.	3.8	4.0	n.a.	n.a.
Ireland	<2.5	<2.5	3.4	3.1	8.9	6.2	n.a.	2.5	2.2	10.3	11.2	24.9	27.9	11.5	14.0	n.a.	n.a.	5.5	5.6	n.a.	n.a.
Latvia	<2.5	<2.5	0.6	1.8	9.9	11.7	1.7[d]	2.1	1.7	5.9	6.6	21.4	22.3	19.2	21.4	n.a.	n.a.	4.5	4.2	n.a.	n.a.
Lithuania	<2.5	<2.5	2.5	1.2	15.3	6.7	4.9[d]	1.9	1.6	4.3	4.6	22.0	21.3	19.7	23.7	n.a.	n.a.	4.7	4.4	n.a.	n.a.
Norway	<2.5	<2.5	1.1	1.5	4.8	7.6	n.a.	n.a.	n.a.	n.a.	n.a.	16.8	20.2	12.7	16.3	n.a.	n.a.	4.7	4.4	n.a.	n.a.
Sweden	<2.5	<2.5	0.8	3.2	4.5	7.9	n.a.	n.a.	n.a.	n.a.	n.a.	15.0	17.5	12.8	16.8	n.a.	n.a.	4.2	4.1	n.a.	n.a.
United Kingdom of Great Britain and Northern Ireland	<2.5	<2.5	1.9	4.0	6.3	7.4	0.4[d]	2.8	3.5	7.8	7.8	24.9	27.4	10.6	13.6	n.a.	n.a.	7.1	6.8	n.a.	n.a.
Southern Europe	**<2.5**	**<2.5**	**1.4**	**1.3**	**7.4**	**5.8**	**n.a.**	**4.2**	**3.6**	**8.6**	**9.0**	**18.4**	**17.0**	**13.3**	**17.2**	**n.a.**	**n.a.**	**8.0**	**8.2**	**n.a.**	**n.a.**
Albania	8.8	5.6	10.0	8.3	38.8	31.8	1.6	16.5	7.4	20.9	16.7	17.8	24.1	20.1	24.7	37.1	n.a.	6.0	6.0	n.a.	91.0
Andorra	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	16.8	17.1	12.6	16.4	n.a.	n.a.	9.1	9.4	n.a.	n.a.

TABLE A1.1 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	PREVALENCE OF UNDERNOURISHMENT IN THE TOTAL POPULATION[1]		PREVALENCE OF SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1, 2, 3]		PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY IN THE TOTAL POPULATION[1, 2, 3]		PREVALENCE OF WASTING IN CHILDREN (<5 YEARS)	PREVALENCE OF STUNTING IN CHILDREN (<5 YEARS)		PREVALENCE OF OVERWEIGHT IN CHILDREN (<5 YEARS)		PREVALENCE OF OBESITY IN THE ADULT POPULATION (≥18 YEARS)		PREVALENCE OF ANAEMIA IN WOMEN (15–49 YEARS)		PREVALENCE OF EXCLUSIVE BREASTFEEDING AMONG INFANTS (0–5 MONTHS)		PREVALENCE OF LOW BIRTHWEIGHT		PERCENTAGE OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	PERCENTAGE OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (%)	2023–25[4] (%)	2014–16 (%)	2023–25 (%)	2014–16 (%)	2023–25 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2023 (%)	2012[6] (%)	2024[7] (%)	2012 (%)	2020 (%)	2024[7] (%)	2021–25[8] (%)
Bosnia and Herzegovina	<2.5	<2.5	1.5	1.8	9.6	8.7	n.a.	9.2	7.9	18.3	13.0	17.6	21.0	22.1	26.0	18.2	n.a.	5.2	5.2	n.a.	75.8
Croatia	3.3	<2.5	0.6	0.6	6.5	4.9	n.a.	n.a.	n.a.	n.a.	n.a.	23.1	30.8	20.4	23.3	n.a.	n.a.	5.0	5.0	n.a.	n.a.
Greece	<2.5	<2.5	2.6	1.6[a]	15.8	7.1[a]	n.a.	1.8	2.0	13.6	13.5	24.2	27.4	12.2	15.6	n.a.	n.a.	10.9	11.4	n.a.	74.1
Italy	<2.5	<2.5	n.a.	<0.5[a]	n.a.	1.7[a]	n.a.	n.a.	n.a.	n.a.	n.a.	15.7	14.0	12.1	16.4	n.a.	n.a.	7.1	7.2	n.a.	n.a.
Malta	<2.5	<2.5	1.5	2.1	5.8	9.0	0.4[d]	5.2	3.5	8.2	10.1	30.5	30.6	11.6	15.7	n.a.	n.a.	7.0	7.2	n.a.	n.a.
Montenegro	4.1	<2.5	2.1	1.4	12.6	9.0	2.2	8.5	8.0	15.2	8.6	14.7	17.1	20.9	25.8	19.3	19.5	6.4	6.2	66.0	n.r.
North Macedonia	4.5	<2.5	3.6	1.6	15.2	9.2	3.4	5.7	3.8	12.7	12.3	22.5	26.8	16.8	21.5	23.0	27.5	8.2	8.3	54.2	79.3
Portugal	<2.5	<2.5	4.1	2.3	14.7	11.0	n.a.	3.8	3.2	8.2	9.4	19.0	18.1	11.6	15.0	n.a.	n.a.	8.4	8.9	n.a.	n.a.
Serbia	<2.5	<2.5	1.7	0.7	11.4	6.7	2.6	5.9	4.6	14.8	12.2	18.1	21.8	20.8	24.9	13.4	23.6	6.0	6.2	85.9	87.8
Slovenia	<2.5	<2.5	0.9	0.6	12.3	7.6	n.a.	n.a.	n.a.	n.a.	n.a.	16.3	19.8	21.1	25.7	n.a.	n.a.	6.2	6.3	n.a.	n.a.
Spain	<2.5	<2.5	1.1	1.9	7.1	7.4	n.a.	n.a.	n.a.	n.a.	n.a.	20.2	15.3	11.9	15.6	n.a.	n.a.	9.5	9.6	n.a.	n.a.
Western Europe	**<2.5**	**<2.5**	**1.3**	**2.2**	**5.2**	**6.6**	**n.a.**	**2.6**	**2.5**	**5.1**	**5.6**	**16.6**	**16.4**	**9.5**	**14.2**	**n.a.**	**n.a.**	**7.0**	**6.8**	**n.a.**	**n.a.**
Austria	<2.5	<2.5	1.1	1.7	5.5	4.4	n.a.	n.a.	n.a.	n.a.	n.a.	14.3	16.5	12.6	16.7	n.a.	n.a.	6.7	6.3	n.a.	n.a.
Belgium	<2.5	<2.5	n.a.	3.0	n.a.	9.3	0.8[d]	2.8	2.6	3.5	4.9	17.8	20.8	11.1	15.0	n.a.	n.a.	7.0	6.8	n.a.	n.a.
France	<2.5	<2.5	1.6	3.3	6.8	9.4	n.a.	n.a.	n.a.	n.a.	n.a.	12.8	11.2	8.0	13.1	n.a.	n.a.	7.5	7.4	n.a.	n.a.
Germany	<2.5	<2.5	1.0	1.1	4.1	4.1	n.a.	1.5	2.2	3.3	3.3	20.6	20.6	9.1	14.0	n.a.	n.a.	6.9	6.7	n.a.	n.a.
Luxembourg	<2.5	<2.5	1.8	0.6	4.7	2.6	n.a.	n.a.	n.a.	n.a.	n.a.	18.2	19.0	11.5	15.4	n.a.	n.a.	7.5	7.7	n.a.	n.a.
Netherlands (Kingdom of the)	<2.5	<2.5	1.5	3.3	5.7	8.9	n.a.	1.5	1.6	4.0	5.4	13.8	14.7	12.4	16.5	n.a.	n.a.	6.1	5.7	n.a.	n.a.
Switzerland	<2.5	<2.5	1.5	1.5	4.8	2.6	n.a.	n.a.	n.a.	n.a.	n.a.	10.1	11.3	12.4	16.6	n.a.	n.a.	6.4	6.4	n.a.	90.9

NOTES:

n.a. = data not available; n.r. = not reported; – = not applicable; <2.5 = prevalence of undernourishment less than 2.5 percent; <0.5 = prevalence of severe food insecurity less than 0.5 percent.

1. Undernourishment and food insecurity statistics are under the custodianship of FAO. Aggregate estimates are included when more than 50 percent of population is covered. To reduce the margin of error, estimates are presented as three-year averages.

2. FAO estimates of the percentage of people living in households where at least one adult has been found to be food insecure.

3. Country-level results are presented only for those countries for which estimates are based on official national data (see note b) or as provisional estimates, based on FAO data collected through the Gallup© World Poll, Geopoll or Kantar for countries whose national relevant authorities expressed no objection to their publication. Note that consent to publication does not necessarily imply validation of the estimate by the national authorities involved and that the estimate is subject to revision as soon as suitable data from official national sources are available. Global, regional and subregional aggregates are based on data collected in approximately 150 countries.

4. The estimates referring to the middle of the projected ranges for the years 2023 to 2025 were used to calculate the three-year averages.

5. For aggregate estimates, values correspond to the model predicted estimates for 2024. For countries, the latest data available from 2017 to 2024 are used.

6. Aggregate estimates are included when more than 50 percent of population is covered. For countries, the latest data available from 2005 to 2012 are used.

7. Aggregate estimates are included when more than 50 percent of population is covered. For countries, the latest data available from 2018 to 2024 are used, with the exception of China where the most recent data are from the year 2017.

8. Global and regional estimates were included when at least 50 percent of the total population of women aged 15–49 years is covered. To reduce the margin of error, estimates are presented as five-year averages (2021–2025). Country-level results are shown only for countries where estimates are based on nationally representative surveys, including the Gallup© World Poll, Demographic and Health Survey (DHS), Multiple Indicator Cluster Survey (MICS), or other national surveys, and for which the relevant national authorities raised no objection to publication or recommended publication as provisional estimates. Note that consent to publication does not necessarily imply validation of the estimate by the national authorities involved and that the estimate is subject to revision as soon as suitable data from official national sources are available. Global, regional and subregional aggregates are based on data collected in 99 countries. These aggregates were adjusted by the total population of women aged 15–49 years in each country, based on the 2024 revision of the *World Population Prospects*.[1]

* Food insecurity estimates for Northern Africa do not reflect updated data for the Sudan after 2018. Food insecurity estimates for Western Asia do not reflect updated data for Palestine after 2022.

a. Based on official national data.

b. For years when official national data are not available, the estimates are projected using FAO data. See **Annex 1B** for further details.

c. Does not include the Tigray region.

d. This estimate has been adjusted because the original estimate did not cover the full age range or the data source was only representative of rural areas.

e. Most recent input data are from before 2000, interpret with caution.

f. The UNICEF-WHO low birthweight estimates are derived through standard methodology applied to all countries to ensure comparability and are not the official statistics of the Government of India. India's most recent national official low birthweight prevalence is 18.2 percent from the 2019–2021 National Family Health Survey–5 (NFHS-5), which is used as the basis of the UNICEF-WHO global estimation model to support cross-country comparability.

SOURCES: Data for undernourishment and food insecurity are from FAO. 2026. *FAOSTAT: Suite of Food Security Indicators*. [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/FS. Licence: CC-BY-4.0; data for stunting, wasting and overweight are based on UNICEF, WHO & World Bank. 2025. *Levels and trends in child malnutrition: UNICEF/ WHO/World Bank Group Joint Child Malnutrition Estimates. Key findings of the 2025 edition*. New York, USA, Geneva, Switzerland and Washington, DC. [Cited 23 April 2026]. https://data.unicef.org/resources/JME, https://www.who.int/teams/nutrition-and-food-safety/monitoring-nutritional-status-andfood-safety-and-events/joint-child-malnutrition-estimates/latest-estimates, https://datatopics.worldbank.org/child-malnutrition; data for adult obesity (age-standardized) are based on WHO. 2026. Global Health Observatory (GHO) data repository: Prevalence of obesity among adults, BMI ≥ 30, age-standardized. Estimates by country. [Accessed on 15 June 2026]. https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-obesity-among-adults-bmi-=-30-(age-standardized-estimate)-(-). Licence: CC-BY-4.0; data for anaemia are based on WHO. 2025. *WHO global anaemia estimates, 2025 edition.* [Cited 23 April 2026]. https://www.who.int/data/gho/data/themes/topics/anaemia_in_women_and_children; data for exclusive breastfeeding are based on UNICEF. 2025. *Infant and young child feeding.* [Cited 23 April 2026]. https://data.unicef.org/topic/nutrition/infant-and-young-child-feeding; data for low birthweight are from UNICEF & WHO. 2023. *Low birthweight joint estimates 2023 edition*. [Cited 23 April 2026]. https://data.unicef.org/topic/nutrition/low-birthweight, https://www.who.int/teams/nutrition-and-food-safety/monitoring-nutritional-status-and-food-safety-and-events/joint-low-birthweight-estimates; data for minimum dietary diversity in children are from UNICEF. 2025. UNICEF Global Databases: Infant and Young Child Feeding. [Accessed on 23 April 2026]. https://data.unicef.org/topic/nutrition/diets. Licence: CC-BY-NC-3.0; data for minimum dietary diversity in women are from FAO. 2026. *FAOSTAT: SDG Indicators.* [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/SDGB. Licence: CC-BY-4.0.

TABLE A1.2 PROGRESS TOWARDS THE SUSTAINABLE DEVELOPMENT GOALS AND GLOBAL NUTRITION TARGETS: NUMBER OF PEOPLE WHO ARE AFFECTED BY UNDERNOURISHMENT, MODERATE OR SEVERE FOOD INSECURITY AND SELECTED FORMS OF MALNUTRITION; NUMBER OF INFANTS EXCLUSIVELY BREASTFED; NUMBER OF BABIES BORN WITH LOW BIRTHWEIGHT; AND NUMBER OF CHILDREN AND WOMEN ACHIEVING MINIMUM DIETARY DIVERSITY

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	NUMBER OF UNDERNOURISHED PEOPLE[1]		NUMBER OF SEVERELY FOOD-INSECURE PEOPLE[1, 2, 3]		NUMBER OF MODERATELY OR SEVERELY FOOD-INSECURE PEOPLE[1, 2, 3]		NUMBER OF CHILDREN (<5 YEARS) AFFECTED BY WASTING	NUMBER OF CHILDREN (<5 YEARS) WHO ARE STUNTED		NUMBER OF CHILDREN (<5 YEARS) WHO ARE OVERWEIGHT		NUMBER OF ADULTS (≥18 YEARS) WHO ARE OBESE		NUMBER OF WOMEN (15–49 YEARS) AFFECTED BY ANAEMIA		NUMBER OF INFANTS (0–5 MONTHS) EXCLUSIVELY BREASTFED		NUMBER OF BABIES WITH LOW BIRTHWEIGHT		NUMBER OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	NUMBER OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (millions)	2023–25[4] (millions)	2014–16 (millions)	2023–25 (millions)	2014–16 (millions)	2023–25 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2024[7] (millions)	2012 (millions)	2020 (millions)	2024[7] (millions)	2021–25[8] (millions)
WORLD	785.5	663.3	561.6	799.0	1 612.1	2 185.7	42.8	180.4	150.2	36.3	35.5	589.9	928.6	505.7	604.8	26.1	30.7	21.6	19.8	59.5	1 742.8
Least Developed Countries	189.0	251.5	179.8	247.4	478.9	661.8	11.4	53.0	57.2	4.2	5.6	22.6	56.2	76.1	108.1	6.6	9.1	4.9	5.2	10.8	274.8
Landlocked Developing Countries	91.2	100.9	74.3	96.3	212.5	291.7	4.3	24.7	24.1	2.8	3.4	22.6	46.1	32.1	46.3	3.3	4.3	2.3	2.5	6.0	140.9
Small Island Developing States	10.3	12.2	15.5	15.2	33.5	35.2	0.2	1.3	1.3	0.4	0.5	8.0	12.5	4.1	5.1	0.2	n.a.	0.2	0.2	n.a.	n.a.
Low-income countries	93.8	188.6	110.4	171.3	268.7	400.9	7.5	36.7	41.7	3.4	4.1	17.4	39.8	42.4	63.3	4.2	6.3	3.2	3.5	5.2	151.1
Lower-middle-income countries	438.3	363.5	333.7	498.0	813.3	1 219.9	29.3	113.6	88.7	10.9	12.3	115.0	242.5	281.7	349.3	12.7	15.9	13.7	12.4	24.5	801.2
Upper-middle-income countries	210.5	75.1	77.3	76.2	349.1	356.4	3.2	26.6	16.7	16.0	13.2	207.0	361.7	136.0	137.0	6.4	5.3	3.4	2.8	25.1	661.1
High-income countries	n.r.	n.r.	18.7	24.4	107.0	110.6	0.3	3.0	2.7	5.7	5.6	235.0	282.3	44.1	53.5	n.a.	n.a.	1.2	1.1	n.a.	n.a.
Low-income food-deficit countries	152.4	251.3	156.6	239.7	408.5	598.4	9.2	43.8	47.6	4.5	5.6	24.5	55.1	65.4	94.7	5.1	7.6	3.9	4.2	8.6	233.5
AFRICA	178.9	304.6	209.3	319.6	563.9	869.4	11.7	61.7	64.8	8.8	9.7	74.5	136.4	94.4	129.9	6.8	10.0	5.8	6.2	13.5	351.6
Northern Africa*	13.0	27.2	22.9	32.1	66.8	91.2	1.5	6.3	5.2	3.1	2.5	34.6	53.5	16.7	21.5	1.2	1.0	0.8	0.8	3.6	55.6
Algeria	2.0	n.r.	5.2	2.3	9.2	8.2	0.1	0.5	0.4	0.6	0.6	4.7	7.1	3.1	3.5	0.1	0.1	0.1	0.1	0.5	9.0
Egypt	4.7	9.8	8.4	13.7	27.6	34.9	0.4	2.8	1.5	1.7	1.3	21.1	31.9	6.9	9.4	0.7	0.5	n.a.	n.a.	1.5	22.8

TABLE A1.2 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	NUMBER OF UNDERNOURISHED PEOPLE[1]		NUMBER OF SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF MODERATELY OR SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF CHILDREN (<5 YEARS) AFFECTED BY WASTING	NUMBER OF CHILDREN (<5 YEARS) WHO ARE STUNTED		NUMBER OF CHILDREN (<5 YEARS) WHO ARE OVERWEIGHT		NUMBER OF ADULTS (≥18 YEARS) WHO ARE OBESE		NUMBER OF WOMEN (15–49 YEARS) AFFECTED BY ANAEMIA		NUMBER OF INFANTS (0–5 MONTHS) EXCLUSIVELY BREASTFED		NUMBER OF BABIES WITH LOW BIRTHWEIGHT		NUMBER OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	NUMBER OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (millions)	2023–25[4] (millions)	2014–16 (millions)	2023–25 (millions)	2014–16 (millions)	2023–25 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2024[7] (millions)	2012 (millions)	2020 (millions)	2024[7] (millions)	2021–25[8] (millions)
Libya	0.3	1.4	0.7	1.1	1.9	2.3	<0.1[d]	0.2	0.1	0.2	<0.1	1.2	1.7	0.5	0.6	n.a.	n.a.	n.a.	n.a.	n.a.	1.5
Morocco	1.5	2.5	n.r.	n.r.	n.r.	n.r.	0.1[d]	0.5	0.4	0.4	0.4	3.7	5.7	2.6	2.8	0.1	n.a.	0.1	0.1	n.a.	7.4
Sudan	–	n.a.	n.r.	n.r.	n.r.	n.r.	n.a.	2.2	2.7	0.2	0.2	2.0	4.7	2.8	4.2	0.3	n.a.	n.a.	n.a.	n.a.	n.a.
Tunisia	0.4	0.3	1.0	0.9	2.1	3.0	<0.1	0.1	0.1	0.1	0.2	1.7	2.3	0.8	0.9	<0.1	<0.1	<0.1	<0.1	0.2	2.8
Sub-Saharan Africa	**165.9**	**277.4**	**186.4**	**287.5**	**497.1**	**778.2**	**10.2**	**55.4**	**59.6**	**5.7**	**7.2**	**38.2**	**79.0**	**77.7**	**108.5**	**5.6**	**8.9**	**5.0**	**5.4**	**10.6**	**296.0**
Eastern Africa	**94.7**	**129.2**	**86.7**	**117.0**	**231.3**	**315.1**	**3.6**	**23.9**	**23.3**	**2.4**	**2.9**	**8.4**	**21.2**	**23.4**	**38.0**	**3.1**	**4.6**	**2.0**	**2.1**	**4.4**	**120.6**
Burundi	n.a.	n.a.	n.a.	2.9[a]	n.a.	9.9[a]	0.2[d]	1.1	1.2	<0.1	0.1	0.1	0.3	0.6	1.3	0.1	0.2	0.1	0.1	0.2	0.7
Comoros	<0.1	0.1	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
Djibouti	0.2	0.2	n.a.	n.a.	n.a.	n.a.	<0.1[d]	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.
Eritrea	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.2	0.2	<0.1	<0.1	<0.1	0.1	0.2	0.3	<0.1	n.a.	<0.1	<0.1	n.a.	n.a.
Ethiopia	28.5	26.3	15.1[c]	22.0[c]	58.4[c]	79.4[c]	1.2	6.5	6.9	0.4	0.6	0.7	2.1	4.0	7.4	0.8	1.2	n.a.	n.a.	1.0	8.0
Kenya	10.1	19.7	7.1[a, b]	14.9[b]	23.9[a, b]	40.5[b]	0.3	2.1	1.3	0.4	0.3	1.6	3.6	2.9	4.7	0.2	0.4	0.2	0.1	0.8	7.2
Madagascar	6.3	13.3	n.a.	5.4[b]	n.a.	19.5[b]	0.3	1.8	1.8	0.1	0.1	0.3	0.8	1.8	2.9	0.2	0.3	0.2	0.2	0.3	3.2
Malawi	2.8	5.3	8.2[a, b]	12.6[b]	13.4[a, b]	17.7[b]	0.1	1.2	1.0	0.1	0.1	0.3	0.9	1.0	1.8	0.2	0.2	0.1	0.1	0.2	1.8
Mauritius	<0.1	<0.1	<0.1	0.2	0.2	0.4	n.a.	<0.1[e]	<0.1[e]	<0.1[e]	<0.1[e]	0.2	0.2	0.1	0.1	n.a.	n.a.	<0.1	<0.1	n.a.	0.3
Mozambique	5.9	7.7	n.r.	n.r.	n.r.	n.r.	0.2	1.9	2.1	0.2	0.3	0.7	1.8	2.6	3.8	0.2	0.3	0.2	0.2	0.3	1.7
Rwanda	2.9	3.2	n.r.	n.r.	n.r.	n.r.	<0.1	0.7	0.6	0.1	0.1	0.1	0.4	0.4	0.6	0.1	0.2	<0.1	<0.1	0.2	1.2
Seychelles	<0.1	n.r.	<0.1[a]	n.a.	<0.1[a]	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Somalia	7.4	10.7	n.r.	n.r.	n.r.	n.r.	n.a.	0.7	0.8	0.1	0.1	0.5	1.3	1.1	1.9	<0.1	0.1	n.a.	n.a.	0.1	2.3
South Sudan	–	2.3	n.a.	7.5[a]	n.a.	10.5[a]	n.a.	0.6	0.5	0.1	0.1	0.3	0.6	0.8	1.0	0.1	n.a.	n.a.	n.a.	n.a.	n.a.
Uganda	5.2	10.4	8.1[b]	6.4[b]	24.9[b]	25.8[b]	0.2	2.1	1.9	0.3	0.3	0.7	2.3	1.9	3.2	0.4	n.a.	n.a.	n.a.	0.2	7.3

TABLE A1.2 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	NUMBER OF UNDERNOURISHED PEOPLE[1]		NUMBER OF SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF MODERATELY OR SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF CHILDREN (<5 YEARS) AFFECTED BY WASTING	NUMBER OF CHILDREN (<5 YEARS) WHO ARE STUNTED		NUMBER OF CHILDREN (<5 YEARS) WHO ARE OVERWEIGHT		NUMBER OF ADULTS (≥18 YEARS) WHO ARE OBESE		NUMBER OF WOMEN (15–49 YEARS) AFFECTED BY ANAEMIA		NUMBER OF INFANTS (0–5 MONTHS) EXCLUSIVELY BREASTFED		NUMBER OF BABIES WITH LOW BIRTHWEIGHT		NUMBER OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	NUMBER OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (millions)	2023–25[4] (millions)	2014–16 (millions)	2023–25 (millions)	2014–16 (millions)	2023–25 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2024[7] (millions)	2012 (millions)	2020 (millions)	2024[7] (millions)	2021–25[8] (millions)
United Republic of Tanzania	11.2	13.1	10.7[b]	15.7[b]	25.4[b]	39.1[b]	0.3	3.1	3.3	0,3	0,5	1.6	4.0	4.0	6.3	0.4	0.7	0.2	0.2	0.6	4.2
Zambia	5.8	8.7	3.7[b]	3.7[b]	8.4[b]	9.8[b]	0.1	1.1	1.0	0,2	0,2	0.5	1.3	0.9	1.4	0.2	0.2	0.1	0.1	0.2	1.5
Zimbabwe	3.7	3.1	5.1	4.2	9.3	11.7	0.1	0.7	0.6	0,1	0,1	0.7	1.3	0.9	1.2	0.1	0.1	0.1	0.1	0.2	2.4
Middle Africa	**32.9**	**62.4**	**n.a.**	**73.6**	**n.a.**	**162.2**	**2.0**	**10.0**	**14.7**	**1.2**	**1.9**	**4.6**	**10.2**	**14.5**	**19.6**	**0.8**	**1.6**	**0.8**	**0.9**	**2.0**	**47.1**
Angola	8.3	6.6	n.a.	6.1[a]	n.a.	28.6[a]	n.a.	1.5	3.0	0.1	0.3	1.0	2.4	2.6	3.7	n.a.	0.2	0.2	0.2	0.4	2.8
Cameroon	2.4	1.4	5.1	6.9	11.4	17.7	0.2	1.1	1.2	0.3	0.6	1.2	2.4	1.8	2.7	0.1	0.2	0.1	0.1	0.3	3.8
Central African Republic	1.5	1.6	n.a.	n.a.	n.a.	n.a.	<0.1[d]	0.3	0.4	<0.1	<0.1	0.1	0.3	0.5	0.5	<0.1	<0.1	<0.1	<0.1	n.a.	n.a.
Chad	3.2	6.8	4.7[b]	5.1[b]	10.0[b]	13.1[b]	0.3	1.0	1.2	0.1	0.1	0.3	0.7	1.5	2.0	<0.1	<0.1	n.a.	n.a.	0.3	2.7
Congo	1.1	1.6	n.r.	n.r.	n.r.	n.r.	n.a.	0.2	0.1	<0.1	<0.1	0.2	0.4	0.6	0.7	<0.1	n.a.	<0.1	<0.1	n.a.	0.7
Democratic Republic of the Congo	16.1	43.2	n.a.	47.9	n.a.	89.3	1.4	5.8	8.7	0.6	0.8	1.4	3.5	7.1	9.4	0.5	1.1	0.4	0.4	0.9	4.2
Equatorial Guinea	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.1	<0.1	<0.1	<0.1	0.1	0.2	0.1	0.2	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.
Gabon	0.2	0.6	n.r.	n.r.	n.r.	n.r.	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.3	0.3	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	0.4
Sao Tome and Principe	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.
Southern Africa	**2.7**	**8.7**	**5.9**	**7.6**	**13.8**	**18.5**	**0.2**	**1.5**	**1.7**	**0.8**	**0.8**	**10.8**	**15.2**	**4.5**	**6.2**	**n.a.**	**n.a.**	**0.2**	**0.2**	**n.a.**	**19.9**
Botswana	0.5	0.5	0.4[b]	0.5[a, b]	1.0[b]	1.3[a, b]	n.a.	0.1	0.1	<0.1	<0.1	0.2	0.3	0.2	0.2	<0.1	n.a.	<0.1	<0.1	n.a.	n.r.
Eswatini	0.1	0.2	n.a.	0.3[a, b]	n.a.	0.8[a, b]	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.2	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.
Lesotho	n.a.	n.a.	n.a.	0.6[a, b]	n.a.	1.4[a, b]	<0.1	0.1	0.1	<0.1	<0.1	0.2	0.3	0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
Namibia	0.4	0.6	0.7[b]	0.9[b]	1.3[b]	1.6[b]	n.a.	0.1	0.1	<0.1	<0.1	0.2	0.3	0.1	0.2	<0.1	n.a.	<0.1	<0.1	n.a.	0.5
South Africa	1.6	7.2	n.a.	5.4[a]	n.a.	13.3[a]	0.2[d]	1.3	1.4	0.7	0.8	10.0	14.0	4.1	5.5	n.a.	n.a.	0.2	0.2	n.a.	n.r.

TABLE A1.2 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	NUMBER OF UNDERNOURISHED PEOPLE[1]		NUMBER OF SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF MODERATELY OR SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF CHILDREN (<5 YEARS) AFFECTED BY WASTING	NUMBER OF CHILDREN (<5 YEARS) WHO ARE STUNTED		NUMBER OF CHILDREN (<5 YEARS) WHO ARE OVERWEIGHT		NUMBER OF ADULTS (≥18 YEARS) WHO ARE OBESE		NUMBER OF WOMEN (15–49 YEARS) AFFECTED BY ANAEMIA		NUMBER OF INFANTS (0–5 MONTHS) EXCLUSIVELY BREASTFED		NUMBER OF BABIES WITH LOW BIRTHWEIGHT		NUMBER OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	NUMBER OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (millions)	2023–25[4] (millions)	2014–16 (millions)	2023–25 (millions)	2014–16 (millions)	2023–25 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2024[7] (millions)	2012 (millions)	2020 (millions)	2024[7] (millions)	2021–25[8] (millions)
Western Africa	**35.5**	**77.1**	**41.0**	**89.3**	**145.1**	**282.4**	**4.4**	**19.9**	**19.9**	**1.2**	**1.5**	**13.7**	**30.4**	**35.2**	**44.7**	**1.4**	**2.4**	**2.0**	**2.1**	**3.7**	**108.5**
Benin	1.0	1.6	1.2[b]	1.9[b]	6.3[b]	9.5[b]	0.2	0.6	0.7	<0.1	0.1	0.4	0.9	1.2	1.7	0.1	0.1	0.1	0.1	0.1	1.4
Burkina Faso	2.4	2.8	n.a.	1.7[b]	n.a.	9.7[b]	0.3	1.0	0.7	<0.1	0.1	0.3	0.9	1.9	2.5	0.1	0.2	0.1	0.1	0.2	1.0
Cabo Verde	<0.1	<0.1	n.a.	<0.1[a]	n.a.	0.2[a]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	0.1	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.
Côte d'Ivoire	3.5	3.6	1.6[b]	2.5[b]	8.6[b]	12.1[b]	0.4	1.1	0.9	0.1	0.2	1.0	2.1	2.8	3.9	0.1	0.2	0.2	0.2	0.4	3.1
Gambia	0.3	0.5	n.a.	0.5	n.a.	1.3	<0.1	0.1	0.1	<0.1	<0.1	0.1	0.2	0.3	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.
Ghana	2.5	2.2	1.5[a, b]	3.0[b]	11.0[a, b]	15.0[b]	0.2	0.9	0.7	0.1	0.1	1.5	2.9	2.8	3.1	0.2	0.2	0.1	0.1	0.5	4.4
Guinea	1.5	1.3	n.r.	n.r.	n.r.	n.r.	0.1	0.6	0.6	0.1	0.1	0.3	0.8	1.2	1.6	<0.1	0.1	n.a.	n.a.	<0.1	1.4
Guinea-Bissau	0.2	0.4	n.a.	n.a.	n.a.	n.a.	<0.1	0.1	0.1	<0.1	<0.1	0.1	0.2	0.2	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.
Liberia	1.2	2.1	1.8	2.0	3.7	4.4	<0.1	0.2	0.2	<0.1	<0.1	0.2	0.5	0.4	0.6	<0.1	<0.1	<0.1	<0.1	<0.1	0.5
Mali	1.6	3.0	n.a.	0.6[b]	n.a.	5.0[b]	0.2	1.0	1.0	<0.1	0.1	0.6	1.5	2.0	3.0	0.1	0.2	n.a.	n.a.	0.2	1.9
Mauritania	0.3	0.6	0.2[b]	0.6[b]	1.0[b]	3.4[b]	0.1[d]	0.2	0.2	<0.1	<0.1	0.3	0.6	0.5	0.7	<0.1	<0.1	n.a.	n.a.	<0.1	0.7
Niger	2.5	3.5	n.a.	2.0[b]	n.a.	13.6[b]	0.5	1.6	2.3	<0.1	0.1	0.3	0.8	1.6	2.7	0.1	0.1	n.a.	n.a.	0.2	2.0
Nigeria	13.2	51.6	21.1[a, b]	61.4[b]	66.1[a, b]	178.1[b]	3.9[d]	11.5	11.4	0.7	0.5	7.7	16.6	17.4	20.6	0.5	1.0	n.a.	n.a.	1.5	16.5
Senegal	1.8	1.0	1.1[b]	0.6[b]	5.7[b]	5.1[b]	0.2	0.4	0.4	<0.1	0.1	0.5	1.2	1.6	1.9	0.1	0.1	0.1	0.1	0.2	2.9
Sierra Leone	2.2	2.2	1.9[a, b]	2.8	5.3[a, b]	7.6	0.1	0.4	0.3	<0.1	0.1	0.2	0.4	0.7	1.0	<0.1	0.1	<0.1	<0.1	<0.1	1.0
Togo	1.3	0.9	1.1[b]	0.8[b]	4.3[b]	4.7[b]	0.1	0.3	0.3	<0.1	<0.1	0.2	0.6	0.7	0.9	0.1	n.a.	<0.1	<0.1	n.a.	n.r.
ASIA	**547.7**	**314.0**	**296.6**	**411.6**	**793.8**	**1047.4**	**30.0**	**108.8**	**76.8**	**17.9**	**16.3**	**191.2**	**389.4**	**345.9**	**394.3**	**15.2**	**16.5**	**13.7**	**11.8**	**33.6**	**1 112.5**
Central Asia	**8.1**	**2.3**	**1.2**	**2.5**	**6.4**	**13.3**	**0.2**	**1.1**	**0.7**	**0.6**	**0.6**	**7.8**	**13.6**	**5.9**	**6.4**	**0.2**	**0.3**	**0.1**	**0.1**	**1.6**	**18.3**
Kazakhstan	1.5	n.r.	n.a.	n.r.	n.a.	0.3[a, b]	n.a.	0.2	0.1	0.2	0.2	2.0	2.9	1.4	1.5	0.1	n.a.	<0.1	<0.1	n.a.	4.3
Kyrgyzstan	0.4	0.3	n.a.	<0.1[a]	n.a.	0.5[a]	<0.1	0.1	0.1	0.1	0.1	0.5	1.0	0.5	0.6	<0.1	<0.1	<0.1	<0.1	0.1	1.6
Tajikistan	2.6	0.8	0.4	0.5	1.6	2.5	0.1	0.3	0.2	0.1	0.1	0.7	1.4	0.8	1.0	<0.1	0.1	<0.1	<0.1	0.1	2.4

TABLE A1.2 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	NUMBER OF UNDERNOURISHED PEOPLE[1]		NUMBER OF SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF MODERATELY OR SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF CHILDREN (<5 YEARS) AFFECTED BY WASTING	NUMBER OF CHILDREN (<5 YEARS) WHO ARE STUNTED		NUMBER OF CHILDREN (<5 YEARS) WHO ARE OVERWEIGHT		NUMBER OF ADULTS (≥18 YEARS) WHO ARE OBESE		NUMBER OF WOMEN (15–49 YEARS) AFFECTED BY ANAEMIA		NUMBER OF INFANTS (0–5 MONTHS) EXCLUSIVELY BREASTFED		NUMBER OF BABIES WITH LOW BIRTHWEIGHT		NUMBER OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	NUMBER OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (millions)	2023–25[4] (millions)	2014–16 (millions)	2023–25 (millions)	2014–16 (millions)	2023–25 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2024[7] (millions)	2012 (millions)	2020 (millions)	2024[7] (millions)	2021–25[8] (millions)
Turkmenistan	0.2	0.3	n.a.	n.a.	n.a.	n.a.	<0.1	0.1	0.1	<0.1	<0.1	0.6	1.1	0.6	0.7	<0.1	<0.1	<0.1	<0.1	0.2	n.a.
Uzbekistan	3.4	n.r.	n.r.	n.r.	n.r.	n.r.	0.1	0.4	0.3	0.2	0.2	3.9	7.3	2.6	2.7	0.1	0.1	<0.1	<0.1	0.8	8.0
Eastern Asia	**102.4**	**n.r.**	**16.6**	**17.1**	**98.6**	**104.0**	**0.9**	**7.5**	**2.9**	**6.5**	**6.1**	**55.0**	**120.0**	**66.8**	**57.9**	**2.9**	**1.8**	**1.2**	**0.8**	**9.5**	**316.8**
China	91.7	n.r.	n.r.	n.r.	n.r.	n.r.	1.7	6.6	2.4	6.1	5.8	47.9	106.6	57.8	49.9	2.5	1.5	1.0	0.6	8.2	272.5
China, mainland	90.5	n.r.	n.r.	n.r.	n.r.	n.r.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Taiwan Province of China	1.0	0.8	n.r.	n.r.	n.r.	n.r.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
China, Hong Kong SAR	n.a.	n.a.	n.r.	n.r.	n.r.	n.r.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
China, Macao SAR	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Democratic People's Republic of Korea	8.4	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	0.4	0.3	<0.1	0.1	1.2	2.4	1.9	1.7	0.1	n.a.	n.a.	n.a.	n.a.	n.a.
Japan	n.r.	n.r.	n.r.	1.7	3.3	7.6	n.a.	0.4	0.2	0.1	0.1	4.2	6.3	5.2	4.4	n.a.	n.a.	0.1	0.1	n.a.	n.a.
Mongolia	0.7	n.r.	n.a.	<0.1[a]	n.a.	0.2[a]	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	0.5	0.2	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	0.5
Republic of Korea	n.r.	n.r.	n.r.	0.6	2.4[a]	3.0	<0.1[d]	<0.1	<0.1	0.2	0.1	1.6	3.8	1.8	1.8	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
South-eastern Asia	**94.2**	**37.1**	**10.9**	**13.2**	**94.1**	**95.5**	**3.6**	**17.7**	**11.6**	**3.4**	**2.2**	**24.0**	**53.1**	**43.6**	**43.4**	**2.0**	**n.a.**	**1.5**	**1.4**	**7.7**	**178.2**
Brunei Darussalam	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Cambodia	2.1	0.8	0.7	0.5	6.2	6.4	0.2	0.6	0.4	<0.1	0.1	0.2	0.6	1.6	1.7	0.1	0.1	<0.1	<0.1	0.3	2.7
Indonesia	42.4	18.0	1.8[a]	n.r.	15.7[a]	11.8[a]	1.9	8.4	5.0	2.0	0.6	9.4	23.6	19.8	19.4	1.0	n.a.	0.5	0.4	n.a.	62.9

TABLE A1.2 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	NUMBER OF UNDERNOURISHED PEOPLE[1]		NUMBER OF SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF MODERATELY OR SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF CHILDREN (<5 YEARS) AFFECTED BY WASTING	NUMBER OF CHILDREN (<5 YEARS) WHO ARE STUNTED		NUMBER OF CHILDREN (<5 YEARS) WHO ARE OVERWEIGHT		NUMBER OF ADULTS (≥18 YEARS) WHO ARE OBESE		NUMBER OF WOMEN (15–49 YEARS) AFFECTED BY ANAEMIA		NUMBER OF INFANTS (0–5 MONTHS) EXCLUSIVELY BREASTFED		NUMBER OF BABIES WITH LOW BIRTHWEIGHT		NUMBER OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	NUMBER OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (millions)	2023–25[4] (millions)	2014–16 (millions)	2023–25 (millions)	2014–16 (millions)	2023–25 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2024[7] (millions)	2012 (millions)	2020 (millions)	2024[7] (millions)	2021–25[8] (millions)
Lao People's Democratic Republic	1.2	0.8	n.a.	0.4	n.a.	2.7	0.1	0.3	0.2	<0.1	<0.1	0.2	0.5	0.5	0.6	<0.1	<0.1	<0.1	<0.1	<0.1	1.5
Malaysia	0.8	n.r.	2.4	1.8	5.4	5.5	0.3	0.5	0.5	0.2	0.1	3.2	6.1	2.6	2.9	n.a.	n.a.	0.1	0.1	n.a.	5.9
Myanmar	11.8	2.5	n.a.	4.3	n.a.	17.1	0.3[d]	1.4	1.1	0.1	<0.1	1.7	3.1	4.9	5.7	0.1	n.a.	0.1	0.1	n.a.	n.r.
Philippines	15.2	3.9	n.a.	3.6[a]	n.a.	37.8[a]	0.6	3.9	2.5	0.4	0.3	3.4	7.4	4.8	3.7	0.4	0.4	0.5	0.5	1.3	n.r.
Singapore	n.a.	n.a.	<0.1	0.2	0.2	0.6	n.a.	<0.1	<0.1	<0.1	<0.1	0.4	0.8	0.2	0.3	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Thailand	7.8	3.9	n.a.	0.4[a, b]	n.a.	3.2[a, b]	0.2	0.6	0.4	0.4	0.3	4.8	9.6	4.3	3.6	0.1	0.1	0.1	0.1	0.6	13.9
Timor-Leste	0.3	0.2	n.a.	n.a.	n.a.	n.a.	<0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.
Viet Nam	12.3	6.1	n.a.	1.8	n.a.	9.5	0.3	1.9	1.4	0.3	0.7	0.5	1.7	4.8	5.3	0.1	0.3	0.1	0.1	1.1	23.0
Southern Asia	**314.9**	**218.0**	**242.4**	**333.5**	**513.4**	**721.3**	**24.4**	**77.0**	**56.4**	**5.0**	**5.7**	**63.4**	**147.3**	**212.2**	**264.9**	**9.1**	**10.8**	**10.2**	**8.8**	**12.7**	**542.6**
Afghanistan	7.5	11.9	5.0	12.9	15.2	33.2	0.2	2.4	2.8	0.3	0.3	1.4	4.4	2.5	4.5	n.a.	0.5	n.a.	n.a.	0.3	3.1
Bangladesh	21.9	14.3	n.a.	n.a.	48.8[b]	45.4[a, b]	1.7	6.2	4.2	0.3	0.3	2.4	6.6	14.5	18.3	1.0	0.9	0.7	0.7	1.9	29.0
Bhutan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	n.a.	n.a.
India	243.9	142.5	n.r.	n.r.	n.r.	n.r.	22.2	53.3	37.4	2.7	4.2	33.0	81.5	164.0	203.5	6.0	7.2	7.7	6.3[g]	8.0	n.r.
Iran (Islamic Republic of)	4.6	6.2	7.9	4.4	39.7	34.5	0.3	0.4	0.3	0.3	0.2	11.5	16.5	4.8	6.2	0.4	n.a.	n.a.	n.a.	n.a.	20.0
Maldives	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	n.a.	<0.1	<0.1	n.a.	n.a.
Nepal	4.4	1.5	2.9	3.6	8.2	10.4	0.2	1.2	0.7	<0.1	<0.1	0.6	1.5	2.3	2.8	0.2	0.2	0.1	0.1	0.4	4.8
Pakistan	29.6	40.4	2.0[b]	13.8[a, b]	30.5[b]	57.5[a, b]	2.2	13.2	10.7	1.4	0.7	14.4	35.0	22.7	28.2	1.2	1.6	n.a.	n.a.	1.5	33.4
Sri Lanka	2.9	1.1	0.1[b]	0.3[b]	1.3[b]	2.3[b]	0.2	0.3	0.2	<0.1	<0.1	0.9	1.9	1.4	1.2	0.1	n.a.	0.1	0.1	n.a.	n.r.

TABLE A1.2 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	NUMBER OF UNDERNOURISHED PEOPLE[1]		NUMBER OF SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF MODERATELY OR SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF CHILDREN (<5 YEARS) AFFECTED BY WASTING	NUMBER OF CHILDREN (<5 YEARS) WHO ARE STUNTED		NUMBER OF CHILDREN (<5 YEARS) WHO ARE OVERWEIGHT		NUMBER OF ADULTS (≥18 YEARS) WHO ARE OBESE		NUMBER OF WOMEN (15–49 YEARS) AFFECTED BY ANAEMIA		NUMBER OF INFANTS (0–5 MONTHS) EXCLUSIVELY BREASTFED		NUMBER OF BABIES WITH LOW BIRTHWEIGHT		NUMBER OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	NUMBER OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (millions)	2023–25[4] (millions)	2014–16 (millions)	2023–25 (millions)	2014–16 (millions)	2023–25 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2024[7] (millions)	2012 (millions)	2020 (millions)	2024[7] (millions)	2021–25[8] (millions)
Western Asia*	**28.1**	**38.8**	**25.6**	**45.3**	**81.3**	**113.3**	**1.0**	**5.4**	**5.1**	**2.5**	**1.8**	**45.7**	**65.5**	**17.4**	**21.7**	**0.9**	**0.9**	**0.7**	**0.7**	**2.9**	**56.5**
Armenia	0.4	n.r.	n.a.	n.r.	n.a.	0.2[a, b]	n.a.	<0.1	<0.1	<0.1	<0.1	0.4	0.6	0.2	0.1	<0.1	n.a.	<0.1	<0.1	n.a.	0.6
Azerbaijan	0.5	n.r.	n.r.	0.2	0.6	1.5	<0.1	0.1	<0.1	0.1	<0.1	1.5	2.1	1.0	1.0	<0.1	<0.1	<0.1	<0.1	0.1	n.r.
Bahrain	n.a.	n.a.	n.r.	n.r.	n.r.	n.r.	n.a.	<0.1[e]	<0.1[e]	n.a.	n.a.	0.3	0.4	0.1	0.1	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Cyprus	<0.1	n.r.	n.a.	n.r.	n.a.	<0.1[a]	n.a.	n.a.	n.a.	n.a.	n.a.	0.2	0.2	<0.1	0.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Georgia	0.2	n.r.	0.3	0.2	1.2	0.9	<0.1	<0.1	<0.1	<0.1	<0.1	0.8	1.0	0.3	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	0.6
Iraq	4.6	6.2	n.r.	n.r.	n.r.	n.r.	0.2	1.0	0.5	0.5	0.3	6.1	10.4	2.3	3.1	0.1	0.1	0.1	0.1	0.8	10.6
Israel	n.r.	n.r.	0.1[a, b]	<0.1[b]	0.9[a, b]	0.8[b]	n.a.	n.a.	n.a.	n.a.	n.a.	1.2	1.4	0.2	0.3	n.a.	n.a.	<0.1	<0.1	n.a.	n.r.
Jordan	0.3	1.4	n.r.	n.r.	n.r.	n.r.	<0.1	0.1	0.1	0.1	0.1	1.6	2.6	0.5	1.0	<0.1	<0.1	<0.1	<0.1	0.1	2.3
Kuwait	n.r.	n.r.	0.2	0.2	0.5	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	1.6	0.2	0.3	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Lebanon	0.3	0.6	n.a.	0.6	n.a.	2.6	<0.1	0.1	<0.1	<0.1	<0.1	1.0	1.2	0.4	0.5	n.a.	<0.1	<0.1	<0.1	<0.1	0.8
Oman	0.2	0.4	n.r.	n.r.	n.r.	n.r.	<0.1	<0.1	0.1	<0.1	<0.1	0.6	1.2	0.3	0.4	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Palestine	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	0.1	0.1	0.1	0.1	0.8	1.1	0.3	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	n.r.
Qatar	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1[d]	<0.1	<0.1	<0.1	<0.1	0.6	1.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.
Saudi Arabia	0.9	n.r.	n.r.	n.r.	n.r.	n.r.	0.1[d]	0.3	0.3	0.3	0.2	6.5	9.8	1.1	1.3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Syrian Arab Republic	1.2	10.1	n.r.	n.r.	n.r.	n.r.	n.a.	0.8	0.6	0.5	0.3	3.8	5.2	1.7	2.0	0.1	0.1	n.a.	n.a.	0.2	n.a.
Türkiye	13.1	n.r.	n.r.	n.r.	n.r.	n.r.	0.1	0.6	0.3	0.6	0.4	15.3	18.7	5.8	6.6	0.3	0.2	0.2	0.2	n.a.	n.r.
United Arab Emirates	0.1	n.r.	n.a.	<0.1[a, b]	n.a.	0.5[a, b]	n.a.	n.a.	n.a.	n.a.	n.a.	1.9	2.8	0.5	0.7	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Yemen	n.a.	n.a.	n.a.	n.a.	14.2	30.2	1.0	2.2	3.1	0.1	0.1	1.3	2.8	2.4	3.5	n.a.	n.a.	n.a.	n.a.	0.5	n.r.

TABLE A1.2 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	NUMBER OF UNDERNOURISHED PEOPLE[1]		NUMBER OF SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF MODERATELY OR SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF CHILDREN (<5 YEARS) AFFECTED BY WASTING	NUMBER OF CHILDREN (<5 YEARS) WHO ARE STUNTED		NUMBER OF CHILDREN (<5 YEARS) WHO ARE OVERWEIGHT		NUMBER OF ADULTS (≥18 YEARS) WHO ARE OBESE		NUMBER OF WOMEN (15–49 YEARS) AFFECTED BY ANAEMIA		NUMBER OF INFANTS (0–5 MONTHS) EXCLUSIVELY BREASTFED		NUMBER OF BABIES WITH LOW BIRTHWEIGHT		NUMBER OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	NUMBER OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (millions)	2023–25[4] (millions)	2014–16 (millions)	2023–25 (millions)	2014–16 (millions)	2023–25 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2024[7] (millions)	2012 (millions)	2020 (millions)	2024[7] (millions)	2021–25[8] (millions)
Central Asia and Southern Asia	**323.0**	**220.3**	**243.5**	**336.0**	**519.8**	**734.6**	**24.6**	**78.1**	**57.1**	**5.5**	**6.3**	**71.2**	**161.2**	**218.1**	**271.3**	**9.3**	**11.1**	**10.3**	**8.9**	**14.1**	**561.0**
Eastern Asia and South-eastern Asia	**196.6**	**n.r.**	**27.5**	**30.3**	**192.7**	**199.5**	**4.4**	**25.3**	**14.6**	**9.9**	**8.3**	**79.1**	**173.0**	**110.4**	**101.3**	**4.9**	**3.8**	**2.7**	**2.2**	**17.1**	**495.0**
Western Asia and Northern Africa	**41.0**	**65.9**	**48.5**	**77.4**	**148.1**	**204.5**	**2.5**	**11.7**	**10.4**	**5.6**	**4.2**	**80.3**	**119.0**	**34.1**	**43.2**	**2.1**	**1.9**	**1.5**	**1.5**	**6.6**	**112.1**
LATIN AMERICA AND THE CARIBBEAN	**47.2**	**33.9**	**38.0**	**44.2**	**149.0**	**160.6**	**0.6**	**6.8**	**5.8**	**3.9**	**4.1**	**91.3**	**151.4**	**28.6**	**34.6**	**1.8**	**2.0**	**1.0**	**0.9**	**n.a.**	**150.6**
Caribbean	**7.1**	**7.4**	**n.a.**	**10.9**	**n.a.**	**23.4**	**0.1**	**0.5**	**0.4**	**0.2**	**0.2**	**5.4**	**8.0**	**2.6**	**3.1**	**0.1**	**0.1**	**0.1**	**0.1**	**0.6**	**n.a.**
Antigua and Barbuda	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Bahamas	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.1	0.2	<0.1	<0.1	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Barbados	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.
Cuba	n.r.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	0.1	0.1	1.5	2.1	0.6	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.
Dominica	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dominican Republic	2.0	n.r.	2.5[a]	1.9[b]	5.7[a]	4.7[b]	<0.1	0.1	0.1	0.1	0.1	1.4	2.4	0.5	0.7	<0.1	<0.1	<0.1	<0.1	0.2	n.r.
Grenada	n.a.	n.a.	n.a.	<0.1[a]	n.a.	<0.1[a]	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Haiti	4.3	6.1	n.a.	5.3	n.a.	9.8	0.1	0.3	0.3	<0.1	<0.1	0.5	0.8	1.1	1.4	0.1	n.a.	n.a.	n.a.	n.a.	n.a.
Jamaica	0.2	0.2	0.7	0.8	1.4	1.6	<0.1	<0.1	<0.1	<0.1	<0.1	0.5	0.8	0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.
Puerto Rico	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1.0	1.2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Saint Kitts and Nevis	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

TABLE A1.2 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	NUMBER OF UNDERNOURISHED PEOPLE[1]		NUMBER OF SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF MODERATELY OR SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF CHILDREN (<5 YEARS) AFFECTED BY WASTING	NUMBER OF CHILDREN (<5 YEARS) WHO ARE STUNTED		NUMBER OF CHILDREN (<5 YEARS) WHO ARE OVERWEIGHT		NUMBER OF ADULTS (≥18 YEARS) WHO ARE OBESE		NUMBER OF WOMEN (15–49 YEARS) AFFECTED BY ANAEMIA		NUMBER OF INFANTS (0–5 MONTHS) EXCLUSIVELY BREASTFED		NUMBER OF BABIES WITH LOW BIRTHWEIGHT		NUMBER OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	NUMBER OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (millions)	2023–25[4] (millions)	2014–16 (millions)	2023–25 (millions)	2014–16 (millions)	2023–25 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2024[7] (millions)	2012 (millions)	2020 (millions)	2024[7] (millions)	2021–25[8] (millions)
Saint Lucia	n.a.	n.a.	<0.1[a]	n.a.	<0.1[a]	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.	<0.1	<0.1	n.a.	n.a.
Saint Vincent and the Grenadines	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Trinidad and Tobago	0.2	0.2	n.a.	0.1[a]	n.a.	0.4[a]	n.a.	<0.1	<0.1	<0.1	<0.1	0.3	0.4	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.
Central America	**10.5**	**9.8**	**10.6**	**12.4**	**48.3**	**43.6**	**0.1**	**3.0**	**2.6**	**1.1**	**1.1**	**28.7**	**45.4**	**4.6**	**6.8**	**0.4**	**0.6**	**0.4**	**0.3**	**n.a.**	**46.8**
Belize	<0.1	<0.1	n.a.	<0.1[a]	n.a.	<0.1[a]	n.a.	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	n.a.	<0.1	<0.1	n.a.	n.a.
Costa Rica	0.2	n.r.	<0.1[b]	0.1[b]	0.6[b]	0.7[b]	<0.1	<0.1	<0.1	<0.1	<0.1	0.8	1.3	0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	1.0
El Salvador	0.5	0.3	0.9	0.8	2.6	2.6	<0.1	0.1	<0.1	<0.1	<0.1	1.0	1.4	0.2	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.
Guatemala	2.5	2.3	2.6	4.1	6.8	9.0	<0.1	0.9	0.8	0.1	0.1	1.6	3.2	0.3	0.5	0.1	0.1	0.1	0.1	n.a.	3.9
Honduras	1.4	1.5	1.3[b]	1.5[a, b]	3.8[b]	4.3[a, b]	<0.1	0.2	0.2	0.1	<0.1	1.1	2.2	0.3	0.5	<0.1	<0.1	<0.1	<0.1	0.2	2.2
Mexico	4.2	4.1	4.2[a, b]	3.5[a]	30.2[a, b]	21.6[a]	0.1	1.5	1.3	0.8	0.8	22.4	34.4	3.3	4.6	0.2	0.4	0.2	0.2	n.a.	30.5
Nicaragua	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.r.
Panama	0.5	0.2	n.r.	n.r.	n.r.	n.r.	<0.1	0.1	<0.1	<0.1	<0.1	0.7	1.2	0.2	0.3	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
South America	**29.7**	**16.7**	**15.3**	**20.9**	**76.5**	**93.6**	**0.4**	**3.3**	**2.8**	**2.6**	**2.8**	**57.2**	**97.8**	**21.3**	**24.7**	**1.4**	**1.4**	**0.6**	**0.5**	**5.8**	**100.9**
Argentina	1.4	1.3	2.5	5.0	8.3	14.5	0.1	0.3	0.3	0.4	0.4	7.7	12.5	2.1	2.7	0.1	n.a.	0.1	<0.1	n.a.	n.a.
Bolivia (Plurinational State of)	2.6	2.4	n.a.	0.6[a, b]	n.a.	3.7[a, b]	n.a.	0.2	0.1	0.1	0.1	1.3	2.4	0.7	0.8	0.1	n.a.	<0.1	<0.1	0.3	2.9
Brazil	10.5	n.r.	1.5[a, b]	1.2[a, b]	26.8[a, b]	20.3[a, b]	0.5	1.0	1.2	1.1	1.4	26.8	48.7	11.7	11.9	0.6	0.6	0.2	0.2	2.4	n.r.
Chile	0.4	n.r.	0.5[b]	0.7[a, b]	1.9[b]	3.2[a, b]	n.a.	<0.1	<0.1	0.1	0.1	3.9	6.3	0.4	0.8	n.a.	n.a.	<0.1	<0.1	n.a.	n.r.
Colombia	4.6	2.2	2.3[b]	2.8[a, b]	9.4[b]	14.8[a, b]	n.a.	0.5	0.4	0.2	0.2	5.7	9.9	2.2	3.2	0.2	n.a.	0.1	0.1	n.a.	n.r.

TABLE A1.2 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	NUMBER OF UNDERNOURISHED PEOPLE[1]		NUMBER OF SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF MODERATELY OR SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF CHILDREN (<5 YEARS) AFFECTED BY WASTING	NUMBER OF CHILDREN (<5 YEARS) WHO ARE STUNTED		NUMBER OF CHILDREN (<5 YEARS) WHO ARE OVERWEIGHT		NUMBER OF ADULTS (≥18 YEARS) WHO ARE OBESE		NUMBER OF WOMEN (15–49 YEARS) AFFECTED BY ANAEMIA		NUMBER OF INFANTS (0–5 MONTHS) EXCLUSIVELY BREASTFED		NUMBER OF BABIES WITH LOW BIRTHWEIGHT		NUMBER OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	NUMBER OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (millions)	2023–25[4] (millions)	2014–16 (millions)	2023–25 (millions)	2014–16 (millions)	2023–25 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2024[7] (millions)	2012 (millions)	2020 (millions)	2024[7] (millions)	2021–25[8] (millions)
Ecuador	2.4	2.0	1.0[a, b]	2.0[b]	3.4[a, b]	5.6[b]	<0.1	0.4	0.2	0.1	0.1	2.0	3.7	0.7	1.0	n.a.	n.a.	<0.1	<0.1	0.3	n.r.
Guyana	<0.1	n.r.	n.a.	<0.1	n.a.	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.2	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.
Paraguay	0.4	0.3	<0.1[b]	0.5[b]	0.5[b]	1.8[b]	n.a.	0.1	<0.1	0.1	0.1	0.9	1.6	0.3	0.4	<0.1	n.a.	<0.1	<0.1	n.a.	1.5
Peru	5.0	2.0	0.9[b]	1.3[a, b]	8.1[b]	11.5[a, b]	<0.1	0.5	0.3	0.2	0.2	3.6	7.1	1.4	1.9	0.2	0.2	0.1	<0.1	0.7	7.0
Suriname	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.
Uruguay	n.r.	n.r.	n.a.	<0.1[a]	n.a.	0.5[a]	<0.1	<0.1	<0.1	<0.1	<0.1	0.6	0.9	0.2	0.2	n.a.	<0.1	<0.1	<0.1	<0.1	n.a.
Venezuela (Bolivarian Republic of)	2.1	1.5	n.r.	n.r.	n.r.	n.r.	n.a.	0.4	0.2	0.2	0.2	4.4	4.5	1.5	1.7	n.a.	n.a.	0.1	<0.1	n.a.	4.4
OCEANIA	**2.2**	**3.8**	**3.5**	**4.7**	**9.0**	**12.3**	**n.a.**	**0.7**	**0.7**	**0.4**	**0.7**	**7.2**	**10.4**	**1.2**	**1.8**	**n.a.**	**n.a.**	**0.1**	**0.1**	**n.a.**	**n.a.**
Australia and New Zealand	**n.r.**	**n.r.**	**0.8**	**1.4**	**3.0**	**5.0**	**<0.1**	**0.1**	**0.1**	**0.2**	**0.4**	**5.5**	**7.8**	**0.5**	**0.8**	**n.a.**	**n.a.**	**<0.1**	**<0.1**	**n.a.**	**n.a.**
Australia	n.r.	n.r.	0.7	1.2	2.6	4.0	n.a.	0.1	<0.1	0.2	0.4	4.6	6.4	0.4	0.7	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
New Zealand	n.r.	n.r.	0.1	0.3	0.5	0.9	n.a.	n.a.	n.a.	n.a.	n.a.	1.0	1.4	0.1	0.1	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Oceania excluding Australia and New Zealand	**2.0**	**3.6**	**2.7**	**3.3**	**6.0**	**7.3**	**0.1**	**0.6**	**0.7**	**0.2**	**0.3**	**1.6**	**2.6**	**0.7**	**1.0**	**0.1**	**n.a.**	**0.1**	**0.1**	**n.a.**	**n.a.**
Melanesia	**2.0**	**3.5**	**n.a.**	**3.2**	**n.a.**	**7.0**	**n.a.**	**0.6**	**0.6**	**0.1**	**0.2**	**1.3**	**2.2**	**0.6**	**0.9**	**0.1**	**n.a.**	**0.1**	**0.1**	**n.a.**	**n.a.**
Fiji	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	0.2	0.1	0.1	n.a.	<0.1	<0.1	<0.1	<0.1	n.a.
New Caledonia	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Papua New Guinea	1.8	3.2	n.a.	n.a.	n.a.	n.a.	n.a.	0.5	0.6	0.1	0.2	1.0	1.8	0.5	0.8	0.1	n.a.	<0.1	<0.1	n.a.	n.a.
Solomon Islands	<0.1	0.2	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	0.1	<0.1	n.a.	<0.1	<0.1	n.a.	n.a.
Vanuatu	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1

TABLE A1.2 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	NUMBER OF UNDERNOURISHED PEOPLE[1]		NUMBER OF SEVERELY FOOD-INSECURE PEOPLE[1, 2, 3]		NUMBER OF MODERATELY OR SEVERELY FOOD-INSECURE PEOPLE[1, 2, 3]		NUMBER OF CHILDREN (<5 YEARS) AFFECTED BY WASTING	NUMBER OF CHILDREN (<5 YEARS) WHO ARE STUNTED		NUMBER OF CHILDREN (<5 YEARS) WHO ARE OVERWEIGHT		NUMBER OF ADULTS (≥18 YEARS) WHO ARE OBESE		NUMBER OF WOMEN (15–49 YEARS) AFFECTED BY ANAEMIA		NUMBER OF INFANTS (0–5 MONTHS) EXCLUSIVELY BREASTFED		NUMBER OF BABIES WITH LOW BIRTHWEIGHT		NUMBER OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	NUMBER OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (millions)	2023–25[4] (millions)	2014–16 (millions)	2023–25 (millions)	2014–16 (millions)	2023–25 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2024[7] (millions)	2012 (millions)	2020 (millions)	2024[7] (millions)	2021–25[8] (millions)
Micronesia	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**0.1**	**0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**n.a.**
Kiribati	<0.1	<0.1	n.a.	<0.1[a]	n.a.	<0.1[a]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.
Marshall Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.
Micronesia (Federated States of)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Naoero	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.	n.a.	<0.1	n.a.
Palau	n.a.	n.a.	n.a.	<0.1[a]	n.a.	<0.1[a]	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Polynesia	**<0.1**	**<0.1**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**0.2**	**0.3**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**<0.1**	**n.a.**
American Samoa	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cook Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
French Polynesia	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.1	0.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Niue	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Samoa	<0.1	<0.1	n.a.	<0.1[a, b]	n.a.	<0.1[a, b]	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	n.a.	n.a.	<0.1	n.a.
Tokelau (Associate Member)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tonga	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.	n.a.	<0.1	n.a.
Tuvalu	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.	n.a.	<0.1	n.a.
NORTHERN AMERICA AND EUROPE	**n.r.**	**n.r.**	**14.2**	**18.9**	**96.4**	**96.0**	**n.a.**	**2.5**	**2.0**	**5.3**	**4.7**	**214.1**	**240.7**	**34.0**	**42.9**	**n.a.**	**n.a.**	**0.9**	**0.8**	**n.a.**	**128.1**
Northern America	**n.r.**	**n.r.**	**3.7**	**4.4**	**35.9**	**41.1**	**<0.1**	**0.6**	**0.8**	**1.9**	**2.0**	**96.5**	**119.9**	**8.5**	**12.8**	**0.5**	**0.5**	**0.3**	**0.3**	**n.a.**	**77.7**
Bermuda	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

TABLE A1.2 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	NUMBER OF UNDERNOURISHED PEOPLE[1]		NUMBER OF SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF MODERATELY OR SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF CHILDREN (<5 YEARS) AFFECTED BY WASTING	NUMBER OF CHILDREN (<5 YEARS) WHO ARE STUNTED		NUMBER OF CHILDREN (<5 YEARS) WHO ARE OVERWEIGHT		NUMBER OF ADULTS (≥18 YEARS) WHO ARE OBESE		NUMBER OF WOMEN (15–49 YEARS) AFFECTED BY ANAEMIA		NUMBER OF INFANTS (0–5 MONTHS) EXCLUSIVELY BREASTFED		NUMBER OF BABIES WITH LOW BIRTHWEIGHT		NUMBER OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	NUMBER OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (millions)	2023–25[4] (millions)	2014–16 (millions)	2023–25 (millions)	2014–16 (millions)	2023–25 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2024[7] (millions)	2012 (millions)	2020 (millions)	2024[7] (millions)	2021–25[8] (millions)
Canada	n.r.	n.r.	0.2[a]	0.7[b]	1.8[a]	4.2[b]	n.a.	n.a.	n.a.	0.2	0.2	6.9	8.4	0.6	1.2	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Greenland	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
United States of America	n.r.	n.r.	3.5[a]	3.7[a]	34.1[a]	36.9[a]	<0.1	0.5	0.8	1.7	1.8	89.5	111.4	7.9	11.6	0.5	0.5	0.3	0.3	n.a.	n.r.
Europe	**n.r.**	**n.r.**	**10.5**	**14.5**	**60.4**	**54.9**	**n.a.**	**1.9**	**1.2**	**3.4**	**2.6**	**116.5**	**118.4**	**25.5**	**30.1**	**n.a.**	**n.a.**	**0.6**	**0.5**	**n.a.**	**n.a.**
Eastern Europe	**n.r.**	**n.r.**	**4.2**	**4.5**	**32.2**	**24.6**	**n.a.**	**1.1**	**0.6**	**1.8**	**1.2**	**50.4**	**48.3**	**14.0**	**15.4**	**n.a.**	**n.a.**	**0.3**	**0.2**	**n.a.**	**43.2**
Belarus	0.4	n.r.	n.a.	n.r.	n.a.	<0.1[a]	<0.1	<0.1	<0.1	<0.1	<0.1	1.7	1.5	0.4	0.5	<0.1	<0.1	<0.1	<0.1	<0.1	n.a.
Bulgaria	0.5	n.r.	0.1	0.1	1.1	0.7	n.a.	<0.1	<0.1	<0.1	<0.1	1.1	1.1	0.4	0.4	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Czechia	n.r.	n.r.	<0.1	0.2	0.6	1.0	n.a.	<0.1	<0.1	<0.1	<0.1	1.9	2.3	0.5	0.6	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Hungary	0.3	n.r.	0.1	0.5	1.1	1.6	n.a.	n.a.	n.a.	n.a.	n.a.	2.1	2.5	0.5	0.5	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Poland	n.r.	n.r.	0.7	n.r.	3.4	1.1	<0.1	<0.1	<0.1	0.1	0.1	6.6	6.9	1.8	2.1	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Republic of Moldova	1.2	n.r.	<0.1	0.2	0.6	0.8	n.a.	<0.1	<0.1	<0.1	<0.1	0.6	0.5	0.2	0.2	<0.1	n.a.	<0.1	<0.1	n.a.	0.6
Romania	n.r.	n.r.	1.1	1.0	3.8	2.9	n.a.	0.1	0.1	0.1	<0.1	3.6	5.0	1.0	1.0	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Russian Federation	n.r.	n.r.	1.0	n.r.	12.0	3.8[a]	n.a.	n.a.	n.a.	0.9	0.7	23.5	20.2	7.3	8.2	n.a.	n.a.	0.1	0.1	n.a.	n.r.
Slovakia	n.a.	n.a.	<0.1	<0.1	0.3	0.4	n.a.	n.a.	n.a.	n.a.	n.a.	0.9	1.2	0.3	0.3	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Ukraine	n.r.	4.1	0.9	2.1	9.1	12.2	n.a.	0.5	0.1	0.5	0.2	8.5	7.1	1.5	1.7	0.1	n.a.	<0.1	<0.1	n.a.	6.2
Northern Europe	**n.r.**	**n.r.**	**1.8**	**3.7**	**6.9**	**8.5**	**n.a.**	**0.2**	**0.2**	**0.5**	**0.4**	**17.8**	**21.5**	**2.7**	**3.5**	**n.a.**	**n.a.**	**0.1**	**0.1**	**n.a.**	**n.a.**
Denmark	n.r.	n.r.	<0.1	0.1	0.3	0.4	n.a.	n.a.	n.a.	n.a.	n.a.	0.6	0.7	0.2	0.2	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Estonia	n.r.	n.r.	<0.1	<0.1	0.1	0.2	n.a.	<0.1	<0.1	<0.1	<0.1	0.2	0.2	0.1	0.1	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Finland	n.r.	n.r.	0.1	0.2	0.5	0.7	<0.1	<0.1	<0.1	<0.1	<0.1	0.8	1.1	0.1	0.2	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Iceland	n.r.	n.r.	<0.1	<0.1	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	0.1	<0.1	<0.1	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.

TABLE A1.2 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	NUMBER OF UNDERNOURISHED PEOPLE[1]		NUMBER OF SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF MODERATELY OR SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF CHILDREN (<5 YEARS) AFFECTED BY WASTING	NUMBER OF CHILDREN (<5 YEARS) WHO ARE STUNTED		NUMBER OF CHILDREN (<5 YEARS) WHO ARE OVERWEIGHT		NUMBER OF ADULTS (≥18 YEARS) WHO ARE OBESE		NUMBER OF WOMEN (15–49 YEARS) AFFECTED BY ANAEMIA		NUMBER OF INFANTS (0–5 MONTHS) EXCLUSIVELY BREASTFED		NUMBER OF BABIES WITH LOW BIRTHWEIGHT		NUMBER OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	NUMBER OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (millions)	2023–25[4] (millions)	2014–16 (millions)	2023–25 (millions)	2014–16 (millions)	2023–25 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2024[7] (millions)	2012 (millions)	2020 (millions)	2024[7] (millions)	2021–25[8] (millions)
Ireland	n.r.	n.r.	0.2	0.2	0.4	0.3	n.a.	<0.1	<0.1	<0.1	<0.1	0.9	1.1	0.1	0.2	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Latvia	n.r.	n.r.	<0.1	<0.1	0.2	0.2	<0.1[d]	<0.1	<0.1	<0.1	<0.1	0.4	0.3	0.1	0.1	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Lithuania	n.r.	n.r.	<0.1	<0.1	0.4	0.2	<0.1[d]	<0.1	<0.1	<0.1	<0.1	0.5	0.5	0.1	0.1	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Norway	n.r.	n.r.	<0.1	<0.1	0.2	0.4	n.a.	n.a.	n.a.	n.a.	n.a.	0.7	0.9	0.1	0.2	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Sweden	n.r.	n.r.	<0.1	0.3	0.4	0.8	n.a.	n.a.	n.a.	n.a.	n.a.	1.1	1.5	0.3	0.4	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
United Kingdom of Great Britain and Northern Ireland	n.r.	n.r.	1.2	2.8	4.1	5.1	<0.1[d]	0.1	0.1	0.3	0.3	12.5	15.0	1.6	2.0	n.a.	n.a.	0.1	<0.1	n.a.	n.a.
Southern Europe	**n.r.**	**n.r.**	**2.1**	**2.0**	**11.3**	**8.8**	**n.a.**	**0.3**	**0.2**	**0.7**	**0.5**	**23.2**	**21.4**	**4.7**	**5.3**	**n.a.**	**n.a.**	**0.1**	**0.1**	**n.a.**	**n.a.**
Albania	0.3	0.2	0.3	0.2	1.1	0.9	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	0.5	0.2	0.2	<0.1	n.a.	<0.1	<0.1	n.a.	0.6
Andorra	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	<0.1	<0.1	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Bosnia and Herzegovina	n.r.	n.r.	<0.1	<0.1	0.3	0.3	n.a.	<0.1	<0.1	<0.1	<0.1	0.5	0.6	0.2	0.2	<0.1	n.a.	<0.1	<0.1	n.a.	0.5
Croatia	0.1	n.r.	<0.1	<0.1	0.3	0.2	n.a.	n.a.	n.a.	n.a.	n.a.	0.8	1.0	0.2	0.2	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Greece	n.r.	n.r.	0.3	0.2[a]	1.7	0.7[a]	n.a.	<0.1	<0.1	0.1	0.1	2.2	2.3	0.3	0.3	n.a.	n.a.	<0.1	<0.1	n.a.	1.5
Italy	n.r.	n.r.	n.a.	n.r.	n.a.	1.0[a]	n.a.	n.a.	n.a.	n.a.	n.a.	7.9	7.1	1.7	1.9	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Malta	n.r.	n.r.	<0.1	<0.1	<0.1	<0.1	<0.1[d]	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Montenegro	<0.1	n.r.	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	n.r.
North Macedonia	<0.1	n.r.	<0.1	<0.1	0.3	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	0.3	0.4	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.3
Portugal	n.r.	n.r.	0.4	0.2	1.5	1.2	n.a.	<0.1	<0.1	<0.1	<0.1	1.6	1.6	0.3	0.3	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Serbia	n.r.	n.r.	0.2	<0.1	1.0	0.6	<0.1	<0.1	<0.1	0.1	<0.1	1.1	1.2	0.4	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	1.3

TABLE A1.2 (Continued)

REGIONS/ SUBREGIONS/ COUNTRIES/ TERRITORIES	NUMBER OF UNDERNOURISHED PEOPLE[1]		NUMBER OF SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF MODERATELY OR SEVERELY FOOD-INSECURE PEOPLE[1,2,3]		NUMBER OF CHILDREN (<5 YEARS) AFFECTED BY WASTING	NUMBER OF CHILDREN (<5 YEARS) WHO ARE STUNTED		NUMBER OF CHILDREN (<5 YEARS) WHO ARE OVERWEIGHT		NUMBER OF ADULTS (≥18 YEARS) WHO ARE OBESE		NUMBER OF WOMEN (15–49 YEARS) AFFECTED BY ANAEMIA		NUMBER OF INFANTS (0–5 MONTHS) EXCLUSIVELY BREASTFED		NUMBER OF BABIES WITH LOW BIRTHWEIGHT		NUMBER OF CHILDREN (6–23 MONTHS) ACHIEVING MINIMUM DIETARY DIVERSITY	NUMBER OF WOMEN (15–49 YEARS) ACHIEVING MINIMUM DIETARY DIVERSITY
	2004–06 (millions)	2023–25[4] (millions)	2014–16 (millions)	2023–25 (millions)	2014–16 (millions)	2023–25 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2024[7] (millions)	2012 (millions)	2020 (millions)	2024[7] (millions)	2021–25[8] (millions)
Slovenia	n.r.	n.r.	<0.1	<0.1	0.3	0.2	n.a.	n.a.	n.a.	n.a.	n.a.	0.3	0.3	0.1	0.1	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Spain	n.r.	n.r.	0.5	0.9	3.3	3.6	n.a.	n.a.	n.a.	n.a.	n.a.	7.8	6.2	1.3	1.6	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Western Europe	**n.r.**	**n.r.**	**2.4**	**4.3**	**10.1**	**13.1**	**n.a.**	**0.2**	**0.2**	**0.5**	**0.5**	**25.5**	**26.8**	**4.1**	**5.9**	**n.a.**	**n.a.**	**0.1**	**0.1**	**n.a.**	**n.a.**
Austria	n.r.	n.r.	<0.1	0.2	0.5	0.4	n.a.	n.a.	n.a.	n.a.	n.a.	1.0	1.3	0.3	0.3	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Belgium	n.r.	n.r.	n.a.	0.4	n.a.	1.1	<0.1[d]	<0.1	<0.1	<0.1	<0.1	1.6	2.0	0.3	0.4	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
France	n.r.	n.r.	1.0	2.2	4.4	6.2	n.a.	n.a.	n.a.	n.a.	n.a.	6.4	5.9	1.1	1.8	n.a.	n.a.	0.1	0.1	n.a.	n.a.
Germany	n.r.	n.r.	0.8	0.9	3.3	3.5	n.a.	0.1	0.1	0.1	0.1	13.9	14.5	1.6	2.3	n.a.	n.a.	<0.1	0.1	n.a.	n.a.
Luxembourg	n.r.	n.r.	<0.1	<0.1	<0.1	<0.1	n.a.	n.a.	n.a.	n.a.	n.a.	0.1	0.1	<0.1	<0.1	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Netherlands (Kingdom of the)	n.r.	n.r.	0.3	0.6	1.0	1.6	n.a.	<0.1	<0.1	<0.1	<0.1	1.9	2.2	0.5	0.6	n.a.	n.a.	<0.1	<0.1	n.a.	n.a.
Switzerland	n.r.	n.r.	0.1	0.1	0.4	0.2	n.a.	n.a.	n.a.	n.a.	n.a.	0.7	0.8	0.2	0.3	n.a.	n.a.	<0.1	<0.1	n.a.	1.7

NOTES:

n.a. = data not available; n.r. = data not reported. In the case of the number of undernourished, this is because the prevalence is less than 2.5 percent; – = not applicable; <0.1 = less than 100 000 people.

1. Undernourishment and food insecurity statistics are under the custodianship of FAO. Aggregate estimates are included when more than 50 percent of population is covered. To reduce the margin of error, estimates are presented as three-year averages.

2. FAO estimates of the number of people living in households where at least one adult has been found to be food insecure.

3. Country-level results are presented only for those countries for which estimates are based on official national data (see note b) or as provisional estimates, based on FAO data collected through the Gallup© World Poll for countries whose national relevant authorities expressed no objection to their publication. Note that consent to publication does not necessarily imply validation of the estimate by the national authorities involved and that the estimate is subject to revision as soon as suitable data from official national sources are available. Global, regional and subregional aggregates are based on data collected in approximately 150 countries.

4. The estimates referring to the middle of the projected ranges for the years 2023 to 2025 were used to calculate the three-year averages.

5. For aggregate estimates, values correspond to the model predicted estimates for 2024. For countries, the latest data available from 2017 to 2024 are used.

6. Aggregate estimates are included when more than 50 percent of population is covered. For countries, the latest data available from 2005 to 2012 are used.

7. Aggregate estimates are included when more than 50 percent of population is covered. For countries, the latest data available from 2018 to 2024 are used, with the exception of China, where the most recent data are from the year 2017.

8. Global and regional estimates were included when at least 50 percent of the total population of women aged 15–49 years is covered. To reduce the margin of error, estimates are presented as five-year averages (2021–2025). Country-level results are shown only for countries where estimates are based on nationally representative surveys, including the Gallup© World Poll, Demographic and Health Survey (DHS), Multiple Indicator Cluster Survey (MICS), or other national surveys, and for which the relevant national authorities raised no objection to publication or recommended publication as provisional estimates. Note that consent to publication does not necessarily imply validation of the estimate by the national authorities involved and that the estimate is subject to revision as soon as suitable data from official national sources are available. Global, regional and subregional aggregates are based on data collected in 99 countries. These aggregates were adjusted by the total population of women aged 15–49 years in each country, based on the 2024 revision of the *World Population Prospects*.[1]

* Food insecurity estimates for Northern Africa do not reflect updated data for the Sudan after 2018. Food insecurity estimates for Western Asia do not reflect updated data for Palestine after 2022.

a. Based on official national data.

b. For years when official national data are not available, the estimates are projected using FAO data. See **Annex 1B** for further details.

c. Does not include the Tigray region.

d. This estimate has been adjusted because the original estimate did not cover the full age range or the data source was only representative of rural areas.

e. Most recent input data are from before 2000, interpret with caution.

f. The UNICEF–WHO low birthweight estimates are derived through standard methodology applied to all countries to ensure comparability and are not the official statistics of the Government of India. India's most recent national official low birthweight prevalence is 18.2 percent from the 2019–2021 National Family Health Survey–5 (NFHS-5), which is used as the basis of the UNICEF–WHO global estimation model to support cross-country comparability.

SOURCES: Data for undernourishment and food insecurity are from FAO. 2026. *FAOSTAT: Suite of Food Security Indicators*. [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/FS. Licence: CC-BY-4.0; data for stunting, wasting and overweight are based on UNICEF, WHO & World Bank. 2025. *Levels and trends in child malnutrition: UNICEF/ WHO/World Bank Group Joint Child Malnutrition Estimates. Key findings of the 2025 edition*. New York, USA, Geneva, Switzerland and Washington, DC. [Cited 23 April 2026]. https://data.unicef.org/resources/JME, https://www.who.int/teams/nutrition-and-food-safety/monitoring-nutritional-status-andfood-safety-and-events/joint-child-malnutrition-estimates/latest-estimates, https://datatopics.worldbank.org/child-malnutrition; data for adult obesity (age-standardized) are based on WHO. 2026. Global Health Observatory (GHO) data repository: Prevalence of obesity among adults, BMI ≥ 30, age-standardized. Estimates by country. [Accessed on 15 June 2026]. https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-obesity-among-adults-bmi-=-30-(age-standardized-estimate)-(-). Licence: CC-BY-4.0; data for anaemia are based on WHO. 2025. *WHO global anaemia estimates, 2025 edition.* [Cited 23 April 2026]. https://www.who.int/data/gho/data/themes/topics/anaemia_in_women_and_children; data for exclusive breastfeeding are based on UNICEF. 2025. *Infant and young child feeding.* [Cited 23 April 2026]. https://data.unicef.org/topic/nutrition/infant-and-young-child-feeding; data for low birthweight are from UNICEF & WHO. 2023. *Low birthweight joint estimates 2023 edition*. [Cited 23 April 2026]. https://data.unicef.org/topic/nutrition/low-birthweight, https://www.who.int/teams/nutrition-and-food-safety/monitoring-nutritional-status-and-food-safety-and-events/joint-low-birthweight-estimates; data for minimum dietary diversity in children are from UNICEF. 2025. UNICEF Global Databases: Infant and Young Child Feeding. [Accessed on 23 April 2026]. https://data.unicef.org/topic/nutrition/diets. Licence: CC-BY-NC-3.0; data for minimum dietary diversity in women are from FAO. 2026. *FAOSTAT: SDG Indicators.* [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/SDGB. Licence: CC-BY-4.0.

TABLE A1.3 PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY, AND SEVERE FOOD INSECURITY ONLY, BY DEGREE OF URBANIZATION IN 2025

REGIONS/SUBREGIONS/ COUNTRY GROUPINGS	Prevalence of severe food insecurity			Prevalence of moderate or severe food insecurity		
	Rural	Peri-urban	Urban	Rural	Peri-urban	Urban
	(%)			(%)		
WORLD	**10.9**	**9.7**	**7.8**	**29.7**	**25.4**	**22.3**
AFRICA	**21.6**	**20.0**	**19.9**	**59.5**	**56.2**	**54.0**
Northern Africa	11.1	10.8	10.9	34.4	29.4	31.1
Sub-Saharan Africa	22.7	22.0	22.9	62.1	62.1	61.7
Eastern Africa	22.6	21.1	22.1	62.9	61.9	61.3
Middle Africa	36.4	43.1	30.4	77.8	80.0	73.0
Southern Africa	14.0	10.4	8.0	31.9	24.7	20.1
Western Africa	17.9	18.2	22.2	58.5	62.3	63.5
ASIA	**9.6**	**9.1**	**6.3**	**23.2**	**21.6**	**17.2**
Central Asia	1.7	3.2	3.1	13.8	17.7	15.2
Eastern Asia	1.3	1.4	0.7	11.8	5.2	5.4
South-eastern Asia	2.7	1.6	1.2	15.9	13.8	10.6
Southern Asia	19.0	15.9	13.0	34.3	34.0	28.9
Western Asia	17.6	19.8	10.6	40.5	41.0	28.7
Western Asia and Northern Africa	*14.6*	*15.1*	*10.7*	*37.7*	*34.9*	*29.8*
LATIN AMERICA AND THE CARIBBEAN	**6.8**	**7.6**	**5.3**	**25.1**	**25.7**	**20.8**
Caribbean	25.5	26.7	23.4	54	55.3	50.4
Latin America	5.6	5.5	4.2	23.3	22.4	19.0
Central America	8.7	8.4	4.2	27.4	25.4	17.7
South America	4.1	4.1	4.2	21.2	21.0	19.4
OCEANIA	**15.4**	**12.2**	**5.8**	**35.9**	**30.2**	**17.7**
NORTHERN AMERICA AND EUROPE	**1.7**	**1.5**	**2.1**	**8.3**	**7.7**	**9.7**
Europe	2.1	1.9	2.4	8.0	7.0	8.1
Eastern Europe	1.7	2.0	1.3	9.8	9.3	7.9
Northern Europe	4.9	2.3	3.9	10.1	6.2	8.3
Southern Europe	1.6	1.0	1.7	5.5	4.6	6.9
Western Europe	1.8	2.1	3.8	6.4	6.2	9.2
Northern America	0.9	0.7	1.6	9.0	9.0	12.9
COUNTRY INCOME GROUPS						
Low-income countries	26.5	30.4	25.8	63.6	66.3	60.5
Lower-middle-income countries	18.4	14.7	13.9	42.4	35.8	34.6
Upper-middle-income countries	3.1	2.4	2.3	15.9	10.0	11.4
High-income countries	1.7	1.6	2.0	7.4	7.3	8.5

SOURCE: FAO. 2026. FAOSTAT: Suite of Food Security Indicators. [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/FS. Licence: CC-BY-4.0.

TABLE A1.4 PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY, AND SEVERE FOOD INSECURITY ONLY, AMONG ADULT MEN AND WOMEN IN 2025

REGIONS/SUBREGIONS/ COUNTRY GROUPINGS	Prevalence of severe food insecurity		Prevalence of moderate or severe food insecurity	
	Men	Women	Men	Women
	(%)		(%)	
WORLD	**8.3**	**8.6**	**22.7**	**23.6**
AFRICA	**19.5**	**20.5**	**54.6**	**55.9**
Northern Africa	9.8	11.6	28.8	32.4
Sub-Saharan Africa	22.0	22.6	61.2	61.7
Eastern Africa	21.5	22.1	61.8	62.5
Middle Africa	34.4	35.0	75.7	75.7
Southern Africa	9.6	10.4	23.1	24.7
Western Africa	19.4	20.2	61.3	62.1
ASIA	**7.7**	**7.8**	**19.3**	**19.5**
Central Asia	3.1	2.6	16.5	15.1
Eastern Asia	1.2	0.9	7.0	5.6
South-eastern Asia	1.5	1.7	12.0	13.0
Southern Asia	14.8	15.7	31.1	32.6
Western Asia	13.8	14.3	31.8	35.3
Western Asia and Northern Africa	*12.0*	*13.1*	*30.5*	*34.0*
LATIN AMERICA AND THE CARIBBEAN	**5.8**	**6.2**	**20.7**	**24.4**
Caribbean	25.4	23.2	50.6	53.1
Latin America	4.4	5.0	18.6	22.4
Central America	5.8	6.6	19.1	24.4
South America	3.9	4.3	18.4	21.5
OCEANIA	**10.2**	**9.8**	**25.8**	**25.0**
NORTHERN AMERICA AND EUROPE	**1.9**	**2.0**	**7.6**	**9.5**
Europe	2.3	2.3	7.1	8.3
Eastern Europe	1.5	1.6	7.8	9.4
Northern Europe	3.6	3.0	8.0	7.8
Southern Europe	1.2	1.8	4.8	7.4
Western Europe	2.5	2.7	6.9	7.8
Northern America	0.9	1.4	8.8	12.5

SOURCE: FAO. 2026. FAOSTAT: Suite of Food Security Indicators. [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/FS. Licence: CC-BY-4.0.

TABLE A1.5 COST OF A HEALTHY DIET, 2017–2025

Regions/subregions/ countries/territories	Cost of a healthy diet								
	2017	2018	2019	2020	2021	2022	2023	2024	2025
	(PPP dollars per person per day)								
WORLD	**2.94**	**3.00**	**3.13**	**3.32**	**3.44**	**3.81**	**4.07**	**4.20**	**4.28**
Low-income countries	**3.25**	**3.13**	**3.20**	**3.30**	**3.46**	**3.99**	**4.10**	**4.01**	**4.05**
Lower-middle-income countries	**2.95**	**3.04**	**3.16**	**3.36**	**3.53**	**3.86**	**4.14**	**4.33**	**4.36**
Upper-middle-income countries	**2.95**	**2.99**	**3.16**	**3.38**	**3.45**	**3.82**	**4.03**	**4.14**	**4.25**
High-income countries	**2.84**	**2.91**	**2.98**	**3.09**	**3.20**	**3.59**	**3.96**	**4.06**	**4.20**
AFRICA	**3.09**	**3.12**	**3.22**	**3.33**	**3.54**	**3.99**	**4.26**	**4.38**	**4.35**
Northern Africa	**3.52**	**3.68**	**3.70**	**3.66**	**3.83**	**4.73**	**5.30**	**5.35**	**5.24**
Algeria[3]	4.10	4.16	4.18	4.19	4.47	5.01	5.41	5.53	5.56
Egypt	3.81	4.02	3.98	3.88	4.01	4.69	5.96	6.39	6.06
Libya	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Morocco	2.63	2.50	2.47	2.47	2.76	3.11	3.45	3.54	3.64
Sudan[1]	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Tunisia	3.66	3.72	3.79	3.81	3.97	4.38	4.77	5.02	5.22
Sub-Saharan Africa	**2.99**	**2.99**	**3.11**	**3.25**	**3.48**	**3.83**	**4.03**	**4.16**	**4.16**
Eastern Africa	**2.84**	**2.89**	**3.03**	**3.20**	**3.43**	**3.82**	**4.05**	**4.19**	**4.34**
Burundi	3.40	3.12	3.10	3.33	3.54	4.00	4.50	4.55	4.65
Comoros	4.47	4.43	4.43	4.37	4.48	4.85	4.97	5.24	5.47
Djibouti[1]	2.93	3.08	3.31	3.54	3.65	4.33	4.50	4.75	4.84
Eritrea	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Ethiopia	2.94	3.03	3.27	3.52	3.88	4.29	4.44	4.67	4.75
Kenya	2.56	2.62	2.83	3.09	3.42	3.86	4.10	4.26	4.50
Madagascar[3]	3.08	3.18	3.21	3.20	3.34	3.65	3.87	3.96	4.08
Malawi	2.38	2.52	2.77	3.09	3.43	3.88	4.29	4.69	5.01
Mauritius	3.38	3.41	3.46	3.64	3.77	4.21	4.42	4.75	4.84
Mozambique	2.74	2.71	2.77	2.93	3.23	3.57	3.81	4.14	4.49
Rwanda	3.05	2.89	2.98	3.30	3.31	3.87	4.59	4.52	4.58
Seychelles	3.53	3.50	3.53	3.46	3.79	4.05	4.22	4.31	4.40
Somalia[1]	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
South Sudan[1]	3.13	3.12	3.55	3.41	3.90	4.09	3.76	3.79	4.09
Uganda	3.12	3.03	2.93	2.90	2.95	3.36	3.68	3.65	3.74
United Republic of Tanzania[3]	2.14	2.30	2.45	2.64	2.79	3.10	3.32	3.39	3.53
Zambia	2.73	2.79	2.88	2.96	3.28	3.61	3.81	3.98	4.18
Zimbabwe	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Middle Africa	**3.60**	**3.23**	**3.36**	**3.40**	**3.53**	**3.73**	**3.74**	**3.63**	**3.65**
Angola	3.18	3.27	3.43	3.70	4.11	4.55	4.72	5.00	5.18
Cameroon	2.60	2.74	2.90	3.10	3.41	3.90	4.20	4.36	4.58
Central African Republic[3]	2.92	3.05	3.19	3.34	3.63	3.94	4.13	4.25	4.34
Chad	2.82	2.80	2.80	2.95	3.04	3.49	3.77	3.94	4.07
Congo[3]	3.04	3.16	3.24	3.43	3.74	4.16	4.33	4.43	4.48
Democratic Republic of the Congo[1]	4.25	3.44	3.56	3.44	3.41	3.37	3.19	2.77	2.66

TABLE A1.5 (Continued)

Regions/subregions/ countries/territories	Cost of a healthy diet								
	2017	2018	2019	2020	2021	2022	2023	2024	2025
	(PPP dollars per person per day)								
Equatorial Guinea[3]	3.70	3.77	3.81	3.93	4.07	4.43	4.60	4.79	4.88
Gabon	3.24	3.31	3.44	3.60	3.81	4.18	4.45	4.64	4.78
Sao Tome and Principe[3]	2.31	2.63	2.98	3.29	3.80	4.17	4.43	4.64	4.91
Southern Africa	**3.03**	**2.98**	**3.00**	**3.07**	**3.22**	**3.54**	**3.85**	**3.99**	**4.14**
Botswana	3.01	3.00	3.04	3.21	3.41	3.62	4.01	4.21	4.44
Eswatini[1]	3.36	3.26	3.35	3.49	3.80	4.05	4.47	4.69	4.95
Lesotho	3.59	3.63	3.74	4.00	4.31	4.68	4.96	5.24	5.47
Namibia	3.26	3.26	3.33	3.51	3.75	4.11	4.50	4.67	4.88
South Africa	3.00	2.94	2.94	3.00	3.14	3.46	3.76	3.89	4.02
Western Africa	**2.87**	**2.98**	**3.10**	**3.27**	**3.55**	**3.92**	**4.17**	**4.42**	**4.21**
Benin	2.85	2.87	2.89	2.90	3.07	3.25	3.30	3.39	3.58
Burkina Faso	2.77	2.82	2.72	2.80	2.97	3.48	3.55	3.73	3.92
Cabo Verde	3.16	2.92	2.86	2.83	2.92	3.38	3.69	3.80	3.88
Côte d'Ivoire	2.66	2.69	2.66	2.73	2.91	3.25	3.45	3.59	3.64
Gambia[3]	2.69	2.86	2.98	3.18	3.45	3.81	4.13	4.38	4.49
Ghana[3]	3.54	3.51	3.48	3.46	3.50	3.83	4.29	4.49	4.65
Guinea[3]	2.59	2.84	3.05	3.35	3.72	4.14	4.65	5.10	5.33
Guinea-Bissau	3.01	3.04	3.14	3.24	3.45	3.74	3.98	4.09	4.38
Liberia[3]	3.24	3.30	3.51	3.78	3.67	3.94	3.64	3.56	3.60
Mali	2.97	2.96	2.97	3.04	3.16	3.56	3.72	3.86	3.98
Mauritania	3.86	3.92	4.02	4.13	4.43	5.04	5.28	5.40	5.57
Niger	3.25	3.27	3.34	3.60	4.02	4.48	4.68	4.98	5.01
Nigeria	2.78	2.96	3.16	3.41	3.76	4.12	4.39	4.72	4.17
Senegal	2.65	2.72	2.79	2.88	3.04	3.44	3.63	3.73	3.83
Sierra Leone	2.64	2.80	2.76	2.83	3.08	3.39	3.74	3.84	3.89
Togo	2.54	2.60	2.65	2.81	3.12	3.50	3.58	3.77	3.95
ASIA	**3.00**	**3.07**	**3.22**	**3.44**	**3.54**	**3.87**	**4.09**	**4.24**	**4.33**
Central Asia	**3.37**	**3.31**	**3.39**	**3.52**	**3.64**	**4.02**	**4.22**	**4.14**	**4.15**
Kazakhstan	2.12	2.13	2.28	2.43	2.59	2.88	3.02	3.02	3.07
Kyrgyzstan	3.23	2.98	2.94	3.21	3.36	3.70	3.77	3.76	3.91
Tajikistan[1]	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Turkmenistan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Uzbekistan	4.11	4.06	4.00	3.97	4.06	4.52	4.78	4.67	4.60
Eastern Asia	**2.94**	**2.97**	**3.16**	**3.46**	**3.46**	**3.78**	**3.97**	**4.07**	**4.15**
China, mainland	2.62	2.63	2.85	3.16	3.13	3.41	3.53	3.60	3.64
Taiwan Province of China	4.43	4.56	4.69	4.82	4.95	5.08	5.21	5.35	5.48
China, Hong Kong SAR	3.33	3.44	3.78	4.04	4.20	4.65	4.77	4.81	4.65
China, Macao SAR	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Democratic People's Republic of Korea	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

TABLE A1.5 (Continued)

Regions/subregions/ countries/territories	Cost of a healthy diet								
	2017	2018	2019	2020	2021	2022	2023	2024	2025
	(PPP dollars per person per day)								
Japan	5.48	5.65	5.57	5.80	5.98	6.62	7.48	7.79	8.27
Mongolia	4.11	4.26	4.56	5.01	5.55	6.17	6.74	7.06	7.28
Republic of Korea	4.73	4.92	4.90	5.18	5.55	6.25	6.75	7.09	7.37
South-eastern Asia	**3.58**	**3.70**	**3.78**	**3.96**	**4.05**	**4.38**	**4.68**	**4.91**	**5.19**
Brunei Darussalam[3]	4.11	4.26	4.36	4.55	4.85	5.32	5.67	5.89	6.04
Cambodia[3]	3.55	3.62	3.68	3.84	3.95	4.25	4.47	4.62	4.77
Indonesia	3.61	3.68	3.68	3.86	4.00	4.39	4.63	4.84	5.09
Lao People's Democratic Republic	3.74	3.77	3.91	4.22	4.33	4.60	5.07	5.19	5.23
Malaysia	3.10	3.20	3.30	3.43	3.52	3.89	4.15	4.27	4.42
Myanmar[1]	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Philippines	3.26	3.40	3.47	3.55	3.73	3.97	4.21	4.39	4.48
Singapore	2.78	2.86	2.93	3.00	3.09	3.31	3.45	3.52	3.62
Thailand[1]	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Timor-Leste	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Viet Nam[3]	3.27	3.33	3.47	3.79	3.88	4.17	4.35	4.49	4.59
Southern Asia	**2.85**	**2.93**	**3.06**	**3.26**	**3.44**	**3.75**	**3.97**	**4.13**	**4.18**
Afghanistan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Bangladesh	3.09	3.26	3.40	3.61	3.83	4.13	4.33	4.49	4.59
Bhutan[3]	4.14	4.31	4.44	4.86	5.14	5.48	5.69	5.96	6.17
India	2.77	2.86	3.01	3.23	3.40	3.67	3.86	4.07	4.11
Iran (Islamic Republic of)	3.01	3.11	3.35	3.15	3.37	4.09	4.52	4.45	4.80
Maldives	3.36	3.34	3.28	3.33	3.39	3.74	4.01	4.30	4.45
Nepal	3.33	3.32	3.36	3.51	3.62	3.88	4.00	4.18	4.19
Pakistan	2.97	2.91	2.95	3.18	3.30	3.70	4.08	3.95	3.94
Sri Lanka	3.86	3.81	3.70	3.65	4.27	4.87	4.89	5.03	5.21
Western Asia	**2.97**	**3.09**	**3.22**	**3.32**	**3.47**	**3.98**	**4.27**	**4.44**	**4.47**
Armenia	3.22	3.31	3.44	3.54	3.80	4.27	4.33	4.37	4.56
Azerbaijan	2.90	2.95	3.10	3.28	3.44	3.92	4.13	4.20	4.37
Bahrain	3.04	3.19	3.30	3.42	3.25	3.74	4.12	4.33	4.32
Cyprus[3]	2.89	2.93	3.04	3.14	3.10	3.50	3.94	4.08	4.18
Georgia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Iraq[3]	3.32	3.48	3.50	3.50	3.42	3.76	3.97	4.78	4.88
Israel	2.51	2.58	2.59	2.61	2.75	3.12	3.41	3.55	3.65
Jordan	2.88	2.90	2.94	3.02	2.99	3.20	3.28	3.37	3.45
Kuwait	2.13	2.18	2.19	2.22	2.46	2.74	2.93	3.09	3.26
Lebanon	1.71	1.86	1.88	3.15	3.71	5.58	6.42	6.45	6.97
Oman	2.29	2.39	2.49	2.48	2.45	2.70	2.87	3.02	3.07
Palestine	2.52	2.65	2.76	2.77	2.72	3.03	3.16	3.28	3.95
Qatar[3]	2.32	2.43	2.45	2.44	2.35	2.52	2.58	2.66	2.73
Saudi Arabia	2.46	2.46	2.48	2.43	2.62	2.87	2.96	3.02	3.07
Syrian Arab Republic[2]	2.50	2.55	2.61	3.91	5.01	5.96	7.26	7.62	6.85

TABLE A1.5 (Continued)

Regions/subregions/ countries/territories	Cost of a healthy diet								
	2017	2018	2019	2020	2021	2022	2023	2024	2025
	(PPP dollars per person per day)								
Türkiye	3.45	3.59	3.88	3.73	3.80	4.44	4.65	4.51	4.58
United Arab Emirates[3]	2.46	2.74	2.87	2.85	2.66	2.93	3.11	3.22	3.27
Yemen	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
LATIN AMERICA AND THE CARIBBEAN	**3.16**	**3.21**	**3.33**	**3.54**	**3.76**	**4.23**	**4.57**	**4.75**	**4.91**
Caribbean	**3.80**	**3.89**	**4.09**	**4.36**	**4.65**	**5.11**	**5.41**	**5.80**	**6.04**
Antigua and Barbuda[3]	3.77	4.24	4.38	4.67	4.92	5.46	5.80	5.92	6.05
Aruba[1]	3.75	3.99	4.28	4.29	4.43	5.01	5.18	5.30	5.49
Bahamas[3]	4.20	4.24	4.12	4.19	4.28	4.97	5.26	5.55	5.63
Barbados	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
British Virgin Islands[2]	3.45	3.51	3.61	3.74	3.94	5.15	5.61	5.96	6.42
Cuba	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cayman Islands[2]	3.50	3.64	3.61	3.81	4.09	4.36	4.58	4.65	4.80
Curaçao[2]	2.95	3.13	3.35	3.65	4.00	4.45	5.07	5.42	5.02
Dominica[3]	4.17	4.43	4.63	5.03	5.26	5.68	6.15	6.45	6.69
Dominican Republic	3.39	3.48	3.74	4.05	4.41	4.87	5.21	5.40	5.60
Grenada[3]	4.43	4.50	4.44	4.50	4.59	5.11	5.58	5.83	6.01
Haiti	3.93	4.05	4.28	4.57	4.88	5.30	5.53	6.19	6.51
Jamaica	4.88	4.78	4.83	4.90	4.90	5.41	5.83	6.02	6.21
Puerto Rico	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Saint Kitts and Nevis[3]	3.37	3.51	3.65	3.81	3.95	4.59	4.84	4.97	5.15
Saint Lucia[3]	3.60	3.80	4.03	4.41	4.57	4.90	5.22	5.18	5.24
Saint Vincent and the Grenadines	4.30	4.44	4.48	4.65	4.87	5.48	6.03	6.43	6.71
Sint Maarten (Dutch part)[2]	4.43	4.58	4.67	4.78	4.82	4.89	4.99	5.11	5.25
Trinidad and Tobago	3.72	3.87	3.93	4.11	4.43	4.98	5.35	5.56	5.82
Turks and Caicos Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Central America	**3.02**	**3.10**	**3.14**	**3.24**	**3.43**	**3.92**	**4.39**	**4.54**	**4.66**
Belize	2.56	2.69	2.90	3.16	3.52	3.85	4.32	4.54	4.69
Costa Rica	3.54	3.58	3.67	3.56	3.70	4.17	4.73	4.84	5.04
El Salvador	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Guatemala	2.88	3.12	3.45	3.74	4.01	4.43	4.78	5.03	5.18
Honduras	3.69	3.66	3.64	3.76	3.81	4.28	4.64	4.75	4.85
Mexico	2.90	2.97	2.98	3.07	3.27	3.78	4.28	4.42	4.54
Nicaragua	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Panama[3]	4.19	3.88	3.78	3.65	3.63	3.96	4.20	4.32	4.46
South America	**3.17**	**3.22**	**3.36**	**3.61**	**3.83**	**4.30**	**4.58**	**4.77**	**4.94**
Argentina[1]	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Bolivia (Plurinational State of)	3.62	3.61	3.75	3.78	3.96	4.30	4.57	4.82	5.38
Brazil	3.15	3.23	3.39	3.69	3.97	4.39	4.55	4.69	4.89
Chile	3.38	3.52	3.66	3.79	3.87	4.45	5.20	5.54	5.65
Colombia	2.84	2.87	2.95	3.15	3.30	4.12	4.82	4.90	5.04

TABLE A1.5 (Continued)

Regions/subregions/ countries/territories	Cost of a healthy diet								
	2017	2018	2019	2020	2021	2022	2023	2024	2025
	(PPP dollars per person per day)								
Ecuador	2.50	2.54	2.63	2.77	2.91	3.19	3.43	3.56	3.66
Guyana	4.62	4.79	5.06	5.41	5.90	6.37	6.64	6.83	7.02
Paraguay	3.74	3.73	3.71	3.73	3.95	4.47	4.71	5.04	5.31
Peru	3.25	3.19	3.24	3.34	3.50	3.94	4.30	4.34	4.45
Suriname	4.40	4.33	4.67	4.94	5.44	5.88	6.40	6.16	5.94
Uruguay	2.78	2.93	3.08	3.45	3.65	4.01	4.29	4.41	4.54
Venezuela (Bolivarian Republic of)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
OCEANIA	**2.41**	**2.42**	**2.48**	**2.59**	**2.68**	**3.04**	**3.29**	**3.32**	**3.43**
Australia and New Zealand	**2.38**	**2.39**	**2.45**	**2.56**	**2.65**	**3.01**	**3.26**	**3.28**	**3.39**
Australia	2.33	2.36	2.40	2.51	2.61	2.96	3.19	3.23	3.33
New Zealand	2.65	2.57	2.70	2.83	2.86	3.28	3.59	3.54	3.71
Oceania excluding Australia and New Zealand	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
Melanesia	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
Fiji	3.20	3.26	3.41	3.48	3.81	4.12	4.48	4.75	4.75
New Caledonia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Papua New Guinea	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Solomon Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Vanuatu	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Micronesia	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
Kiribati	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Marshall Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Micronesia (Federated States of)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Naoero	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Palau	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Polynesia	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
American Samoa	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cook Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
French Polynesia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Niue	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Samoa	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tokelau (Associate Member)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tonga	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tuvalu	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
NORTHERN AMERICA AND EUROPE	**2.43**	**2.47**	**2.57**	**2.66**	**2.76**	**3.13**	**3.46**	**3.53**	**3.64**
Northern America	**2.26**	**2.28**	**2.30**	**2.38**	**2.48**	**2.76**	**2.91**	**2.94**	**3.02**
Bermuda[2]	2.88	2.94	3.12	3.33	3.55	3.96	4.31	4.53	4.78
Canada	3.08	3.13	3.19	3.33	3.52	3.90	4.22	4.27	4.46
Greenland	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
United States of America	2.17	2.18	2.20	2.28	2.36	2.63	2.76	2.79	2.86

TABLE A1.5 (Continued)

Regions/subregions/ countries/territories	Cost of a healthy diet								
	2017	2018	2019	2020	2021	2022	2023	2024	2025
	(PPP dollars per person per day)								
Europe	**2.51**	**2.58**	**2.72**	**2.81**	**2.91**	**3.33**	**3.76**	**3.84**	**3.97**
Eastern Europe	**2.54**	**2.58**	**2.76**	**2.87**	**3.00**	**3.37**	**3.64**	**3.72**	**3.85**
Belarus	3.13	3.13	3.19	3.22	3.30	3.60	3.72	3.83	4.01
Bulgaria	3.39	3.47	3.67	3.80	3.93	4.77	5.51	5.52	5.75
Czechia	2.81	2.83	2.97	3.00	2.90	3.42	3.94	3.81	3.99
Hungary	3.36	3.45	3.60	3.69	3.68	4.50	5.40	5.25	5.36
Poland	2.95	3.03	3.25	3.38	3.35	3.83	4.27	4.38	4.55
Republic of Moldova	2.34	2.47	2.65	2.90	3.08	3.42	3.56	3.69	3.81
Romania	2.79	2.84	3.03	3.17	3.22	3.57	4.15	4.12	4.21
Russian Federation	2.25	2.28	2.45	2.57	2.77	3.06	3.14	3.26	3.39
Slovakia	2.46	2.53	2.69	2.89	3.01	3.57	4.41	4.49	4.57
Ukraine	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Northern Europe	**2.06**	**2.11**	**2.20**	**2.23**	**2.29**	**2.65**	**3.08**	**3.13**	**3.25**
Denmark	2.20	2.26	2.34	2.41	2.49	2.78	3.21	3.28	3.47
Estonia	3.14	3.21	3.35	3.43	3.34	3.81	4.55	4.67	4.89
Finland	2.53	2.61	2.72	2.81	2.87	3.33	3.78	3.82	4.00
Iceland	2.37	2.41	2.52	2.69	2.77	3.07	3.43	3.50	3.64
Ireland	2.33	2.27	2.30	2.22	2.29	2.58	2.91	3.00	3.14
Latvia	3.04	3.03	3.19	3.28	3.55	4.19	4.78	4.91	5.16
Lithuania	2.85	2.87	3.04	3.07	3.12	3.70	4.20	4.23	4.37
Norway	3.32	3.43	3.53	3.61	3.63	4.02	4.51	4.67	4.91
Sweden	2.71	2.77	2.91	3.00	3.06	3.56	4.06	4.09	4.35
United Kingdom of Great Britain and Northern Ireland	1.70	1.75	1.83	1.86	1.90	2.23	2.64	2.67	2.75
Southern Europe	**2.79**	**2.86**	**3.01**	**3.07**	**3.20**	**3.73**	**4.36**	**4.47**	**4.62**
Albania	3.04	3.13	3.32	3.40	3.49	4.17	4.88	4.99	5.16
Andorra	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Bosnia and Herzegovina	4.07	4.13	4.34	4.34	4.54	5.54	6.31	6.45	6.88
Croatia	3.31	3.35	3.44	3.53	3.71	4.25	4.82	4.89	5.10
Greece	2.93	2.99	3.10	3.13	3.25	3.79	4.44	4.55	4.65
Italy	2.74	2.83	3.01	3.09	3.17	3.67	4.22	4.37	4.55
Malta	3.35	3.49	3.75	3.74	3.79	4.43	5.07	5.17	5.37
Montenegro	3.21	3.24	3.49	3.43	3.63	4.48	5.03	4.96	5.08
North Macedonia	3.29	3.30	3.48	3.51	3.84	4.50	5.05	5.19	5.39
Portugal	2.64	2.73	2.85	2.87	2.99	3.57	4.10	4.17	4.30
Serbia	3.56	3.64	3.84	3.86	4.01	4.66	5.55	5.58	5.74
Slovenia	2.60	2.70	2.85	2.98	3.01	3.49	3.97	4.02	4.26
Spain	2.53	2.57	2.70	2.75	2.94	3.45	4.13	4.22	4.33

TABLE A1.5 (Continued)

Regions/subregions/ countries/territories	Cost of a healthy diet								
	2017	2018	2019	2020	2021	2022	2023	2024	2025
	(PPP dollars per person per day)								
Western Europe	**2.51**	**2.60**	**2.73**	**2.83**	**2.90**	**3.33**	**3.83**	**3.91**	**4.03**
Austria	2.06	2.11	2.19	2.30	2.42	2.81	3.12	3.19	3.28
Belgium	2.00	2.07	2.16	2.28	2.26	2.53	2.97	3.03	3.12
France	2.58	2.65	2.83	2.94	2.96	3.38	3.93	4.00	4.12
Germany	2.64	2.76	2.87	2.97	3.10	3.59	4.14	4.22	4.35
Luxembourg	2.46	2.59	2.62	2.62	2.65	3.05	3.55	3.65	3.73
Netherlands (Kingdom of the)	2.21	2.27	2.39	2.49	2.54	2.96	3.38	3.45	3.56
Switzerland	2.39	2.45	2.55	2.59	2.63	2.84	3.01	3.16	3.22

NOTES: PPP = purchasing power parity; n.a. = data not available; n.r. = data not reported. CoHD for aggregates is reported as the population-weighted mean of the countries within each group, and only for groups where estimates cover at least 50 percent of the total population.
[1] PPP from International Monetary Fund. [2] PPP imputed using FAO methods for countries with missing data from 2023 to 2025. [3] PPP for 2025 estimated using the World Bank's World Development Indicators extrapolation method.

SOURCES: FAO. 2026. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 21 July 2026]. www.fao.org/faostat/en/#data/CAHD. Licence: CC-BY-4.0; IMF. 2026. IMF Datamapper: Implied PPP conversion rate. [Accessed on 1 May 2026]. https://www.imf.org/external/datamapper/PPPEX@WEO/OEMDC/ADVEC/WEOWORLD

TABLE A1.6 UNAFFORDABILITY OF A HEALTHY DIET, 2017–2025

Regions/subregions/ country groupings	Proportion of the population unable to afford a healthy diet									Number of people unable to afford a healthy diet								
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2017	2018	2019	2020	2021	2022	2023	2024	2025
	(%)									(millions)								
WORLD	**41.0**	**39.0**	**38.0**	**39.6**	**37.4**	**36.7**	**35.4**	**34.3**	**32.7**	**3 135.5**	**3 011.2**	**2 968.9**	**3 126.2**	**2 973.5**	**2 941.1**	**2 862.7**	**2 801.0**	**2 692.1**
Low-income countries	**77.5**	**75.9**	**75.8**	**78.7**	**77.0**	**76.2**	**77.5**	**77.3**	**76.1**	**398.4**	**401.3**	**412.5**	**440.8**	**443.1**	**450.2**	**470.2**	**482.1**	**487.6**
Lower-middle-income countries	**56.0**	**53.2**	**51.7**	**54.2**	**52.4**	**50.2**	**48.6**	**47.1**	**44.1**	**1 595.8**	**1 537.6**	**1 514.8**	**1 611.0**	**1 574.8**	**1 529.6**	**1 498.9**	**1 472.1**	**1 394.2**
Upper-middle-income countries	**33.2**	**30.7**	**29.7**	**31.0**	**26.7**	**26.7**	**24.7**	**23.3**	**22.2**	**920.9**	**858.6**	**836.3**	**876.3**	**758.4**	**758.3**	**703.1**	**666.0**	**636.7**
High-income countries	**11.9**	**11.4**	**10.5**	**9.7**	**9.2**	**9.5**	**8.9**	**8.3**	**8.1**	**161.8**	**156.1**	**145.1**	**133.5**	**127.0**	**132.3**	**124.3**	**116.3**	**113.2**
AFRICA	**64.8**	**64.4**	**64.3**	**66.1**	**66.2**	**66.4**	**67.8**	**67.9**	**66.6**	**830.3**	**846.6**	**865.6**	**912.8**	**935.0**	**960.4**	**1 004.0**	**1 027.6**	**1 031.2**
Northern Africa	**36.3**	**37.5**	**36.7**	**35.4**	**31.0**	**30.3**	**37.6**	**38.8**	**34.8**	**88.0**	**92.9**	**92.4**	**90.7**	**80.7**	**80.2**	**100.9**	**105.6**	**96.1**
Algeria	41.3	40.6	40.1	43.2	43.0	43.4	43.5	41.8	38.8	17.2	17.2	17.4	19.0	19.2	19.7	20.1	19.6	18.4
Egypt	40.2	41.3	36.8	31.0	28.1	30.7	42.7	45.4	38.5	41.7	43.7	39.5	33.9	31.2	34.5	48.9	52.9	45.5
Libya	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Morocco	13.7	13.0	12.3	14.4	12.5	13.2	13.9	13.1	12.4	4.8	4.6	4.5	5.3	4.6	4.9	5.3	5.0	4.8
Sudan	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Tunisia	8.1	7.6	7.3	8.6	7.6	7.6	8.5	8.7	8.6	0.9	0.9	0.9	1.0	0.9	0.9	1.0	1.1	1.1
Sub-Saharan Africa	**71.4**	**70.6**	**70.6**	**73.2**	**74.2**	**74.5**	**74.6**	**74.3**	**73.5**	**742.5**	**754.0**	**773.4**	**822.4**	**854.6**	**880.5**	**903.3**	**922.2**	**935.4**
Eastern Africa	**74.9**	**74.5**	**75.4**	**77.5**	**78.7**	**78.9**	**78.3**	**77.5**	**76.5**	**311.6**	**318.2**	**331.2**	**349.7**	**364.5**	**374.8**	**382.2**	**388.0**	**392.8**
Burundi	90.6	88.6	88.0	89.5	89.7	90.5	91.5	91.1	90.9	10.4	10.5	10.8	11.3	11.6	12.1	12.5	12.8	13.1
Comoros	59.2	57.1	56.2	55.4	54.5	53.2	49.8	48.5	48.6	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Djibouti	56.8	55.7	55.3	56.5	55.4	55.8	54.2	52.2	49.8	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Eritrea	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Ethiopia	65.7	65.3	67.9	70.9	74.7	74.5	72.3	70.9	67.9	72.0	73.6	78.6	84.3	91.3	93.4	93.0	93.6	92.0
Kenya	69.8	69.8	72.1	76.3	78.0	77.8	76.9	76.4	76.3	34.3	35.1	36.9	39.8	41.5	42.2	42.6	43.1	43.9
Madagascar	82.5	83.1	83.0	85.3	85.6	85.8	85.9	85.3	85.3	22.1	22.8	23.4	24.7	25.4	26.1	26.8	27.3	27.9
Malawi	85.5	86.4	87.8	88.9	88.9	89.8	91.1	92.1	92.7	15.4	16.0	16.7	17.4	17.8	18.5	19.2	19.9	20.6
Mauritius	18.1	16.9	16.0	22.1	21.3	20.7	19.2	19.1	17.8	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2
Mozambique	85.9	86.2	87.2	89.0	89.7	89.9	89.9	90.7	91.3	24.2	25.0	26.1	27.4	28.4	29.4	30.2	31.4	32.5
Rwanda	81.6	77.7	75.1	79.1	74.6	74.9	76.8	72.2	69.7	10.0	9.7	9.6	10.3	10.0	10.2	10.7	10.3	10.2
Seychelles	46.5	45.0	44.7	45.5	40.2	51.2	51.2	45.2	43.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Somalia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

TABLE A1.6 (Continued)

Regions/subregions/ country groupings	Proportion of the population unable to afford a healthy diet									Number of people unable to afford a healthy diet								
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2017	2018	2019	2020	2021	2022	2023	2024	2025
	(%)									(millions)								
South Sudan	91.4	90.8	92.4	92.8	93.4	93.8	92.6	95.0	93.9	9.4	9.2	9.6	9.9	10.1	10.3	10.6	11.4	11.4
Uganda	77.2	75.9	75.1	75.1	74.6	75.7	76.4	74.4	73.6	31.0	31.5	32.3	33.4	34.3	35.8	37.2	37.2	37.8
United Republic of Tanzania	74.7	74.2	73.4	73.9	73.6	73.8	73.9	73.0	73.0	41.6	42.6	43.4	45.0	46.2	47.7	49.2	50.1	51.5
Zambia	82.8	83.1	84.0	85.5	86.1	86.5	86.3	86.3	86.2	14.4	14.9	15.5	16.3	16.9	17.4	17.9	18.4	18.9
Zimbabwe	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Middle Africa	**78.3**	**77.8**	**77.6**	**78.9**	**79.1**	**79.1**	**79.1**	**78.9**	**78.7**	**134.1**	**137.5**	**141.4**	**148.3**	**153.2**	**158.0**	**163.0**	**168.1**	**172.8**
Angola	60.1	64.8	66.8	69.6	71.1	71.4	71.8	72.2	72.9	18.2	20.3	21.6	23.3	24.5	25.4	26.4	27.4	28.4
Cameroon	50.8	50.6	50.8	52.1	52.6	54.1	55.0	55.0	55.3	12.3	12.6	12.9	13.6	14.2	14.9	15.6	16.0	16.5
Central African Republic	86.1	86.1	85.9	86.4	87.1	87.1	87.2	87.5	87.6	4.1	4.2	4.2	4.3	4.5	4.4	4.5	4.7	4.8
Chad	67.2	63.4	59.6	62.2	62.0	63.4	65.4	66.7	66.6	10.5	10.2	9.9	10.7	11.1	11.7	12.6	13.5	14.0
Congo	73.3	74.0	73.9	76.2	77.1	78.2	78.2	78.1	77.3	3.9	4.1	4.1	4.4	4.5	4.7	4.8	4.9	5.0
Democratic Republic of the Congo	95.8	93.7	93.2	93.7	93.2	92.4	91.5	90.8	90.1	83.4	84.4	86.7	90.0	92.4	94.7	96.8	99.2	101.7
Equatorial Guinea	57.0	56.9	56.8	61.2	61.1	60.7	60.0	61.9	63.2	0.9	0.9	0.9	1.0	1.1	1.1	1.1	1.2	1.2
Gabon	32.8	33.7	34.5	36.1	37.2	38.7	39.3	39.2	39.3	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.0
Sao Tome and Principe	45.0	44.0	44.4	45.0	45.5	47.1	48.5	49.1	51.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	0.1	0.1	0.1
Southern Africa	**60.8**	**59.6**	**58.8**	**60.2**	**58.6**	**57.7**	**58.0**	**58.1**	**58.3**	**40.0**	**39.8**	**39.9**	**41.6**	**41.1**	**41.1**	**41.9**	**42.5**	**43.2**
Botswana	61.9	60.0	59.4	59.5	59.2	58.7	58.7	59.0	59.9	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5
Eswatini	69.3	68.5	67.1	68.1	67.7	68.6	69.5	69.1	68.1	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9
Lesotho	70.7	71.5	72.5	76.2	76.7	76.5	76.8	77.1	77.4	1.5	1.6	1.6	1.7	1.7	1.7	1.8	1.8	1.8
Namibia	45.4	45.9	46.7	50.8	48.5	47.2	48.1	47.8	47.9	1.1	1.2	1.2	1.4	1.4	1.4	1.4	1.4	1.5
South Africa	60.9	59.5	58.6	59.9	58.1	57.3	57.5	57.6	57.9	35.1	34.9	34.9	36.2	35.8	35.7	36.3	36.9	37.5
Western Africa	**66.7**	**65.6**	**64.7**	**68.5**	**70.0**	**70.9**	**71.4**	**71.4**	**70.4**	**258.0**	**259.8**	**262.6**	**284.4**	**297.5**	**308.2**	**317.8**	**325.0**	**327.9**
Benin	80.1	71.3	65.4	63.7	62.2	58.8	56.3	54.1	53.5	9.6	8.8	8.3	8.3	8.3	8.1	7.9	7.8	7.9
Burkina Faso	68.4	65.5	62.6	63.2	62.7	66.6	65.3	65.1	65.5	13.6	13.4	13.1	13.6	13.8	15.0	15.0	15.3	15.8
Cabo Verde	56.5	54.8	52.3	60.6	58.4	54.5	54.0	51.0	49.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Côte d'Ivoire	56.4	52.1	46.8	49.7	50.5	51.1	50.0	48.7	46.6	15.1	14.3	13.2	14.4	15.0	15.5	15.6	15.5	15.2
Gambia	43.6	42.7	42.1	44.8	44.7	44.5	44.8	45.0	43.7	1.0	1.0	1.0	1.1	1.2	1.2	1.2	1.2	1.2
Ghana	67.2	66.1	64.8	65.6	64.7	64.7	66.4	65.8	65.8	20.2	20.2	20.3	20.9	21.1	21.5	22.4	22.6	23.1

TABLE A1.6 (Continued)

Regions/subregions/ country groupings	Proportion of the population unable to afford a healthy diet									Number of people unable to afford a healthy diet								
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2017	2018	2019	2020	2021	2022	2023	2024	2025
	(%)									(millions)								
Guinea	47.1	46.4	45.4	45.4	45.1	45.9	48.6	50.4	50.3	5.8	5.9	5.9	6.1	6.2	6.5	7.0	7.4	7.6
Guinea-Bissau	69.4	65.8	62.7	65.1	67.0	67.0	66.6	65.5	66.4	1.3	1.3	1.2	1.3	1.4	1.4	1.4	1.4	1.5
Liberia	65.8	65.0	67.4	70.8	66.3	61.1	60.8	62.1	59.6	3.2	3.2	3.4	3.6	3.5	3.3	3.3	3.5	3.4
Mali	59.2	53.8	51.3	56.6	59.4	62.4	61.8	61.4	60.8	11.7	11.0	10.8	12.3	13.3	14.4	14.7	15.0	15.3
Mauritania	49.8	49.9	50.4	52.2	54.6	55.4	53.8	51.7	50.9	2.1	2.2	2.3	2.4	2.6	2.7	2.7	2.7	2.7
Niger	86.5	84.6	84.2	85.4	87.6	86.9	87.5	86.7	85.8	18.6	18.8	19.3	20.3	21.5	22.0	22.9	23.4	24.0
Nigeria	68.6	69.5	70.1	75.8	78.5	79.7	80.9	81.6	80.5	137.5	142.4	146.9	162.3	171.6	177.8	184.3	189.8	191.2
Senegal	54.7	49.5	47.6	49.0	47.9	49.8	49.4	47.4	45.5	8.5	7.9	7.8	8.2	8.3	8.8	8.9	8.8	8.6
Sierra Leone	65.0	65.3	61.5	63.1	63.7	63.6	64.8	63.6	61.9	4.8	4.9	4.8	5.0	5.2	5.3	5.5	5.5	5.5
Togo	64.6	56.7	53.1	54.7	56.6	57.4	54.9	54.1	53.7	4.7	4.2	4.0	4.3	4.5	4.6	4.5	4.5	4.6
ASIA	**43.1**	**40.0**	**38.5**	**40.7**	**36.7**	**35.4**	**32.9**	**31.3**	**28.9**	**1 972.3**	**1 844.5**	**1 792.1**	**1 905.8**	**1 729.4**	**1 679.4**	**1 573.4**	**1 506.8**	**1 399.1**
Central Asia	**25.8**	**23.2**	**22.3**	**23.9**	**22.0**	**20.0**	**16.6**	**14.1**	**11.3**	**18.6**	**17.1**	**16.8**	**18.3**	**17.1**	**15.8**	**13.4**	**11.6**	**9.4**
Kazakhstan	11.5	7.9	8.6	8.0	6.3	6.2	5.1	4.0	3.4	2.1	1.5	1.7	1.6	1.3	1.2	1.0	0.8	0.7
Kyrgyzstan	46.1	38.8	36.3	45.9	41.9	40.6	32.1	24.4	22.1	2.9	2.5	2.4	3.1	2.9	2.8	2.3	1.8	1.6
Tajikistan	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Turkmenistan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Uzbekistan	22.9	21.7	20.1	21.5	19.8	17.2	13.6	10.5	6.2	7.3	7.0	6.6	7.2	6.8	6.0	4.9	3.8	2.3
Eastern Asia	**26.8**	**23.6**	**21.7**	**23.2**	**16.0**	**16.6**	**14.0**	**12.6**	**11.2**	**442.7**	**391.6**	**361.3**	**387.0**	**265.7**	**276.4**	**232.7**	**208.9**	**185.2**
China	28.4	24.6	22.6	24.5	16.4	17.2	14.3	12.8	11.2	410.7	357.5	329.6	357.3	238.9	250.9	208.3	185.2	162.2
China, mainland	28.8	24.9	22.9	24.8	16.6	17.4	14.5	12.9	11.3	406.5	353.8	326.1	354.1	236.3	248.3	205.9	183.1	160.4
Taiwan Province of China	7.9	7.4	6.7	5.2	5.7	5.2	5.2	4.3	3.8	1.9	1.8	1.6	1.2	1.4	1.2	1.2	1.0	0.9
China, Hong Kong SAR	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
China, Macao SAR	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Democratic People's Republic of Korea	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Japan	13.7	16.7	16.1	14.8	14.2	13.5	13.3	13.3	13.2	17.4	21.2	20.4	18.7	17.8	16.8	16.5	16.4	16.2
Mongolia	51.9	49.8	44.9	45.2	43.2	38.6	36.6	31.5	29.8	1.6	1.6	1.5	1.5	1.4	1.3	1.3	1.1	1.0
Republic of Korea	12.2	10.3	8.3	6.8	6.5	5.9	5.6	5.5	5.3	6.3	5.3	4.3	3.5	3.4	3.0	2.9	2.8	2.8
South-eastern Asia	**50.3**	**48.5**	**47.2**	**48.7**	**48.7**	**48.4**	**48.1**	**47.6**	**46.5**	**330.0**	**321.7**	**316.1**	**329.0**	**331.0**	**331.5**	**332.2**	**330.8**	**325.5**
Brunei Darussalam	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

TABLE A1.6 (Continued)

Regions/subregions/ country groupings	Proportion of the population unable to afford a healthy diet									Number of people unable to afford a healthy diet								
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2017	2018	2019	2020	2021	2022	2023	2024	2025
	(%)									(millions)								
Cambodia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Indonesia	74.4	71.7	70.5	70.2	69.7	72.0	71.6	70.6	68.6	198.9	193.5	192.1	193.0	192.8	200.7	201.4	200.2	195.9
Lao People's Democratic Republic	59.9	58.4	56.7	58.2	56.6	54.7	54.9	51.9	49.7	4.2	4.2	4.1	4.3	4.2	4.1	4.2	4.0	3.9
Malaysia	4.4	3.8	3.0	3.6	3.1	2.1	1.9	1.6	1.4	1.4	1.3	1.0	1.2	1.1	0.7	0.7	0.6	0.5
Myanmar	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Philippines	49.4	48.4	47.2	53.3	52.8	50.2	49.1	47.4	45.0	53.5	52.9	52.3	59.7	59.8	57.2	56.4	54.9	52.6
Singapore	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Thailand	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Timor-Leste	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Viet Nam	11.1	10.0	8.4	9.2	9.6	9.4	8.6	7.9	7.0	10.6	9.6	8.2	9.0	9.5	9.3	8.6	8.0	7.1
Southern Asia	**57.9**	**54.1**	**52.7**	**55.2**	**52.0**	**48.6**	**45.3**	**42.9**	**39.0**	**1 110.4**	**1 049.0**	**1 033.3**	**1 094.4**	**1 041.9**	**983.0**	**926.1**	**886.3**	**813.7**
Afghanistan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Bangladesh	62.8	58.5	55.1	51.6	47.2	43.3	41.5	40.4	38.6	101.8	95.6	90.8	85.9	79.2	73.4	71.1	70.0	67.8
Bhutan	28.8	14.5	17.8	17.0	21.3	4.7	4.3	4.1	3.7	0.2	0.1	0.1	0.1	0.2	<0.1	<0.1	<0.1	<0.1
India	59.8	55.2	52.9	56.2	52.4	47.8	43.1	40.6	35.5	813.1	759.2	734.4	788.2	740.6	681.3	619.9	589.2	520.1
Iran (Islamic Republic of)	29.9	32.6	41.2	41.8	40.4	39.5	38.5	35.7	37.4	25.4	28.1	35.9	36.7	35.8	35.4	34.9	32.7	34.5
Maldives	8.1	6.8	6.1	11.2	9.7	7.2	5.5	4.7	4.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nepal	34.7	28.9	27.8	29.2	26.0	22.7	20.6	20.0	17.9	9.7	8.1	7.9	8.5	7.7	6.8	6.1	5.9	5.3
Pakistan	59.3	58.0	59.7	62.1	62.6	64.5	67.2	64.4	63.0	132.4	131.6	137.7	145.9	150.0	157.2	166.3	161.7	160.7
Sri Lanka	32.3	29.3	28.6	33.5	33.8	40.5	38.8	36.3	34.9	7.1	6.5	6.4	7.6	7.7	9.2	8.9	8.4	8.1
Western Asia	**18.9**	**17.0**	**17.0**	**21.6**	**21.1**	**20.5**	**19.1**	**19.3**	**18.1**	**52.0**	**47.6**	**48.1**	**62.2**	**61.7**	**61.0**	**58.0**	**59.6**	**56.7**
Armenia	51.4	51.6	55.5	56.5	56.8	57.0	57.4	46.6	44.0	1.5	1.5	1.6	1.6	1.6	1.6	1.7	1.4	1.3
Azerbaijan	1.5	1.3	1.1	1.9	1.4	1.2	1.1	0.7	0.7	0.1	0.1	0.1	0.2	0.1	0.1	0.1	<0.1	<0.1
Bahrain	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cyprus	5.5	3.3	3.0	3.0	2.6	2.3	1.8	1.7	1.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Georgia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Iraq	23.4	22.9	21.0	27.3	27.0	24.5	25.4	27.1	28.0	9.2	9.2	8.6	11.5	11.6	10.8	11.4	12.5	13.2
Israel	22.3	21.2	22.0	21.8	21.2	20.9	22.5	22.7	22.5	1.9	1.8	1.9	1.9	1.9	1.9	2.1	2.1	2.1
Jordan	2.6	2.5	2.5	3.0	2.7	2.5	2.4	2.3	2.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

TABLE A1.6 (Continued)

Regions/subregions/ country groupings	Proportion of the population unable to afford a healthy diet									Number of people unable to afford a healthy diet								
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2017	2018	2019	2020	2021	2022	2023	2024	2025
	(%)									(millions)								
Kuwait	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Lebanon	0.1	0.1	0.1	3.6	22.9	36.9	45.2	45.6	46.4	<0.1	<0.1	<0.1	0.2	1.3	2.1	2.6	2.6	2.7
Oman	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Palestine	5.9	6.2	6.6	8.8	8.3	6.7	7.8	14.3	17.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.8	1.0
Qatar	1.7	1.7	1.9	3.3	1.6	1.8	1.6	2.2	1.9	<0.1	<0.1	0.1	0.1	<0.1	0.1	<0.1	0.1	0.1
Saudi Arabia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Syrian Arab Republic	57.3	44.2	41.0	74.0	71.2	70.7	74.4	73.5	61.1	11.0	8.7	8.3	15.6	15.4	15.9	17.6	18.1	15.6
Türkiye	15.1	14.1	15.1	14.4	12.9	11.7	5.5	4.6	4.0	12.6	11.9	12.9	12.4	11.1	10.2	4.8	4.0	3.5
United Arab Emirates	3.7	3.1	2.9	2.9	2.9	2.3	2.0	2.0	1.9	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2
Yemen	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
LATIN AMERICA AND THE CARIBBEAN	**31.2**	**30.5**	**30.5**	**31.3**	**32.2**	**29.7**	**28.4**	**26.4**	**25.7**	**197.1**	**194.2**	**195.7**	**202.4**	**209.2**	**194.7**	**187.3**	**174.8**	**172.0**
Caribbean	**47.9**	**46.0**	**46.1**	**49.4**	**50.0**	**49.8**	**48.7**	**48.7**	**48.9**	**20.6**	**19.9**	**20.1**	**21.6**	**21.9**	**21.9**	**21.5**	**21.6**	**21.8**
Antigua and Barbuda	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Aruba	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Bahamas	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Barbados	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
British Virgin Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cuba	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cayman Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Curaçao	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dominica	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dominican Republic	26.0	22.6	21.2	25.0	25.4	23.9	20.5	16.8	16.2	2.8	2.4	2.3	2.7	2.8	2.7	2.3	1.9	1.9
Grenada	23.4	22.2	22.2	29.4	27.9	25.4	24.2	23.2	22.9	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Haiti	77.6	78.1	79.5	81.5	82.5	83.7	84.4	87.9	88.9	8.4	8.6	8.8	9.2	9.4	9.6	9.8	10.3	10.6
Jamaica	31.1	23.0	24.0	29.0	28.3	26.8	26.8	27.1	26.4	0.9	0.6	0.7	0.8	0.8	0.8	0.8	0.8	0.7
Puerto Rico	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Saint Kitts and Nevis	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Saint Lucia	8.3	8.1	8.3	11.2	9.1	7.8	7.8	7.4	7.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Saint Vincent and the Grenadines	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

TABLE A1.6 (Continued)

Regions/subregions/ country groupings	Proportion of the population unable to afford a healthy diet									Number of people unable to afford a healthy diet								
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2017	2018	2019	2020	2021	2022	2023	2024	2025
	(%)									(millions)								
Sint Maarten (Dutch part)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Trinidad and Tobago	28.0	28.5	28.4	32.8	33.4	33.4	33.0	32.0	32.0	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Turks and Caicos Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Central America	**34.4**	**33.6**	**33.5**	**36.5**	**31.8**	**30.2**	**27.8**	**25.8**	**25.4**	**59.1**	**58.2**	**58.7**	**64.5**	**56.7**	**54.4**	**50.5**	**47.3**	**47.0**
Belize	25.7	21.7	17.5	21.6	18.7	16.8	18.4	17.7	17.8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Costa Rica	53.6	53.7	54.7	61.4	55.2	56.4	52.5	47.5	41.8	2.6	2.7	2.7	3.1	2.8	2.9	2.7	2.4	2.2
El Salvador	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Guatemala	45.5	46.6	47.3	50.9	48.7	49.2	50.0	48.6	47.3	7.5	7.8	8.1	8.8	8.6	8.8	9.1	8.9	8.8
Honduras	40.6	39.6	39.5	44.4	39.4	39.4	39.9	35.2	34.2	3.9	3.9	3.9	4.5	4.1	4.1	4.2	3.8	3.8
Mexico	31.6	30.4	30.1	32.6	27.4	25.2	21.9	20.1	20.0	39.0	37.9	37.8	41.3	35.0	32.4	28.4	26.2	26.4
Nicaragua	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Panama	52.7	50.0	49.1	55.6	55.2	54.8	54.3	52.3	51.4	2.2	2.1	2.1	2.4	2.4	2.4	2.4	2.4	2.4
South America	**28.7**	**28.1**	**28.1**	**27.8**	**31.1**	**28.2**	**27.3**	**25.1**	**24.3**	**119.6**	**118.2**	**119.1**	**118.7**	**133.2**	**121.3**	**118.2**	**109.2**	**106.6**
Argentina	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Bolivia (Plurinational State of)	14.4	13.0	9.7	10.8	8.9	9.6	9.0	9.5	10.5	1.6	1.5	1.1	1.3	1.1	1.2	1.1	1.2	1.3
Brazil	28.8	27.7	27.3	20.8	31.2	26.4	24.1	21.4	21.1	58.9	57.1	56.6	43.5	65.3	55.5	50.9	45.4	44.8
Chile	50.1	47.9	47.5	51.7	44.5	42.5	42.3	38.1	36.8	9.3	9.1	9.1	10.0	8.7	8.3	8.3	7.5	7.3
Colombia	36.7	36.6	37.7	44.9	41.3	39.8	39.3	36.6	35.9	17.7	18.0	18.8	22.7	21.1	20.6	20.5	19.3	19.2
Ecuador	23.7	24.4	25.5	30.9	27.9	26.4	26.6	28.7	25.7	4.0	4.2	4.4	5.4	4.9	4.7	4.8	5.2	4.7
Guyana	78.2	77.8	76.9	58.0	49.1	24.9	15.2	10.0	9.3	0.6	0.6	0.6	0.5	0.4	0.2	0.1	<0.1	<0.1
Paraguay	27.1	25.5	25.0	27.8	27.7	27.5	24.6	23.2	22.3	1.7	1.6	1.6	1.8	1.9	1.9	1.7	1.6	1.6
Peru	36.0	33.3	31.3	45.9	37.3	36.7	38.3	35.8	34.8	11.3	10.6	10.2	15.1	12.4	12.3	13.0	12.3	12.0
Suriname	21.6	20.4	20.9	26.2	27.3	26.8	27.2	25.6	23.7	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Uruguay	30.7	32.0	32.8	37.6	37.4	35.5	35.4	33.2	32.0	1.0	1.1	1.1	1.3	1.3	1.2	1.2	1.1	1.1
Venezuela (Bolivarian Republic of)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
OCEANIA	**5.2**	**5.5**	**5.7**	**5.9**	**5.9**	**5.4**	**5.1**	**5.1**	**5.0**	**2.2**	**2.3**	**2.5**	**2.6**	**2.6**	**2.5**	**2.3**	**2.4**	**2.3**
Australia and New Zealand	**3.5**	**3.8**	**3.8**	**3.8**	**3.6**	**3.4**	**3.2**	**3.2**	**3.2**	**1.0**	**1.1**	**1.2**	**1.2**	**1.1**	**1.1**	**1.0**	**1.0**	**1.0**
Australia	3.5	3.8	3.8	3.8	3.6	3.4	3.2	3.2	3.2	0.9	0.9	1.0	1.0	0.9	0.9	0.8	0.9	0.9
New Zealand	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

TABLE A1.6 (Continued)

Regions/subregions/ country groupings	Proportion of the population unable to afford a healthy diet									Number of people unable to afford a healthy diet								
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2017	2018	2019	2020	2021	2022	2023	2024	2025
	(%)									(millions)								
Oceania excluding Australia and New Zealand	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
Melanesia	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
Fiji	50.6	52.5	57.5	66.6	70.1	63.8	61.1	60.5	58.0	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5
New Caledonia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Papua New Guinea	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Solomon Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Vanuatu	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Micronesia	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
Kiribati	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Marshall Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Micronesia (Federated States of)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Naoero	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Palau	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Polynesia	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**
American Samoa	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cook Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
French Polynesia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Niue	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Samoa	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tokelau (Associate Member)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tonga	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Tuvalu	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
NORTHERN AMERICA AND EUROPE	**10.9**	**10.1**	**9.1**	**8.1**	**7.7**	**8.4**	**7.7**	**7.1**	**6.8**	**122.1**	**112.7**	**102.7**	**91.7**	**87.4**	**94.6**	**86.6**	**79.7**	**77.5**
Northern America	**5.6**	**5.1**	**4.5**	**3.5**	**2.8**	**5.1**	**4.9**	**4.5**	**4.4**	**20.6**	**19.1**	**17.1**	**13.2**	**10.6**	**19.4**	**18.9**	**17.2**	**17.0**
Bermuda	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Canada	3.7	3.3	3.0	1.4	1.8	2.8	2.9	3.0	3.0	1.3	1.2	1.1	0.5	0.7	1.1	1.2	1.2	1.2
Greenland	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
United States of America	5.8	5.3	4.7	3.7	2.9	5.4	5.2	4.6	4.5	19.3	17.9	15.9	12.7	9.9	18.3	17.7	16.0	15.7

TABLE A1.6 (Continued)

Regions/subregions/ country groupings	Proportion of the population unable to afford a healthy diet									Number of people unable to afford a healthy diet								
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2017	2018	2019	2020	2021	2022	2023	2024	2025
	(%)									(millions)								
Europe	**13.8**	**12.7**	**11.6**	**10.6**	**10.4**	**10.2**	**9.2**	**8.5**	**8.2**	**102.8**	**94.7**	**86.7**	**79.6**	**78.0**	**75.9**	**68.3**	**63.0**	**61.0**
Eastern Europe	**25.0**	**23.0**	**21.0**	**18.7**	**18.7**	**18.0**	**14.8**	**13.1**	**12.7**	**73.7**	**67.8**	**61.8**	**55.0**	**54.7**	**52.0**	**42.4**	**37.5**	**36.1**
Belarus	4.7	2.8	3.1	1.9	1.5	1.5	1.1	0.7	0.6	0.4	0.3	0.3	0.2	0.1	0.1	<0.1	<0.1	<0.1
Bulgaria	51.7	43.4	40.4	34.4	35.0	27.9	24.8	23.1	20.7	3.7	3.0	2.8	2.4	2.4	1.9	1.7	1.6	1.4
Czechia	5.7	5.1	4.2	4.4	4.2	5.5	6.4	6.1	5.8	0.6	0.5	0.4	0.5	0.4	0.6	0.7	0.7	0.6
Hungary	41.0	37.4	34.2	35.3	31.8	29.4	30.5	30.0	29.8	4.0	3.7	3.3	3.4	3.1	2.9	3.0	2.9	2.9
Poland	19.8	17.4	12.2	11.6	9.0	9.0	8.7	7.8	7.3	7.6	6.7	4.7	4.4	3.4	3.4	3.4	3.0	2.8
Republic of Moldova	11.3	9.3	10.1	11.2	10.6	14.6	15.0	12.5	11.4	0.4	0.3	0.3	0.3	0.3	0.4	0.5	0.4	0.3
Romania	55.9	50.0	43.4	36.2	31.0	27.9	22.7	20.7	20.1	11.0	9.8	8.5	7.0	6.0	5.4	4.3	3.9	3.8
Russian Federation	22.9	21.9	21.2	18.5	20.2	19.5	14.9	12.8	12.4	33.4	32.0	31.0	27.1	29.4	28.4	21.6	18.5	17.8
Slovakia	22.8	21.4	18.1	23.0	22.2	27.4	29.2	27.7	27.2	1.2	1.2	1.0	1.3	1.2	1.5	1.6	1.5	1.5
Ukraine	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Northern Europe	**4.6**	**4.5**	**3.9**	**3.3**	**3.3**	**3.5**	**3.5**	**3.4**	**3.4**	**4.8**	**4.7**	**4.1**	**3.5**	**3.6**	**3.7**	**3.8**	**3.7**	**3.7**
Denmark	0.9	1.2	1.2	1.3	0.9	1.9	1.4	1.3	1.3	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1
Estonia	13.7	11.9	10.1	9.2	6.4	11.2	10.1	10.2	10.2	0.2	0.2	0.1	0.1	<0.1	0.2	0.1	0.1	0.1
Finland	1.1	1.3	1.0	0.8	1.1	1.4	2.0	2.0	2.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	0.1
Iceland	0.9	1.6	2.1	2.2	2.1	1.8	1.8	1.8	1.8	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ireland	4.1	2.9	2.3	2.0	2.2	1.7	1.2	1.2	0.9	0.2	0.1	0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
Latvia	32.5	26.4	22.0	20.4	17.3	19.9	17.5	17.3	16.9	0.6	0.5	0.4	0.4	0.3	0.4	0.3	0.3	0.3
Lithuania	24.3	19.3	15.0	10.5	10.3	12.6	14.0	13.3	12.3	0.7	0.5	0.4	0.3	0.3	0.4	0.4	0.4	0.3
Norway	1.9	1.7	1.5	1.8	1.2	1.3	1.3	1.2	1.2	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Sweden	4.2	5.3	4.3	3.6	4.3	5.4	4.9	4.8	4.9	0.4	0.5	0.4	0.4	0.4	0.6	0.5	0.5	0.5
United Kingdom of Great Britain	3.7	3.9	3.6	3.0	3.1	2.8	3.0	2.9	2.9	2.4	2.6	2.4	2.1	2.1	1.9	2.0	2.0	2.0
Southern Europe	**16.1**	**14.6**	**12.7**	**12.9**	**11.3**	**10.7**	**11.0**	**10.6**	**10.3**	**24.6**	**22.3**	**19.4**	**19.7**	**17.2**	**16.2**	**16.7**	**16.0**	**15.5**
Albania	29.2	20.9	18.4	17.6	16.0	14.2	13.9	12.6	11.9	0.8	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.3
Andorra	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Bosnia and Herzegovina	18.3	16.9	15.9	16.1	14.8	14.1	13.8	12.7	12.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4	0.4	0.4
Croatia	32.6	27.6	23.5	23.0	18.4	18.5	14.3	12.9	12.0	1.3	1.1	0.9	0.9	0.7	0.7	0.6	0.5	0.5
Greece	35.7	33.3	28.4	28.7	25.3	25.5	24.6	23.8	22.7	3.8	3.6	3.0	3.1	2.7	2.7	2.5	2.4	2.3

TABLE A1.6 (Continued)

Regions/subregions/ country groupings	Proportion of the population unable to afford a healthy diet									Number of people unable to afford a healthy diet								
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2017	2018	2019	2020	2021	2022	2023	2024	2025
	(%)									(millions)								
Italy	11.1	10.5	9.2	9.5	8.5	7.1	8.6	8.5	8.4	6.7	6.3	5.5	5.7	5.1	4.3	5.1	5.0	4.9
Malta	5.6	4.8	4.3	4.4	3.3	5.5	4.8	4.5	4.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Montenegro	18.5	19.7	16.6	16.7	14.0	12.2	10.2	8.0	7.5	0.1	0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
North Macedonia	24.5	22.6	20.4	21.7	18.5	17.6	17.2	16.1	15.6	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
Portugal	22.1	19.0	15.1	16.1	15.7	16.9	15.0	14.8	14.4	2.3	2.0	1.6	1.7	1.6	1.8	1.6	1.5	1.5
Serbia	26.8	21.1	15.6	13.0	9.8	11.3	10.3	9.4	8.5	2.4	1.9	1.4	1.1	0.8	1.0	0.9	0.8	0.7
Slovenia	4.7	3.2	2.7	2.4	2.2	2.0	2.4	2.3	2.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Spain	12.6	12.0	11.3	11.7	10.2	9.5	9.9	9.6	9.3	5.9	5.7	5.4	5.6	4.9	4.5	4.8	4.6	4.5
Western Europe	**2.5**	**2.3**	**2.8**	**2.5**	**3.1**	**3.6**	**3.8**	**3.8**	**3.8**	**4.8**	**4.5**	**5.5**	**5.0**	**6.1**	**7.1**	**7.5**	**7.6**	**7.5**
Austria	2.5	2.4	2.8	2.5	3.4	2.4	2.8	2.9	2.9	0.2	0.2	0.2	0.2	0.3	0.2	0.3	0.3	0.3
Belgium	2.6	1.4	1.4	1.1	0.9	0.8	1.0	1.0	0.9	0.3	0.2	0.2	0.1	<0.1	<0.1	0.1	0.1	0.1
France	2.3	2.5	3.8	3.2	3.6	3.5	3.7	3.6	3.5	1.5	1.6	2.5	2.1	2.4	2.3	2.4	2.4	2.4
Germany	2.8	2.5	2.6	2.5	3.5	5.0	5.2	5.3	5.3	2.3	2.0	2.2	2.1	3.0	4.2	4.4	4.5	4.5
Luxembourg	3.0	2.4	1.4	0.8	2.3	1.2	0.8	0.9	0.9	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Netherlands (Kingdom of the)	1.9	1.7	1.8	1.8	1.4	1.1	1.1	1.1	1.1	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
Switzerland	1.9	1.8	1.7	1.6	1.2	1.1	1.1	1.1	1.1	0.2	0.1	0.1	0.1	0.1	<0.1	<0.1	<0.1	<0.1

NOTES: n.a. = data not available; n.r. = data not reported. For aggregates, unaffordability estimates are reported as the population-weighted means of the countries within each group, and only for groups where estimates cover at least 50 percent of the total population. The global number of people unable to afford a healthy diet (NUA) estimate is obtained by multiplying the proportion of the population unable to afford a healthy diet for each of the five world regions by the total population size in each region. Calculating the global NUA estimate as the sum of the NUA estimates of other country groupings, such as those based on income levels, should be avoided.

SOURCE: FAO. 2026. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 21 July 2026]. https://www.fao.org/faostat/en/#data/CAHD. Licence: CC-BY-4.0.

ANNEX 1B METHODOLOGICAL NOTES FOR THE FOOD SECURITY AND NUTRITION INDICATORS

PREVALENCE OF UNDERNOURISHMENT

Definition

Undernourishment is defined as the condition of an individual whose habitual food consumption is insufficient to provide, on average, the amount of dietary energy required to maintain a normal, active and healthy life.

How it is reported

The indicator (denominated "prevalence of undernourishment" [PoU]) is an estimate of the percentage of individuals in the population that are in a condition of undernourishment. National estimates are reported as three-year moving averages, to control for the low reliability of the estimates of some of the underlying parameters due to elements for which complete, reliable information is very scarce. This includes, for example, the year-to-year variation in food commodity stocks, one of the components of the annual FAO food balance sheets (FBS). Regional and global aggregates, on the other hand, are reported as annual estimates, as possible estimation errors are expected not to be correlated and therefore are expected to be reduced to acceptable levels when aggregating across countries.

The entire series of PoU values is revised with each new edition of this report to reflect new data and information that FAO has obtained since the release of the previous edition. As this process usually implies backward revisions of the entire PoU series, readers are advised to refrain from comparing series across different editions of this report and should always refer to the current edition, including for values in past years.

FAO gathered data from national and international institutions up to 1 April 2026. Data that became available after this date are not reflected in this edition of the report.

Methodology

To compute an estimate of the prevalence of undernourishment in a population, the probability distribution of habitual dietary energy intake levels (expressed in kcal per person per day) for the average individual is modelled as a parametric probability density function, f(x).[3, 4] The indicator is obtained as the cumulative probability that the habitual dietary energy intake (x) is below the minimum dietary energy requirement (MDER) (i.e. the lowest limit of the range of energy requirements that is appropriate for the population's representative average individual) as in the formula below:

$$PoU = \int_{x<MDER} f(x|\theta)dx$$

where θ is a vector of parameters that characterizes the probability density function. In the actual computations, the distribution is assumed to be lognormal and thus fully characterized by only two parameters: the mean dietary energy consumption (DEC) and its coefficient of variation (CV).

Data source

Different data sources are used to estimate the different parameters of the model.

Minimum dietary energy requirement (MDER)

Human energy requirements for an individual in a given sex/age class are determined on the basis of normative requirements for basic metabolic rate per kilogram of body mass, multiplied by the ideal weights that a healthy person of that sex/age class may have, given their height, and then multiplied by a coefficient of physical activity level (PAL) to take into account physical activity.[bp] Given that both healthy body mass indices (BMIs) and normal PALs vary among active and healthy individuals of the same sex and age, a range

bp A person is considered healthy if their BMI indicates neither underweight nor overweight. Human energy requirement norms per kilogram of body mass are given in UNU, WHO and FAO (2004).[5]

of energy requirements apply to each sex and age group of the population. The MDER for the average individual in the population, which is the parameter used in the PoU formula, is obtained as the weighted average of the lower bounds of the energy requirement ranges for each sex and age group, using the shares of the population in each sex and age group as weights. Similar to the MDER, the average dietary energy requirement (ADER) (used to estimate the one component of the CV as described below) is estimated using the average values of the PAL category "Active or moderately active lifestyle".[5]

Information on the population structure by sex and age needed to compute the MDER is available for most countries in the world and for each year from the United Nations Department of Economic and Social Affairs *World Population Prospects*, revised every two years. This edition of *The State of Food Security and Nutrition in the World* uses the 2024 revision of the *World Population Prospects*.[1]

Information on the median height in each sex and age group for a given country is derived from a recent demographic and health survey (DHS) or from other surveys that collect anthropometry data on children and adults. Even if such surveys do not refer to the same year for which the PoU is estimated, the impact of possible small intervening changes in median heights over the years on the MDER, and therefore on the PoU estimates, is expected to be negligible.

Dietary energy consumption (DEC)

Ideally, DEC could be estimated from data on food consumption coming from nationally representative household surveys (such as Living Standards Measurement Study [LSMS] surveys or household consumption and expenditure surveys). However, only very few countries conduct such surveys on an annual basis. Thus, in FAO's PoU estimates for global monitoring, DEC values are estimated from the dietary energy supply (DES) reported in the FBS, compiled by FAO for most countries in the world.[6]

Since the last edition of this report, the FBS domain in FAOSTAT has been updated with new values of the series up to 2023 for all countries. In addition, at the time of closing this report, the FBS series were updated to 2024 for the following 78 countries and regions, selected as a priority due to the high contribution they make to the total number of undernourished people in the world: Afghanistan, Angola, Argentina, Bangladesh, Benin, Bolivia (Plurinational State of), Botswana, Brazil, Burkina Faso, Burundi, Cambodia, Cameroon, Central African Republic, Chad, Colombia, Congo, Côte d'Ivoire, Cuba, Democratic People's Republic of Korea, Democratic Republic of the Congo, Dominica, Ecuador, Egypt, Ethiopia, Gabon, Ghana, Guatemala, Guinea, Haiti, Honduras, India, Indonesia, Iran (Islamic Republic of), Iraq, Japan, Jordan, Kenya, Lao People's Democratic Republic, Liberia, Libya, Madagascar, Malawi, Malaysia, Mali, Mexico, Morocco, Mozambique, Myanmar, Namibia, Nepal, Niger, Nigeria, Pakistan, Papua New Guinea, Paraguay, Peru, Philippines, Rwanda, Senegal, Sierra Leone, Somalia, South Africa, South Sudan, Sri Lanka, Sudan, Syrian Arab Republic, Taiwan Province of China, Tajikistan, Thailand, Togo, Uganda, Ukraine, United Republic of Tanzania, Venezuela (Bolivarian Republic of), Viet Nam, Yemen, Zambia and Zimbabwe.

Per capita average DES in 2024 (for countries other than the ones listed above) and in 2025 (for all countries) are nowcasted on the basis of the short-term market outlook exercises conducted by FAO to inform the World Food Situation portal[7] and used to calculate the 2024 and 2025 values of DEC.

Waste factors

This edition of the report involved updating the waste factors that are used to calculate the DEC by subtracting the percentage of waste from the DES for all countries. The percentages of food waste at distribution level have been estimated using the FBS data available in FAOSTAT.

Using the percentages given in the FAO document *Global food losses and food waste*,[8] kilocalorie waste for each food group is calculated and summed up, with the exception that the waste factor used for cereals is 2 percent for all regions. Finally, the total kilocalorie waste is taken as a percentage of the total kilocalories for each year and country. The data are available up to the year 2023. For the years 2024 and 2025, the value of the year 2023 is used.

Coefficient of variation (CV)

The CV of habitual DEC in the population is obtained as the geometric mean of two components, labelled respectively CV|y and CV|r:

$$CV = \sqrt{(CV|y)^2 + (CV|r)^2}$$

The first component (CV|y) refers to variability in the per capita consumption across households belonging to different sociodemographic strata, and therefore is referred to as the CV "due to income", while the second component (CV|r) captures variability across individuals, due to differences in sex, age, body mass and PAL that can be found among members of the same household. As these are the same elements that determine energy requirements, the second component is referred to as CV "due to energy requirements".

CV|y

When reliable data on food consumption are available from nationally representative household surveys, the CV due to income (CV|y) can be estimated directly. Since the last edition of this report, 16 new surveys from the following 15 countries have been processed to update the CV|y: Bangladesh (2021), Bolivia (Plurinational State of) (2019 and 2021), Chile (2022), Dominican Republic (2018), Eswatini (2017), Ethiopia (2022), Guatemala (2023), Iraq (2023), Kazakhstan (2024), Kyrgyzstan (2023), Mexico (2024), Mongolia (2024), Nigeria (2023), Pakistan (2024) and Peru (2024). That makes for a total of 185 surveys from 74 countries for which the estimate of the CV|y is based on data from national surveys.

When no suitable survey data are available, Food Insecurity Experience Scale (FIES) data collected by FAO since 2014 are used to project the changes in the CV|y from 2017 (or from the year of the last food consumption survey, if more recent) up to 2025, based on the observed trend in severe food insecurity. The projections are based on the assumption that observed changes in the extent of severe food insecurity measured with the FIES might be indicative of equivalent changes in the PoU. To the extent that such implied changes in the PoU cannot be fully explained by the supply-side effects of changes in average food supplies, they can be confidently attributed to unobserved changes in the CV|y that might have occurred at the same time. Analysis of historical PoU estimates reveals that, on average, and once differences in DEC, MDER and CV|r have been controlled for, differences in the CV|y explain about one-third of the differences in PoU across time and space. Based on all this, for each country for which FIES data are available, the change in the CV|y that may have occurred from 2017, or from the date of the last available survey, is therefore estimated as the change that would generate one-third of a percentage point change in the PoU for each observed percentage point change in the prevalence of severe food insecurity. For all other countries, lacking any supporting evidence, the CV|y is kept constant at the last available estimate. As in the last five editions of this report, the nowcast of the CV|y for 2020, 2021, 2022, 2023, 2024 and 2025 required special treatment to account for the effects of the COVID-19 pandemic (see Supplementary material to Chapter 2).

CV|r

The CV due to energy requirements (CV|r) represents the variability of the distribution of dietary energy requirements of a hypothetical average individual representative of a healthy population, which is also equal to the CV|y of the distribution of dietary energy intakes of a hypothetical average individual if everyone in the population were perfectly nourished. For estimation purposes, the distribution of dietary energy requirements of such a hypothetical average individual is assumed to be normal and its standard deviation (SD) can be estimated from any two known percentiles. The above-mentioned MDER and ADER are used to approximate the 1st and the 50th percentiles.[9, 10] The value of CV|r is then derived as the inverse cumulative standard normal distribution of the difference between the MDER and the ADER.

Challenges and limitations

While formally, the state of being undernourished or not is a condition that applies to individuals, given the data usually available on a large scale, it is impossible to reliably identify which individuals in a certain group are actually undernourished. Through the statistical model described above, the indicator can only be computed with reference to a population or a

group of individuals for which a sufficiently representative sample is available. The prevalence of undernourishment is thus an estimate of the percentage of individuals in that group that are in such a condition, but it cannot be further disaggregated.

Due to the probabilistic nature of the inference and the margins of uncertainty associated with estimates of each of the parameters in the model, the precision of the PoU estimates is generally low. While it is not possible to formally compute margins of error around PoU estimates, they are expected to exceed 5 percent in most cases. For this reason, FAO does not consider PoU estimates lower than 2.5 percent as sufficiently reliable to be reported.

It is important to note that the upper and lower bounds around the point estimates of the PoU from 2020 to 2025 should not be interpreted as statistical confidence intervals. Rather, they represent different scenarios used to nowcast the values of CV|y, the margins of uncertainty around waste factors from 2020 to 2025, and the margins of uncertainty around nowcasting of DES for 2024 and 2025 (see Supplementary material to Chapter 2).

Recommended readings

Cafiero, C. 2014. *Advances in hunger measurement: traditional FAO methods and recent innovation*s. FAO Statistics Division Working Paper, No. 14–04. Rome, FAO. https://openknowledge.fao.org/handle/20.500.14283/i4060e

FAO. 1996. Methodology for assessing food inadequacy in developing countries. In: *The Sixth World Food Survey*. pp. 114–143. Rome. https://openknowledge.fao.org/handle/20.500.14283/w0931e

FAO. 2002. *Summary of Proceedings of the International Scientific Symposium on Measurement and Assessment of Food Deprivation and Undernutrition. Rome, 26-28 June 2002.* Rome. https://openknowledge.fao.org/handle/20.500.14283/y4250e

FAO. 2025. Measuring hunger, food security and food consumption. In: *FAO*. [Cited 1 May 2026]. https://www.fao.org/measuring-hunger/en

Naiken, L. 2002. *Keynote paper: FAO methodology for estimating the prevalence of undernourishment*. Rome, FAO. https://www.fao.org/4/y4249e/y4249e06.htm

Wanner, N., Cafiero, C., Troubat, N. & Conforti, P. 2014. *Refinements to the FAO methodology for estimating the prevalence of undernourishment indicator*. FAO Statistics Working Paper Series, No. 14-05. Rome, FAO. https://openknowledge.fao.org/handle/20.500.14283/i4046e

PREVALENCE OF FOOD INSECURITY AS MEASURED BY THE FOOD INSECURITY EXPERIENCE SCALE

Definition

Food insecurity as measured by this indicator refers to limited **access to food,** at the level of individuals or households, due to lack of money or other resources. The severity of food insecurity is measured using data collected with the Food Insecurity Experience Scale Survey Module (FIES-SM), a set of eight questions asking respondents to self-report conditions and experiences typically associated with limited access to food. For purposes of annual SDG monitoring, the questions are asked with reference to the 12 months preceding the survey.

Using statistical techniques based on the Rasch model,[2] the information obtained in a FIES-SM survey is validated for internal consistency and converted into a quantitative measure along a national scale of severity, ranging from mild to severe. Based on FIES data collected over three years from 2014 to 2016, FAO established the FIES reference scale, which is used as the global standard for experience-based food insecurity measures. By equating the national scale to the global, two globally comparable thresholds of severity are set. Based on their responses to the survey items, and according to the internationally comparable thresholds, the individuals or households interviewed in a nationally representative survey of the population are assigned a probability of being in one of three classes: i) food secure or only marginally insecure; ii) moderately food insecure; and iii) severely food insecure.

SDG Indicator 2.1.2 is obtained as the sum of the probabilities of being in the classes of moderate food insecurity and severe food insecurity. A separate indicator is computed by considering only the severe food insecurity class.

How it is reported

In this report, FAO provides estimates of food insecurity at two different levels of severity: moderate or severe food insecurity, and severe food insecurity. For each of these two levels, two estimates are reported:

- the **prevalence (percentage) of individuals** in the population living in households where at least one adult was found to be food insecure; and
- the estimated **number of individuals** in the population living in households where at least one adult was found to be food insecure.

The entire series of food insecurity estimates is revised with each new edition of this report to reflect new data and information that FAO has obtained since the release of the previous edition. As this process may imply backward revisions of the entire series, readers are advised to avoid comparing series across different editions of this report and to always refer to the current edition, including for values in past years.

Data source

Since 2014, the eight-question FIES-SM has been applied in nationally representative samples of the adult population (defined as aged 15 years or older) in more than 140 countries included in the Gallup© World Poll (GWP), covering more than 90 percent of the world population. In 2025, interviews were conducted in both telephone and face-to-face modality.

Gallup© traditionally uses telephone surveys in Northern America, Western Europe, some parts of Asia, and Cooperation Council for the Arab States of the Gulf countries. In Central and Eastern Europe, much of Latin America, and nearly all of Asia, the Near East and Africa, an area frame design is used for face-to-face interviewing.

In most countries, samples include about 1 000 individuals, with larger samples in China (mainland) (3 500), India (3 000) and the Russian Federation (2 000). No data were collected in China (mainland) in 2025.

National government survey data are used to calculate the food insecurity prevalence estimates for at least one year for 86 countries, covering more than one-third of the world population, by applying FAO's statistical methods to internally validate and adjust national results to the same global reference standard. Once validated, the data are used to inform or update the national series (see bullet points below). When the population of a country accounts for a large proportion of the regional population, this may result in revision or back revision of the regional and subregional series.

FAO gathered data from national and international institutions up to 1 April 2026. Data that became available after this date are not reflected in this edition of the report.

In this edition of the report, national government survey data from the following 86 countries and territories were used: Afghanistan, Angola, Antigua and Barbuda, Armenia, Bangladesh, Belarus, Belize, Benin, Bolivia (Plurinational State of), Botswana, Brazil, Burkina Faso, Burundi, Cabo Verde, Cameroon, Canada, Central African Republic, Chad, Chile, Colombia, Costa Rica, Côte d'Ivoire, Cyprus, Dominican Republic, Ecuador, Eswatini, Fiji, Ghana, Greece, Grenada, Guinea-Bissau, Guyana, Honduras, Indonesia, Israel, Italy, Kazakhstan, Kenya, Kiribati, Kyrgyzstan, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mexico, Mongolia, Mozambique, Namibia, Naoero, Niger, Nigeria, Pakistan, Palau, Palestine, Papua New Guinea, Paraguay, Peru, Philippines, Republic of Korea, Russian Federation, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Samoa, Senegal, Seychelles, Sierra Leone, South Africa, South Sudan, Sri Lanka, Sudan, Thailand, Timor-Leste, Togo, Tonga, Trinidad and Tobago, Uganda, United Arab Emirates, United Republic of Tanzania, United States of America, Uruguay, Vanuatu, Viet Nam, Yemen and Zambia. National data for these countries are considered for the year or years when they are available. For the remaining years, the following strategy was followed:

- When more than one year of national data is available, the missing years are linearly interpolated.
- If only one year of data is available, missing years are informed as follows:
  - informed using FAO data if considered compatible with the national surveys;
  - imputed using the trend suggested by FAO data if national data are not compatible;

- imputed using the trend of the subregion if no other reliable and timely information is available; or
- considered constant to the level of the national survey if the subregion cannot be computed or the trend of other surveys or the subregion is not applicable to the country-specific situation considering evidence found in support of the trend (e.g. evolution of poverty, extreme poverty, employment and food inflation); this applies also to countries where the prevalence of food insecurity is very low (below 3 percent at the severe level) or very high (above 85 percent at the moderate or severe level).

Given the heterogeneity of the survey sources and the small sample size of some of the FAO surveys, new data can occasionally cause a notably large increase or decrease from one year to the next. In such situations, the protocol is to look for external information for the country (data and/or reports, possibly in consultation with country experts such as FAO country or regional officers) to explore whether big shocks or interventions have occurred. If the trend can be justified by supporting evidence, but seems excessive, the trend is maintained but smoothed (e.g. using the three-year average). Otherwise, the same protocol used for missing years is applied (i.e. keeping the level constant or applying the subregional trend). In 2025, no FIES data were collected in China (mainland), therefore the trend was kept constant.

Methodology

The data were validated and used to construct a scale of food insecurity severity using the Rasch model, which postulates that the probability of observing an affirmative answer by respondent i to question j is a logistic function of the distance, on an underlying scale of severity, between the position of the respondent, a_i, and that of the item, b_j.

$$Prob(X_{i,j} = \text{Yes}) = \frac{\exp(a_i - b_j)}{1 + \exp(a_i - b_j)}$$

By applying the Rasch model to the FIES data, it is possible to estimate the cross-country comparable probability of being food insecure ($p_{i,L}$) at each level of severity of food insecurity L (moderate or severe, or severe only), for each respondent i, with $0 < p_{i,L} < 1$.

The prevalence of food insecurity at each level of severity (FI_L) in the population is computed as the weighted sum of the probability of being food insecure for all respondents (i) in a sample:

$$FI_L = \Sigma p_{i,L} w_i$$

where w_i are post-stratification sampling weights that indicate the proportion of individuals or households in the national population represented by each record in the sample.

As only individuals aged 15 years or more are sampled in the GWP, the prevalence estimates directly produced from these data refer to the population aged 15 years and older. To arrive at the **prevalence and number of individuals (of all ages) in the population**, an estimate is required of the number of people living in households where at least one adult is estimated to be food insecure. This involves a multistep procedure detailed in Annex 1B of *Methods for estimating comparable rates of food insecurity experienced by adults throughout the world* (see "Recommended readings" below).

Regional and global aggregates of food insecurity at moderate or severe, and severe levels, $FI_{L,r}$, are computed as:

$$FI_{L,r} = \frac{\Sigma_c FI_{L,c} \times N_c}{\Sigma_c N_c}$$

where r indicates the region, $FI_{L,c}$ is the value of FI at level L estimated for country c in the region, and N_c is the corresponding population size. When no estimate of FI_L is available for a country, it is assumed to be equal to the population-weighted average of the estimated values of the remaining countries in the same subregion or imputed using another reasonable value. A regional aggregate is produced only if the countries for which an estimate is available cover at least 50 percent of the region's population.

Universal thresholds are defined on the FIES global standard scale (a set of item parameter values based on results from all countries covered by the GWP in 2014–2016) and converted into corresponding values on local scales. The process of calibrating each country's scale against the FIES global standard can be referred to as **equating** and permits the production of

internationally comparable measures of food insecurity severity for individual respondents, as well as comparable national prevalence rates.

The problem stems from the fact that, when defined as a *latent* trait, the severity of food insecurity has no absolute reference against which it can be evaluated. The Rasch model enables identification of the relative position that the various items occupy on a scale that is denominated in logit units but whose "zero" is arbitrarily set, usually to correspond to the mean estimated severity. This implies that the zero of the scale changes in each application. To produce comparable measures over time and across different populations requires establishing a common scale to use as a reference and finding the formula needed to convert measures across different scales. As is the case for converting measures of temperature across different measuring scales (such as Celsius and Fahrenheit), this requires the identification of "anchoring" points. In the FIES methodology, these anchoring points are the severity levels associated with the items whose *relative* position on the scale of severity can be considered equal to that of the corresponding items on the global reference scale. The "mapping" of the measures from one scale to the other is then obtained by finding the formula that equates the mean and the SD of the common items' severity levels.

Challenges and limitations

When food insecurity prevalence estimates are based on FIES data collected in the GWP, with national sample sizes of about 1 000 individuals in most countries, confidence intervals rarely exceed 20 percent of the measured prevalence (that is, prevalence rates of 50 percent would have margins of error of up to plus or minus 5 percent). Confidence intervals are much smaller, however, when national prevalence rates are estimated using larger samples and for estimates referring to aggregates of several countries. To reduce the impact of year-to-year sampling variability, country-level estimates are presented as three-year averages, computed as averages of all available years in the considered triennia.

National government surveys are the preferred source to inform food insecurity prevalence estimates based on the FIES. However, they may not be available on a yearly basis and data may become available to FAO with some years of delay. In the absence of annual national surveys, the time series are informed using the strategy described above (see "Data source"). This may result in a back revision of the series.

Recommended readings

Cafiero, C., Viviani, S. & Nord, M. 2018. Food security measurement in a global context: The food insecurity experience scale. *Measurement*, 116: 146–152. https://www.sciencedirect.com/science/article/pii/S0263224117307005

FAO. 2016. *Methods for estimating comparable rates of food insecurity experienced by adults throughout the world*. Rome. https://openknowledge.fao.org/handle/20.500.14283/i4830e

FAO. 2025. Measuring hunger, food security and food consumption. In: *FAO*. [Cited 1 May 2026]. https://www.fao.org/measuring-hunger/en

COST OF A HEALTHY DIET

Definition

The cost of a healthy diet is defined as the cost of purchasing the least expensive combination of locally available foods that may compose a diet that conforms to the recommendations most commonly found in dietary guidelines (sometimes referred to as food-based dietary guidelines) worldwide.

How it is reported

The indicator (denominated "cost of a healthy diet" [CoHD]) is an estimate of the average daily per capita minimum amount of money that people must spend in a country to buy the least expensive combination of locally available foods to compose a healthy diet. The series of the CoHD indicator are computed and expressed in current local currency units (LCU) and reported both in **current LCU and in current PPP dollars per person per day**.

The entire series of CoHD estimates is revised with each new edition of this report to reflect new data and information that FAO has obtained since the release of the previous edition. As this process may imply backward revisions of the entire series, readers are advised to avoid comparing series across different editions of this report and to always refer to the current edition, including for values in past years.

ANNEX 1B

Data source

The prices of the food items that belong to each of the six food groups that are present in healthy diets, as recommended in dietary guidelines, are derived from retail food price data collected by the International Comparison Program (ICP), coordinated by the World Bank.[11] The CoHD estimates are thus directly computed for the year covered in the most recent ICP round (currently, 2021). To estimate the cost of a healthy diet in gap years where ICP rounds are not available, the 2021 values are projected using rates of change from the food consumer price index (CPI) data published by FAO.[12] The PPP conversion factors for private consumption needed to convert the CoHD from LCU to international dollars are provided by the World Bank's Development Data Group and are reported in the World Development Indicators (WDI) database.[13]

FAO gathered data from national and international institutions up to 1 April 2026. Data that became available after this date are not reflected in this edition of the report.

Methodology

Method for defining a healthy diet basket

Even if the construct of healthy diet is the same for all monitored countries, the foods that compose a healthy diet may differ as national dietary guidelines recommend healthy diets based on local dietary habits that reflect their specific cultural context and locally available foods. As not all countries have own specific dietary guidelines that provide quantifiable recommendations in terms of food quantities, ten quantified dietary guidelines, representative of different world regions and compiled in recent years, have been used to create the Healthy Diet Basket (HDB), which is used as the global standard of reference to calculate the CoHD. For each of the ten dietary guidelines used, the average recommended proportions of dietary energy contribution from six different food groups: starchy staples; animal source foods; legumes, nuts and seeds; vegetables; fruits; and oils and fats, are calculated first, and then the HDB is built using, for each food group, the median of the dietary energy amounts recommended in the ten quantified dietary guidelines. For comparability reasons, the HDB is defined as composed of 11 different food items calibrated on a total of 2 330 kcal per day distributed as follows: 1 160 kcal from two starchy staples items, 300 kcal from two animal source foods, 300 kcal from one item among legumes, nuts and seeds, 110 kcal from three vegetables, 160 kcal from two fruits, and 300 kcal from one item in the oils and fats category.

Methods to calculate the CoHD in each country when ICP data are available

The cost of a healthy diet is estimated as the cost needed to purchase the quantities required to reach the target HDB amounts of dietary energy attributed to each food group of the food items that, within each group, have the lowest cost per unit of dietary energy provided. Food items are selected among those for which the latest round of the ICP provides retail prices (currently, 2021). In practice, each ICP food item is classified into its food group, and the cheapest items are identified within each group: two for starchy staples, two for animal source foods, one for legumes, nuts and seeds, three for vegetables, two for fruits, and one for oils and fats, for a total of 11 items. The cost per day of each food group is calculated as the price of acquiring the selected items in that group multiplied by the quantity containing the energy content required by the HDB for that group. Finally, the CoHD in each country is computed by summing the cost associated to the six food groups.

Methods to extrapolate the CoHD to other years

The CoHD calculated in LCU using ICP price data currently refers to the year 2021. To project it backwards and forwards in time, it is assumed that the prices of the items included in the country specific HDB move in line with the food CPI of the respective country, so that the CoHD for other years is calculated as follows:

$$CoHD_t^{LCU} = CoHD_{2021}^{LCU} \times \frac{FCPI_t}{FCPI_{2021}}$$

where $FCPI_t$ are food CPIs published by FAO.

In this way, complete series of CoHD are estimated for 173 countries from 2017 to 2025.

For cross-country comparability and averaging, the series of $CoHD_t^{LCU}$ are converted to international dollars as follows:

$$CoHD_t^{PPP} = CoHD_t^{LCU} / PPP_t$$

where PPP_t are the purchasing power parity exchange rates for private consumption (that is, amounts of local currency units considered equivalent to one US dollar) computed by the ICP.

Regional and global aggregates of the cost of a healthy diet are computed using population weighted averages of the CoHD values of the countries that belong to each group.

Challenges and limitations

Data on internationally standardized food prices are not available every year to allow annual monitoring. A limitation of the method used to update the cost of a healthy diet is that changes in the cost are modelled based on food CPIs and do not reflect item-specific or food group-specific price changes.[bq] FAO, in collaboration with the World Bank, is exploring how to expand reporting of item-level prices and/or food group-level price indices, to allow more frequent direct computation and/or more reliable forecasts of the CoHD.

Recommended readings

Bai, Y., Conti, V., Herforth, A., Cafiero, C., Ebel, A., Rissanen, M.O., Masters, W.A. & Rosero Moncayo, J. 2024. *Methods for monitoring the cost of a healthy diet based on price data from the International Comparison Program*. FAO Statistics Working Paper Series, No. 24-43. Rome, FAO. https://doi.org/10.4060/cd3037en

Herforth, A., Bai, Y., Venkat, A., Mahrt, K., Ebel, A. & Masters, W.A. 2020. *Cost and affordability of healthy diets across and within countries – Background paper for The State of Food Security and Nutrition in the World 2020*. FAO Agricultural Development Economics Technical Study, No. 9. Rome, FAO. https://doi.org/10.4060/cb2431en

Herforth, A., Venkat, A., Bai, Y., Costlow, L., Holleman, C. & Masters, W.A. 2022. *Methods and options to monitor the cost and affordability of a healthy diet globally – Background paper to The State of Food Security and Nutrition in the World 2022*. FAO Agricultural Development Economics Working Paper, No. 22-03. Rome, FAO. https://doi.org/10.4060/cc1169en

bq The food CPIs reflect average price changes for a basket of various food items defined in each country, which may not accurately represent the price changes of foods in the Healthy Diet Basket. As the basket is designed to include only the cheapest nutritious foods that compose a healthy diet, this means that using the aggregate food CPI may lead to an overestimation of the cost of a healthy diet.

UNAFFORDABILITY OF A HEALTHY DIET

Definition

The unaffordability of a healthy diet is defined as the inability of a household or of an individual to regularly spend the amount of money needed to acquire the least-cost combination of locally available foods that meets the requirement for a healthy diet, after having accounted for the portion of their income they have to reserve to acquire all essential needs and services other than food.

How it is reported

The main indicator (denominated **"prevalence of unaffordability" [PUA]**) is an estimate of the percentage of individuals in a population whose disposable income, net of the amount needed to acquire all other essential non-food goods and services, is lower than the minimum cost of a healthy diet.

National estimates are obtained by contrasting country-specific distributions of daily, per capita income against a threshold (r) calculated by adding the CoHD to the estimated cost of basic non-food needs (n). Along with the PUA, the **number of people unable to afford a healthy diet (NUA)** is computed by multiplying the PUA by the country's total population size.

The entire series of PUA and NUA estimates are revised with each new edition of this report to reflect new cost data, new population data, and updated income distributions. As this process usually implies backward revisions of the entire PUA and NUA series, readers are advised to refrain from comparing series across different editions of this report and should always refer to the current edition of the report, including for values in past years.

FAO gathered data from national and international institutions up to 1 April 2026. Data that became available after this date are not reflected in this edition of the report.

Methodology

The PUA in a population is an estimate of the percentage of individuals whose average daily income is lower than a threshold, r, computed by adding the CoHD to the average daily cost of essential non-food goods and services, n. The latter

is estimated as a fraction of the relevant global poverty line equal to the share of total consumption expenditure reported by households whose income is close to the poverty line. Given the current values of the global poverty lines published by the World Bank in June 2025 and estimates of the average share of non-food expenditure reported by households in the second quintile of the income distribution for low- and lower-middle-income countries, and by those in the first quintile for upper-middle- and high-income countries, n is calculated separately for the four categories of countries (low-income, lower-middle-income, upper-middle income and high-income), as follows:

$n^{\text{low-income}} = 3.0 \times 0.37 = 1.11$

$n^{\text{lower-middle-income}} = 4.2 \times 0.44 = 1.848$

$n^{\text{upper-middle-income}} = 8.3 \times 0.54 = 4.482$

$n^{\text{high-income}} = 29.4 \times 0.54 = 15.876$

and expressed in 2021 PPP dollars.

The threshold r in 2021 for country i is thus obtained as:

$$r^{i}_{2021} = CoHD^{PPP}_{2021} + n^{j}$$

where j denotes the income group to which the country belongs.

For all other years, *CoHD* needs to be converted from its current values $CoHD^{LCU}_{t}$ to 2021 PPP values using the following formula:

$$CoHD^{2021\,PPP}_{t} = \frac{c(LCU)_t \times CPI\ ratio_t}{PPP_{2021}}$$

where t ≠ 2021, and $CPI\ ratio_t = \left(\frac{CPI_{2021}}{CPI_{\mathrm{t}}}\right)$ is calculated using general CPI.

Finally, the cost threshold r_i, expressed in 2021 PPP, is compared with the country-specific distribution of disposable income, x^i, to estimate the percentage of the population whose income falls below that threshold, as in the formula below:

$$PUA = \int_{\mathrm{x^i<r^i}} f(x^i)dx$$

Data source

Income distributions are sourced by the World Bank Poverty and Inequality Platform and are available for around 150 countries up to 2025.[14]

Regional and global aggregates of the prevalence of unaffordability are computed as the population-weighted averages of the PUA estimated for the countries for which data are available, as follows:

$$PUA_a = \frac{\sum_i PUA_i \times N_i}{\sum_i N_i}$$

where a indicates the region or other aggregate, PUA_i is the value of PUA estimated for country i in the aggregate, and N_i is the corresponding population size. A regional aggregate is produced only if the countries for which an estimate is available cover at least 50 percent of the aggregate's population.

The number of people unable to afford a healthy diet (NUA_a) is then obtained by multiplying the average PUA_a – calculated from countries with available data – by the total population size N_a of all countries belonging to that aggregate.

$$NUA_a = PUA_a \times N_a$$

Population data are taken from the 2024 revision of the *World Population Prospects*.[1]

Challenges and limitations

Due to the lack of country-specific information, the income allowance for non-food essential spending is assumed to be the same for all countries that belong to the same income groups. Moreover, there is currently no consideration of the variation in incomes and cost of living across locations within countries, nor of the potential inconsistency between the income threshold r and the way the temporal and spatial deflation is implemented in the PIP income distribution. These two aspects may induce a bias in the estimated PUA, the direction of which is difficult to predict without detailed data from national household expenditure surveys. Possible refinements are being considered to reduce the risk of such bias in the future.

Recommended readings

Bai, Y., Herforth, A., Cafiero, C., Conti, V., Rissanen, M.O., Masters, W.A. & Rosero Moncayo, J. 2024. *Methods for monitoring the affordability of a healthy diet.* FAO Statistics Working Paper Series, No. 24-44. Rome, FAO. https://doi.org/10.4060/cd3703en

Herforth, A., Bai, Y., Venkat, A., Mahrt, K., Ebel, A. & Masters, W.A. 2020. *Cost and affordability of healthy diets across and within countries – Background paper for The State of Food Security and Nutrition in the World 2020.* FAO Agricultural Development Economics Technical Study, No. 9. Rome, FAO. https://doi.org/10.4060/cb2431en

WASTING IN CHILDREN UNDER FIVE YEARS OF AGE

Definition

Wasting is defined as weight (kg) for height/length (cm) <–2 SD of the World Health Organization (WHO) Child Growth Standards median.

How it is reported

This is the percentage of children aged 0 to 59 months who are –2 SD below the median weight-for-height of the WHO Child Growth Standards. The estimates presented are from the report *Levels and trends in child malnutrition: UNICEF/WHO/World Bank Group Joint Child Malnutrition Estimates. Key findings of the 2025 edition*.[15] The entire series of aggregates is revised with every new edition. Readers are advised to refrain from comparing regional and global series with prior editions of the report.

Methodology

Country level

The Joint Child Malnutrition Estimates (JME) dataset contains the point estimate, and where available, the standard error, the 95 percent confidence bounds and the unweighted sample size. Where microdata are available, the JME dataset uses estimates that have been recalculated to adhere to the global standard definition. Where microdata are not available, reported estimates are used, except in cases where adjustments are required to standardize for:

- use of an alternate growth reference from the 2006 WHO Child Growth Standards;
- age ranges that do not include the full 0–59-month age group; and
- data sources that are only nationally representative for populations residing in rural areas.

Regional and global aggregates

The wasting prevalence data derived from national data sources in the JME May 2025 dataset were used to generate regional and global estimates from 1990 to 2024, using the JME subregional multilevel model and applying population weights for children under five years of age from the 2024 revision of the *World Population Prospects*.[1]

Data sources

Nationally representative household surveys – for example, DHS, Multiple Indicator Cluster Surveys (MICS), Standardized Monitoring and Assessment of Relief and Transition (SMART) surveys, and LSMS surveys – are the most common nationally representative data sources that specifically collect child nutrition data on the height, weight and age of children under five years of age, and which can be used to generate country-level prevalence estimates for wasting. Administrative data sources (e.g. from routine or surveillance systems) are also included where population coverage is high.

Given that country surveys can be collected during any season, the prevalence estimate from any survey may be at a high or a low, or it may fall somewhere in between if data collection spans several seasons. Thus, the prevalence of wasting captures the situation of wasting at a specific point in time and not over an entire year. Variations in seasons across surveys make it difficult to draw inferences on trends.

Challenges and limitations

The recommended periodicity for countries to report on wasting is every three to five years; however, for some countries, data are available less frequently. While every effort has been made to maximize the comparability of statistics across countries and over time, country data may differ in terms of data collection methods, population coverage and estimation methods. Survey estimates come with levels of uncertainty due to both sampling errors and non-sampling errors

(technical measurement errors, recording errors, and so on). Neither of the two sources of error has been fully addressed for deriving estimates at the country or regional and global levels.

Recommended readings

de Onis, M., Blössner, M., Borghi, E., Morris, R. & Frongillo, E.A. 2004. Methodology for estimating regional and global trends of child malnutrition. *International Journal of Epidemiology*, 33(6): 1260–1270. https://doi.org/10.1093/ije/dyh202

UNICEF (United Nations Children's Fund), WHO & World Bank. 2024. *The UNICEF-WHO-World Bank Joint Child Malnutrition Estimates (JME) standard methodology*. New York, USA. https://iris.who.int/server/api/core/bitstreams/3a1218eb-23cd-45f4-9c34-d9ee6c42ba50/content

UNICEF, WHO & World Bank. *Levels and trends in child malnutrition: UNICEF/WHO/World Bank Group Joint Child Malnutrition Estimates. Key findings of the 2025 edition*. New York, USA, Geneva, Switzerland and Washington, DC. https://data.unicef.org/resources/JME, https://www.who.int/teams/nutrition-and-food-safety/monitoring-nutritional-status-and-food-safety-and-events/joint-child-malnutrition-estimates/latest-estimates, https://datatopics.worldbank.org/child-malnutrition

WHO. 2014. *Comprehensive Implementation Plan on maternal, infant and young child nutrition*. Geneva, Switzerland. https://www.who.int/publications/i/item/WHO-NMH-NHD-14.1

WHO. 2024. *Nutrition Landscape Information System (NLIS) country profile indicators: interpretation guide*. Second edition. Geneva, Switzerland. https://www.who.int/publications/i/item/9789241516952

STUNTING IN CHILDREN UNDER FIVE YEARS OF AGE

Definition

Stunting is defined as height/length (cm) for age (days) <–2 SD of the WHO Child Growth Standards median.

How it is reported

This is the percentage of children aged 0 to 59 months who are –2 SD below the median height-for-age of the WHO Child Growth Standards. The estimates presented are from the report *Levels and trends in child malnutrition: UNICEF/WHO/World Bank Group Joint Child Malnutrition Estimates. Key findings of the 2025 edition*.[15] The entire series of aggregates is revised with every new edition. Readers are advised to refrain from comparing regional and global series with prior editions of the report.

Methodology

Country level

The JME dataset contains the point estimate, and where available, the standard error, the 95 percent confidence bounds and the unweighted sample size. Where microdata are available, the JME dataset contains estimates that have been recalculated to adhere to the global standard definition. Where microdata are not available, reported estimates are presented, except in cases where adjustments are required to standardize for:

- use of an alternate growth reference from the 2006 WHO Child Growth Standards;
- age ranges that do not include the full 0–59-month age group; and
- data sources that are only nationally representative for populations residing in rural areas.

Based on the JME May 2025 dataset, the prevalence of stunting was modelled at logit (log-odds) scale using a penalized longitudinal mixed model with a heterogeneous error term. The quality of the models was quantified with model-fit criteria that balance the complexity of the model with the closeness of the fit to the observed data. The proposed method has important characteristics, including non-linear time trends, regional trends, country-specific trends, covariate data and a heterogeneous error term. All countries with data contribute to estimates of the overall time trend and the impact of covariate data on the prevalence. The covariate data consisted of linear and quadratic sociodemographic index (SDI)[br] average health system access over the previous five years.

br The SDI is a summary measure that identifies where countries or other geographical areas sit on the spectrum of development. Expressed on a scale of 0 to 1, the SDI is a composite average of the rankings of the income per capita, average educational attainment, and fertility rates of all areas in the Global Burden of Disease study.

Annual country-level modelled estimates from 2000 to 2024 for stunting were disseminated by the JME in 2025 for 162 countries and territories. Modelled country estimates were also produced for an additional 43 countries, used solely for the generation of regional and global aggregates.

Regional and global aggregates

Regional and global aggregates for all years from 1990 to 2024 were derived as the respective country averages weighted by the countries' under-five population from the 2024 revision of the *World Population Prospects*,[1] using model-based estimates for 205 countries and territories. This includes 162 countries and territories whose estimates are published. It also includes 43 countries with modelled estimates generated for development of regional and global aggregates but for which country-modelled estimates are not shown.

Data sources

Nationally representative household surveys (e.g. DHS, MICS, SMART surveys and LSMS surveys) are the most common nationally representative data sources that specifically collect child nutrition data on the height and age of children under five years of age, and which can be used to generate country-level prevalence estimates for stunting. Administrative data sources (e.g. from routine or surveillance systems) are also included where population coverage is high.

Challenges and limitations

The recommended periodicity for countries to report on stunting is every three to five years; however, for some countries, data are available less frequently. While every effort has been made to maximize the comparability of statistics across countries and over time, country data may differ in terms of data collection methods, population coverage and estimation methods. Survey estimates come with levels of uncertainty due to both sampling errors and non-sampling errors (technical measurement errors, recording errors, and so on). Neither of the two sources of error has been fully addressed for deriving estimates at the country or regional and global levels.

Recommended readings

Brauer, M., Roth, G.A., Aravkin, A.Y., Zheng, P., Abata, K.H., Abate, Y.H., Abbafati, C. *et al.* 2024. Global burden and strength of evidence for 88 risk factors in 204 countries and 811 subnational locations, 1990-2021: a systematic analysis for the Global Burden of Disease Study 2021. *The Lancet*, 403(10440): 2162–2203. https://doi.org/10.1016/S0140-6736(24)00933-4. Erratum, *The Lancet*, 404(10449): 244. https://doi.org/10.1016/S0140-6736(24)01458-2

McLain, A.C., Frongillo, E.A., Feng, J. & Borghi, E. 2019. Prediction intervals for penalized longitudinal models with multisource summary measures: An application to childhood malnutrition. *Statistics in Medicine*, 38(6): 1002–1012. https://doi.org/10.1002/sim.8024

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UNICEF, WHO & World Bank. 2025. *Levels and trends in child malnutrition: UNICEF/WHO/World Bank Group Joint Child Malnutrition Estimates. Key findings of the 2025 edition*. New York, USA, Geneva, Switzerland and Washington, DC. https://data.unicef.org/resources/JME, https://www.who.int/teams/nutrition-and-food-safety/monitoring-nutritional-status-and-food-safety-and-events/joint-child-malnutrition-estimates/latest-estimates, https://datatopics.worldbank.org/child-malnutrition

WHO. 2014. *Comprehensive Implementation Plan on maternal, infant and young child nutrition*. Geneva, Switzerland. https://www.who.int/publications/i/item/WHO-NMH-NHD-14.1

WHO. 2024. *Nutrition Landscape Information System (NLIS) country profile indicators: interpretation guide*. Second edition. Geneva, Switzerland. https://www.who.int/publications/i/item/9789241516952

WHO & UNICEF. 2019. *Recommendations for data collection, analysis and reporting on anthropometric indicators in children under 5 years old*. Geneva, Switzerland and New York, USA. https://www.who.int/publications/i/item/9789241515559

OVERWEIGHT IN CHILDREN UNDER FIVE YEARS OF AGE

Definition

Overweight is defined as weight (kg) for height/length (cm) >+2 SD of the WHO Child Growth Standards median.

How it is reported

This is the percentage of children aged 0 to 59 months who are +2 SD above the median weight-for-height of the WHO Child Growth Standards. The estimates presented are from the report *Levels and trends in child malnutrition: UNICEF/WHO/World Bank Group Joint Child Malnutrition Estimates. Key findings of the 2025 edition*.[15] The entire series of aggregates is revised with every new edition. Readers are advised to refrain from comparing regional and global series with prior editions of the report.

Methodology

Country level

The JME dataset contains the point estimate, and where available, the standard error, the 95 percent confidence bounds and the unweighted sample size. Where microdata are available, the JME dataset contains estimates that have been recalculated to adhere to the global standard definition. Where microdata are not available, reported estimates are presented, except in cases where adjustments are required to standardize for:

- use of an alternate growth reference from the 2006 WHO Child Growth Standards;
- age ranges that do not include the full 0–59-month age group; and
- data sources that are only nationally representative for populations residing in rural areas.

Based on the JME May 2025 dataset, the prevalence of overweight was modelled at logit (log-odds) scale using a penalized longitudinal mixed model with a heterogeneous error term. The quality of the models was quantified with model-fit criteria that balance the complexity of the model with the closeness of the fit to the observed data. The proposed method has important characteristics, including non-linear time trends, regional trends, country-specific trends, covariate data and a heterogeneous error term. All countries with data contribute to estimates of the overall time trend and the impact of covariate data on the prevalence. The covariate data consisted of linear and quadratic SDI.

Annual country-level modelled estimates from 2000 to 2024 of overweight were disseminated by the JME in 2025 for 163 countries and territories. Modelled country estimates were also produced for an additional 42 countries, used solely for the generation of regional and global aggregates.

Regional and global aggregates

Regional and global aggregates for all years from 1990 to 2024 were derived as the respective country averages weighted by the countries' under-five population from the 2024 revision of the *World Population Prospects*,[1] using model-based estimates for 205 countries. This includes 163 countries and territories whose estimates are published. It also includes 42 countries with modelled estimates generated for development of regional and global aggregates but for which country-modelled estimates are not shown.

Data sources

Nationally representative household surveys (e.g. DHS, MICS, SMART surveys and LSMS surveys) are the most common nationally representative data sources that specifically collect child nutrition data on the height, weight and age of children under five years of age, and which can be used to generate country-level prevalence estimates for overweight. Some administrative data sources (e.g. from routine or surveillance systems) are also included where population coverage is high.

Challenges and limitations

The recommended periodicity for countries to report on overweight is every three to five years; however, for some countries, data are available less frequently. While every effort has been made to maximize the comparability of statistics across countries and over time, country data may differ in terms of data collection methods, population coverage and estimation methods. Survey estimates come with levels of uncertainty due to both sampling errors and non-sampling errors (technical measurement errors, recording errors, and so on). Neither of

the two sources of error has been fully addressed for deriving estimates at the country or regional and global levels.

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WHO. 2014. *Comprehensive Implementation Plan on maternal, infant and young child nutrition*. Geneva, Switzerland. https://www.who.int/publications/i/item/WHO-NMH-NHD-14.1

WHO. 2024. *Nutrition Landscape Information System (NLIS) country profile indicators: interpretation guide.* Second edition. Geneva, Switzerland. https://www.who.int/publications/i/item/9789241516952

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EXCLUSIVE BREASTFEEDING

Definition

Exclusive breastfeeding for infants under six months of age is defined as receiving only breastmilk and no additional food or drink, not even water.

How it is reported

This is the percentage of infants aged 0 to 5 months who are fed exclusively on breastmilk with no additional food or drink, not even water, in the 24 hours preceding the survey.

The estimates presented are from UNICEF's Global Database on Infant and Young Child Feeding.[16]

Methodology

Country level

This indicator is defined as breastfeeding with no other food or drink, not even water. Estimates are based on a recall of the previous day's feeding to a cross-section of infants 0 to 5 months of age.

$$\frac{\textit{Infants 0–5 months of age who received only breastmilk during the previous day}}{\textit{Infants 0–5 months of age}}$$

Breastfeeding by a wet nurse, feeding of expressed breastmilk and feeding of donor human milk all count as being fed breastmilk. Prescribed medicines, oral rehydration solution, vitamins and minerals are not counted as fluids or foods. However, herbal fluids and similar traditional medicines are counted as fluids, and infants who consume these are not exclusively breastfed.

Regional and global aggregates

For 2012, the regional and global exclusive breastfeeding estimates were generated using the most recent estimate available for each country between 2005 and 2012. Similarly, 2024 estimates were developed using the most recent estimate available for each country between 2018 and 2024, with the exception of China where the most recent data are from the year 2017. Regional and global estimates are calculated as weighted averages of the prevalence of exclusive breastfeeding in each country, using the total number of infants aged 0 to 5 months (defined as half of the population

aged zero) from the 2024 revision of the *World Population Prospects*[1] (2012 for the baseline and 2024 for the current) as weights. Estimates are presented in the cases where the available data represent at least 50 percent of corresponding regions' total number of infants aged 0 to 5 months, unless otherwise noted.

Data sources

Data are collected through nationally representative household surveys such as DHS and MICS. The estimates are based on questions about liquid and food intake of children aged 0 to 23 months in the 24 hours preceding the survey.

Challenges and limitations

While a high proportion of countries collect data for exclusive breastfeeding, data are particularly lacking from high-income countries. The recommended periodicity of reporting on exclusive breastfeeding is every three to five years. However, for some countries, data are reported less frequently, meaning changes in feeding patterns are often not detected for several years after the change occurs.

Regional and global averages may be affected depending on which countries had data available for the periods considered in this report.

Using the previous day's feeding as a basis may cause the proportion of exclusively breastfed infants to be overestimated, as some infants who may have been given other liquids or foods irregularly may not have received these on the day before the survey.

Recommended readings

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LOW BIRTHWEIGHT

Definition

Low birthweight is defined as a weight at birth of less than 2 500 g.

How it is reported

This is the percentage of newborns weighing less than 2 500 g (less than 5.51 lbs) at birth. The estimates presented are from the 2023 edition of the UNICEF and WHO *Joint low birthweight estimates*.[17] As the entire series of estimates is revised with every new edition, readers are advised to refrain from comparing series with prior editions.

Methodology

Country level

Nationally representative low birthweight data, including survey and administrative data sources, were collated from 2000 to 2020 from 158 countries. Data quality criteria and adjustment methods were applied to develop the final set of country data to be included in the modelling exercise. Country data are reviewed prior to entry into the dataset for coverage and quality, and adjusted to account for biases due to birthweight missingness and heaping. To be included, birthweights available from administrative data needed to cover at least 80 percent of the 2022 revision of the *World Population Prospects*[18] estimated live births for that year. For national household surveys to be included in the dataset, they must:

- have a birthweight in the dataset for a minimum of 30 percent of the sample;
- include a minimum of 200 birthweights in the dataset;
- present no indication of severe data heaping or implausible distribution – this means that: i) ≤55 percent of all birthweights can fall on the three most frequent birthweights (i.e. if 3 000 g, 3 500 g and 2 500 g were the three most frequent birthweights, when added together, they would have to make up ≤55 percent of all

birthweights in the dataset); ii) ≤10 percent of all birthweights are ≥4 500 g; and iii) ≤5 percent of birthweights fall on the tail end of <500 g or >5 000 g; and
- have undergone an adjustment for missing birthweights and heaping.

Estimates of low birthweight prevalence at the national level were predicted from a Bayesian multilevel regression model. The model is fit on the logit (log-odds) scale to ensure that proportions are bounded between zero and one, and then back-transformed and multiplied by 100 to obtain prevalence estimates.

Hierarchical random country-specific intercepts (countries within regions within global) accounted for the correlation within and between regions. Penalized splines were used as temporal smoothing across the time series, meaning that country-level non-linear time trends were captured without random variation affecting the trend. The final covariates included in the model were: gross national income PPP per person,[bs] the prevalence of underweight among female adults, the adult female literacy rate, the modern contraception prevalence rate, and the percentage of urban population.

Data quality categories were used to apply bias shifts and additional variance terms. These bias shifts were applied to administrative data from lower quality categories, which approximated the expected bias from heaping that was already accounted for in the survey adjustment. The additional variance was based on the data quality category of the administrative data, and the weighting between administrative and survey data if the country had both.

Standard diagnostic checks were done to assess for convergence and sampling efficiency. Cross-validation was implemented, averaging over 200 random splits of 20 percent test data, and 80 percent training data. Sensitivity analyses were undertaken including checks on covariates, bias method, temporal smoothing, and non-informative priors. All models were fitted in R statistical software and the R packages "rjags" and "R2jags".[19, 20]

bs Measured in constant 2017 international dollars.

The model included all 2 040 country-years of data meeting the inclusion criteria and generated annual estimates from 2000 to 2020 with 95 percent credible intervals for the 195 countries and territories with either low birthweight input data or covariate data. Only estimates for countries and territories with data are reported. For the 37 (out of 195) countries with no data or data not meeting inclusion criteria, the final model was used to predict estimates of the prevalence of low birthweight based on country intercepts and time trends estimated from the region- and country-level covariates for all country-years.

Regional and global aggregates

Regional and global aggregates are produced using all estimates from all 195 countries and territories weighted by estimated live births for that year from the 2022 revision of the *World Population Prospects*.[18]

Data sources

Nationally representative estimates of low birthweight prevalence can be derived from a range of sources, broadly defined as national administrative data or representative household surveys. National administrative data are those coming from national systems including civil registration and vital statistics systems, national health management information systems, and birth registries. National household surveys such as DHS and MICS, which contain information about birthweight as well as key related indicators including maternal perception of size at birth, are also an important source of data on low birthweight, especially in contexts where birthweights are not recorded and/or data heaping is a problem.

Challenges and limitations

A major limitation of monitoring low birthweight globally is the lack of birthweight data for many of the world's children. There is a notable bias, with children born to poorer, less educated, rural mothers and families being less likely to have a recorded birthweight when compared to their richer, urban counterparts with more highly educated mothers. Close to one out of three surveys containing birthweight data were not included, primarily due to missingness or poor data quality, and mostly from low-income countries in regions with a high risk of low birthweight.

As newborns with missing birthweights have risk factors for low birthweight, estimates that do not represent these children may be lower than the true value. Furthermore, poor data quality regarding excessive heaping on multiples of 500 g or 100 g exists in data from low- and middle-income countries which can further underestimate low birthweight. The methods applied in the current database to adjust for missing birthweights and heaping in survey estimates are meant to address this problem. A limitation of current methods is that individual-level data are not available for administrative data, and these data cannot be directly adjusted to remove bias from heaping and missingness.

The geographical groupings used in the modelling may not be appropriate for epidemiological or economic regional outliers. In all, the estimates for 37 (out of 195) countries without input data may have been affected. In addition, the confidence limits of the regional and global estimates may be artificially small, given that about half of the modelled countries had a country-specific effect generated at random for each bootstrap prediction, some of which were positive and others negative, making the relative uncertainty at the regional and global levels less than that at the country level.

Recommended readings

Blanc, A. & Wardlaw, T. 2005. Monitoring low birth weight: An evaluation of international estimates and an updated estimation procedure. *Bulletin World Health Organization*, 83(3): 178–185. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2624216

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ADULT OBESITY

Definition

Adult obesity is defined as body mass index (BMI) ≥30.0 kg/m^2. The BMI is the weight-to-height ratio commonly used to classify the nutritional status of adults. It is calculated as the body weight in kilograms divided by the square of the body height in metres (kg/m^2). Obesity includes individuals with BMI equal to or higher than 30 kg/m^2.

How it is reported

Percentage of the population over 18 years of age with BMI ≥30.0 kg/m^2 weighted by sex and standardized by age. The estimates presented are based on WHO (2026).[21] The entire series of estimates is revised with every new update. Readers are advised to refrain from comparing the current series with prior updates.

Methodology

Country level

A Bayesian hierarchical regression model, fitted using a Markov Chain Monte Carlo (MCMC) sample, with inference made using posterior MCMC samples, was applied to estimate the trends in the prevalence of different BMI categories by sex, age, country and year from 1980 to 2024.[22] Countries were organized into 20 regions and 8 super-regions, primarily based on geography and national income. The model had a hierarchical structure in which estimates for each country-year were informed by its own data, if available, and by data from other years within the same country and from other countries, especially those in the same region and super-region with data for similar time periods. The model included non-linear time trends through a combination of linear and second-order random walk terms, all modelled hierarchically. The age association of BMI was modelled using a cubic spline to allow for non-linear age patterns, which might vary across countries. The coefficients of the splines

were modelled hierarchically and were allowed to vary over time to reflect the changing age associations. Age standardization was performed by taking the weighted means of age-sex-specific estimates, using age weights from the WHO standard population.[23]

Regional and global aggregates

Regional and global prevalence estimates are calculated as population-weighted averages of the constituent countries.

Data sources

Population-based studies with measurements of height and weight were used. These may be representative of a national, subnational or community population.

Challenges and limitations

Body mass index is an imperfect measure of the extent and distribution of body fat but is widely available in population-based surveys and is used in clinical practice; it is also correlated with the more complex and costly dual-energy x-ray absorptiometry.

Some countries had few data sources and three countries had no data source. Estimates for these countries were informed to a larger degree by data from other countries through geographical hierarchy.

There were also differences in data availability by age group, with fewer data available for older adults (≥65 years), which increased the uncertainty of estimates for that age group.

Recommended readings

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WHO. 2026. WHO: Noncommunicable Diseases Data Portal. [Accessed on 15 June 2026]. https://ncdportal.org

WHO. 2024. *Nutrition Landscape Information System (NLIS) country profile indicators: interpretation guide*. Second edition. Geneva, Switzerland. https://www.who.int/publications/i/item/9789241516952

WHO. 2026 Global Health Observatory data repository: Obesity among adults, BMI >= 30, prevalence (age-standardized estimate) (%). [Accessed on 15 June 2026]. https://www.who.int/data/gho/data/indicators/indicator-details/GHO/prevalence-of-obesity-among-adults-bmi-=-30-(age-standardized-estimate)-(-). Licence: CC-BY-4.0.

ANAEMIA IN WOMEN AGED 15 TO 49 YEARS

Definition

Anaemia in women aged 15 to 49 years is defined as the percentage of women aged 15 to 49 years with a haemoglobin concentration of less than 120 g/L for non-pregnant women and lactating women, and less than 110 g/L for pregnant women, adjusted for altitude and smoking.

How it is reported

Percentage of women aged 15 to 49 years with a haemoglobin concentration below 110 g/L for pregnant women and below 120 g/L for non-pregnant women. The estimates presented are based on WHO (2025).[24] The entire series of estimates is revised with every new edition. Readers are advised to refrain from comparing the current series with prior editions.

Methodology

Country level

The 2025 edition of anaemia estimates in women aged 15 to 49 years, by pregnancy status, included data sources from the Micronutrients Database, part of the WHO Vitamin and Mineral Nutrition Information System (VMNIS) and from anonymized individual-level data which span from 1995 to 2023. Adjustments of data on blood haemoglobin concentrations for altitude were carried out when relevant (i.e. for countries with a high-altitude population) and adjustments for smoking were done when feasible. Biologically implausible haemoglobin values (<25 g/L or >200 g/L) were excluded.

A Bayesian hierarchical mixture model was used to estimate trends for each country-year, informed by data from the same country-year, other years for the same country, and other countries in the same region. The model accounted more for areas with fewer data and less for data-rich regions. Trends were modelled as linear plus smooth non-linear trends at country, regional and global levels. Estimates were also informed by covariates like sociodemographic index, meat supply, and overweight prevalence. Further information can be found in the background document, *WHO standard methodology to estimate SDG 2.2.3 indicator on anaemia prevalence in women 15-49 years, by pregnancy status*.[25]

This edition improved how data from capillary puncture and HemoCue® 301 are treated due to potential measurement errors and bias. Mean haemoglobin concentrations were used to minimize errors in capillary blood, while all available data were used for venous blood assessments. An indicator for HemoCue® 301 was included in the model to account for the suspected bias in HemoCue® 301 measurements and improve anaemia prevalence predictions.

This provided consistent estimates of haemoglobin levels and anaemia prevalence, based on WHO thresholds from 1989 (<110 g/L for pregnant women, <120 g/L for non-pregnant women).[26] Although the latest criteria from 2024 were not used due to limited individual-level data available to perform reanalysis,[27] updates are ongoing for the next round which will include the updated cut-offs.

Regional and global aggregates

Regional and global prevalence estimates are calculated as population-weighted averages of the constituent countries.

Data sources

The preferred data source is population-based surveys. Data from surveillance systems may be used under some circumstances, but recorded diagnoses are typically underestimated.
The Micronutrients database[28] of the WHO VMNIS compiles and summarizes data on the micronutrient status of populations from various other sources, including data collected from the scientific literature and through collaborators, including WHO regional and country offices, United Nations organizations, ministries of health, research and academic institutions, and non-governmental organizations. In addition, anonymized individual-level data are obtained from multi-country surveys, including DHS, Malaria Indicator Surveys and Reproductive Health Surveys.

Challenges and limitations

Despite a high proportion of countries having nationally representative survey data for anaemia, there is still a lack of reporting on this indicator, especially in high-income countries. In addition, this round of estimates only included sources where the measurement method was known. As a result, the estimates may not fully capture the variation across countries and regions, and thus tend to "shrink" towards global means when data are sparse.

Recommended readings

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MINIMUM DIETARY DIVERSITY IN CHILDREN

Definition

Minimum Dietary Diversity for Children (MDD-C) aged 6 to 23 months is defined as consuming foods and beverages from at least five out of eight defined food groups.

How it is reported

This is the percentage of children aged 6 to 23 months who consumed foods and beverages from at least five out of eight defined food groups during the previous day.

The estimates presented are from UNICEF's Global Database on Infant and Young Child Feeding.[16]

Methodology

Country level

The MDD-C indicator is based on 24-hour non-quantified dietary intake recall data in which parents or caregivers are asked to report all the foods and drinks the child has consumed over the past 24 hours at home and elsewhere. Consumption of any amount of food or beverage from a food group is sufficient to "count", i.e. there is no minimum quantity.

This indicator is calculated in two steps. The first step is to construct a food group score summing the eight defined food groups. The eight food groups considered are: breast milk; grains, roots, tubers and plantains; pulses (beans, peas and lentils), nuts and seeds; dairy products (milk, infant formula, yogurt, cheese); flesh foods (meat, fish, poultry, organ meats); eggs; vitamin A-rich fruits and vegetables; and other fruits and vegetables. Begin with a score of 0. For each of the eight food groups, add one point if any food in the group was consumed.

The second step is to calculate as a percentage whereby the numerator is the number of children aged 6 to 23 months who have consumed foods and beverages from five or more of the eight defined food groups; and the denominator is the total number of children aged 6 to 23 months in the sample. This value is multiplied by 100 to convert the value into a percentage.

$$\frac{\textit{Children 6–23 months of age who consumed foods and beverages from at least five out of eight defined food groups during the previous day}}{\textit{Children 6–23 months of age}}$$

Regional and global aggregates

For 2024, estimates were developed using the most recent estimate available for each country between 2018 and 2024, with the exception of China where the most recent data are from the year 2017. Regional and global estimates are calculated as weighted averages of the prevalence of minimum dietary diversity in each country, using the total number of children aged 6 to 23 months in the year 2024 (defined as half of population aged zero combined with population aged one year) from the 2024 revision of the *World Population Prospects*[1] as weights. Estimates are

presented in the cases where the available data represent at least 50 percent of corresponding regions' total number of children aged 6 to 23 months, unless otherwise noted.

Data sources
Data are collected through nationally representative household surveys such as DHS and MICS that include modules about dietary intake of children aged 6 to 23 months in the 24 hours preceding the survey.

Challenges and limitations
The indicator does not provide information on nutritional adequacy. As estimates are based on dietary recall in the previous 24 hours, it may miss seasonal or longer-term variations in dietary patterns and may be subject to recall bias.

While a high proportion of countries collect data for minimum dietary diversity, data are particularly lacking from high-income countries. The recommended periodicity of reporting on minimum dietary diversity is every three to five years. However, for some countries, data are reported less frequently, meaning changes in feeding patterns are often not detected for several years after the change occurs.

Regional and global averages may be affected depending on which countries had data available for the periods considered in this report.

Recommended readings
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MINIMUM DIETARY DIVERSITY IN WOMEN

Definition
Minimum Dietary Diversity for Women (MDD-W) is a measure of dietary diversity, one of the principles of a healthy diet, and it is achieved when women aged 15 to 49 years consume at least five out of ten defined food groups in the previous day.

How it is reported
MDD-W is a population level indicator that indicates the percentage of women aged 15 to 49 years who consumed at least five out of ten defined food groups during the previous day.

Methodology
Country level
The MDD-W estimates presented in this report are based on publicly available data compiled by FAO from nationally representative surveys that included dietary diversity modules for women aged 15 to 49 years.

In general, the MDD-W indicator is computed using data collected through a non-quantified 24-hour dietary recall, in which women aged 15 to 49 years report all foods and beverages consumed over the previous day, both at home and outside the home. Although questionnaires vary across surveys, the surveys analysed collected only yes/no responses for the ten defined food groups used to construct the indicator, without capturing quantities of foods or beverages consumed. The ten food groups comprise: grains, white roots and tubers, and plantains; pulses (beans, peas and lentils); nuts and seeds; milk and milk products; meat, poultry and fish; eggs; dark green leafy vegetables; other vitamin A-rich fruits and vegetables; other vegetables; and other fruits.

To estimate MDD-W, each food group is first coded as "1" if any food in the group was consumed and "0" if otherwise. A food group counts towards the indicator only if the amount consumed in the previous day was 15 g or more (approximately one tablespoon, for most foods).

A food group diversity score is then calculated by summing these values, ranging from 0 to 10, across the sample. Each woman is then coded

as "yes" if the scoring is at least (≥) 5 and "no" if otherwise. Using survey-specific weights, MDD-W is then estimated as the percentage of women in the sample who achieve a food group diversity score of five or more. The following value is multiplied by 100 to convert it into a percentage.

$$\frac{\textit{Women aged 15–49 years who consumed foods and beverages from at least five out of ten defined food groups during the previous day}}{\textit{Women aged 15–49 years of age in the sample}}$$

There are important technical considerations for designing surveys to collect MDD-W data, including the adaptation of data collection tools to local contexts, which are detailed in the FAO guide on MDD-W.

Regional and global aggregates

The regional and global MDD-W estimates were computed primarily using data from the most recent nationally representative survey conducted in each country between 2021 and 2025, with only one survey per country included in the analysis. In cases where two surveys were available for a country within this period, preference was given to the survey with a substantially larger sample size, based on the assumption of relatively lower sampling error and greater precision of the estimates.

Regional and global estimates were calculated as weighted averages of the prevalence of MDD-W in each country, using the total number of women aged 15 to 49 years based on the 2024 revision of the UN *World Population Prospects*.[1] Estimates are presented only when the available data represent at least 50 percent of the total number of women aged 15 to 49 years in the corresponding global or regional population, unless otherwise noted.

Data sources

As noted above, data from publicly available nationally representative surveys that included modules about dietary diversity of women aged 15 to 49 years in the 24 hours preceding the survey were used. These included the Gallup© World Poll (GWP), Demographic and Health Survey (DHS), National Food Security and Nutrition Surveys, National Micronutrient Surveys, Multiple Indicator Cluster Surveys (MICS), SMART surveys and the Comprehensive Food Security and Vulnerability Assessments (CFVA).

Challenges and limitations

Although MDD-W is a validated proxy indicator for assessing the micronutrient adequacy of women's diets, it does not capture the adequacy of intake of all essential nutrients, including macronutrients. In addition, the indicator is based on dietary intake during the previous 24 hours only and may therefore not reflect usual dietary patterns or capture seasonal variations in food consumption. It is also subject to recall bias, as respondents may forget food consumed or misreport intake. The indicator does not capture the consumption of unhealthy foods, such as excess sugar, although additional survey questions can be incorporated to assess these aspects if relevant to a country's context.

As the data presented in this report were drawn from different national surveys, comparability across countries may be affected by differences in survey quality, sample size, and questionnaires used.

The regional and global averages may also be influenced by the availability of country data on MDD-W within the reporting period defined for this report (i.e. the five years preceding the report).

Recommended reading

FAO. 2021. *Minimum dietary diversity for women*. Rome. https://doi.org/10.4060/cb3434en ■

ANNEX 2
GLOSSARY

Acute food insecurity
Food insecurity found in a specified area at a specific point in time and of a severity that threatens lives, livelihoods, or both, regardless of the causes, context or duration. It has relevance in providing strategic guidance to actions being made within the humanitarian–development–peace nexus, to provide humanitarian assistance to the population involved and to prevent or decrease the impact of food crises.[29]

Affordability of a healthy diet
The ability of people to buy the foods needed to consume healthy diets in their local environment, while protecting their access to other essential goods and services. See **Annex 1B** for the full description of the methodology.

Agrifood systems
Cover the journey of food from farm to table – including when it is grown, fished, harvested, processed, packaged, transported, distributed, traded, bought, prepared, eaten and disposed of. They also encompass non-food products that constitute livelihoods and all of the people, activities, investments and choices that play a part in making available these food and agricultural products. In the FAO Constitution, the term "agriculture" and its derivatives include fisheries, marine products, forestry and primary forestry products.

Animal source foods
All types of meat, poultry, fish, shellfish, insects, grubs, eggs, milk, cheese, yoghurt and other milk products.[30, 31]

Cash transfer programmes
Direct payments of money, provided by governments or humanitarian organizations, to help individuals meet their basic needs, particularly in emergencies or during periods of poverty. These programmes can be either unconditional, meaning no conditions are required for receiving the cash, or conditional, with requirements such as school attendance or health checks.[32]

Chronic food insecurity
Persistent inability to access sufficient food, often driven by structural factors such as poverty, poor infrastructure, or limited access to essential services. It can manifest itself at different levels of severity, including at moderate levels that do not necessarily threaten lives or livelihoods but that persist over time and can negatively affect people's well-being and the long-term development of communities and countries.

Consumer price index (CPI)
A system for measuring changes in the prices of goods and services that households consume. Such changes affect the real purchasing power of consumers' incomes and their welfare. As the prices of different goods and services do not all change at the same rate, a price index can only reflect their average movement. A price index is typically assigned a value of unity, or 100, in a specified period, and the values of the index for other periods of time are intended to indicate the average proportionate, or percentage, change in prices from this price reference period. Price indices can also be used to measure differences in price levels between different cities, regions or countries at the same point in time.

Cost of a healthy diet (CoHD)
The amount of money needed to purchase the least expensive combination of locally available foods that satisfy the recommendations provided in dietary guidelines. See **Annex 1B** for the full description of the methodology.

Cost of caloric adequacy
Also known as cost of an energy-sufficient diet, it refers to the minimum cost to meet energy requirements using the least-cost available starchy staple food in each country.[33]

Cost of nutrient adequacy
Also known as cost of a nutrient-adequate diet, it refers to the least-cost set of items available at each time and place that would stay within the lower and upper bounds for dietary energy and all essential nutrients.[33]

Currency depreciation
A decline in the value of a country's currency relative to another currency, typically measured against major global currencies such as the US dollar (USD). When a currency depreciates, more local currency is needed to buy the same amount of foreign currency or imported goods. When a currency depreciates, imports become more expensive, and can exacerbate food price inflation, especially in countries that rely heavily on imported foods.

Diet quality (or healthy diets)
Comprising four key aspects: diversity (within and across food groups), adequacy (sufficiency of all essential nutrients compared to requirements), moderation (of foods and nutrients that are related to poor health outcomes) and balance (energy and macronutrient intake). Foods consumed should be safe.[34]

Dietary diversity
The variety of different foods or food groups consumed over a given reference period. It reflects an important component of the quality of a person's diet. Greater diversity is associated with a greater likelihood of adequate nutrient intake and reduced risk of nutrient deficiency.

Dietary energy requirements
The amount of dietary energy, measured in kilojoules or kilocalories (often referred to as calories), required by an individual to maintain body functions, health and normal activity. Dietary energy requirements are dependent upon age, sex, body size and level of physical activity. Additional energy is required to support optimal growth and development in children and in women during pregnancy, and for milk production during lactation, consistent with the good health of mother and child.

Dietary guidelines
Also known as food-based dietary guidelines, they are intended to establish a basis for public food and nutrition, health and agricultural policies, and nutrition education programmes to foster healthy eating habits and lifestyles. They provide advice on foods, food groups and dietary patterns to provide the required nutrients to the general public to promote overall health and prevent chronic diseases.[35]

Economic shock
An unexpected or unpredictable event that is external to the specific economy and can either harm or boost it. A global financial crisis causing bank lending or credit to fall, or an economic downturn in a major trading partner of a country both reflect demand-side shocks that can have multiple effects on spending and investment. A steep rise in oil and gas prices, natural disasters that result in sharp falls in production, or conflict that disrupts trade and production, are examples of supply-side shocks.

Energy price shock
A sudden and significant increase (or decrease) in the prices of energy commodities – such as oil, natural gas or electricity – often caused by geopolitical conflicts, supply disruptions or market volatility. These shocks can have wide-ranging effects on production costs, transportation, inflation and economic stability.

Energy-dense foods
Food with a high content of calories (energy) with respect to its mass or volume.

Exchange rate
The price of one country's currency expressed in terms of another currency. The exchange rate indicates how much of one currency is needed to purchase one unit of another. It affects international trade (exports/imports), influences inflation, interest rates and foreign investment, and can impact the competitiveness of a country's goods and services abroad.

Export bans
Government-imposed prohibition on the export of certain products, most commonly essential commodities like foodstuffs, with the aim of addressing domestic concerns such as food security. Export bans are typically enacted to increase domestic food availability, stabilize or reduce domestic food prices, and prevent or relieve critical shortages of food during sudden supply disruptions.

Export quotas
Government-imposed restrictions that restrict the quantity or value of exports of a particular good or service (usually considered essential) within a given period. These measures are enacted to ensure domestic supply stability.

Export restrictions
Government-imposed limitations on the quantity or value of goods – particularly food and agricultural products – that can be exported to other countries. These measures can take various forms, including export bans, quotas, taxes, licensing requirements, or other regulatory controls.

Extreme poverty
Refers to the percentage of people living on less than USD 3.00 per person per day (2021 PPP prices) in a country in a given year.[36]

Food consumer price index
A system for measuring the change over time in the general price levels of foods and non-alcoholic beverages that households use, pay for or otherwise acquire for consumption. The cost of purchasing a fixed basket of consumer foods and beverages is measured during a specified period; the products in the basket are representative of household expenditure and are of constant quality and similar characteristics.[37]

Food environments
The physical, economic, political and sociocultural contexts in which consumers engage with agrifood systems to make their decisions about acquiring, preparing and consuming food.[38]

Food Insecurity Experience Scale (FIES)
An experience-based food security scale used to produce a measure of access to food at different levels of severity that can be compared across contexts. It relies on data obtained by asking people, directly in surveys, about the occurrence of conditions and behaviours that are known to reflect constrained access to food. The prevalence of moderate or severe food insecurity based on the FIES is SDG Indicator 2.1.2. See **Annex 1B** for the full description of the methodology.

Food security
A situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. Based on this definition, four food security dimensions can be identified: food availability, economic and physical access to food, food utilization, and stability over time.

Food security dimensions
In this report, food security dimensions refer to the four traditional dimensions of food security:

a. **Availability** – This dimension addresses whether or not food is actually or potentially physically present, including aspects of production, food reserves, markets and transportation, and wild foods.
b. **Access** – If food is actually or potentially physically present, the next question is whether or not households and individuals have sufficient physical and economic access to that food.
c. **Utilization** – If food is available and households have adequate access to it, the next question is whether or not households are maximizing the consumption of adequate nutrition and energy. Sufficient energy and nutrient intake by individuals is the result of good caring and feeding practices, food preparation, dietary diversity and intra-household distribution of food, and access to clean water, sanitation and health care. Combined with good biological utilization of food consumed, this determines the nutritional status of individuals.
d. **Stability** – If the dimensions of availability, access and utilization are sufficiently met, stability is the condition in which the whole system is stable, thus ensuring that households are food secure at all times. Stability issues can refer to short-term instability (which can lead to acute food insecurity) or medium- to

long-term instability (which can lead to chronic food insecurity). Climatic, economic, social and political factors can all be a source of instability.

Governance
Formal and informal rules, organizations and processes through which public and private actors articulate their interests and make and implement decisions.[39]

Healthy diets
See **Diet quality** definition.

Hunger
An uncomfortable or painful physical sensation caused by insufficient consumption of dietary energy. In this report, the term hunger is synonymous with chronic undernourishment and is measured by the prevalence of undernourishment.

Macronutrients
The major source of energy and bulk (volume) in our diets, macronutrients are needed in large quantities (in gram range). They include carbohydrates, proteins and fats. They are a main source of dietary energy, which is measured in calories. Obtaining sufficient energy is essential for everyone in order to maintain body growth, development and good health. Carbohydrates, proteins and fats, in addition to providing energy, each have very specific functions in the body and must be supplied in sufficient amounts to carry out those functions.

Malnutrition
An abnormal physiological condition caused by inadequate, unbalanced or excessive intake of macronutrients and/or micronutrients. Malnutrition includes undernutrition (child stunting and wasting, and vitamin and mineral deficiencies), as well as overweight and obesity.

Market concentration
The degree to which a small number of firms dominate total sales or market share in a particular industry. High market concentration often leads to reduced competition, potentially giving firms more pricing power and control over supply chains.

Market information system
A service that involves the regular collection of information on prices (and, in some cases, traded quantities) of agricultural products from wholesale and retail markets and the dissemination of this information on a timely basis to farmers, traders, government officials, policymakers, consumers and other stakeholders.[40]

Market power
The ability of a firm or group of firms to influence the price or supply of a product in the market, rather than being purely subject to competitive market forces. Firms with significant market power can raise prices above competitive levels and may limit output or exclude competitors. This often arises in markets characterized by high concentration (a small number of dominant firms).

Micronutrients
Including vitamins and minerals, micronutrients are required in very small (micro) but specific amounts. Vitamins and minerals in foods are necessary for the body to grow, develop and function properly, and are essential for our health and well-being. Our bodies require a number of different vitamins and minerals, each of which has a specific function in the body and must be supplied in different, sufficient amounts.

Minimum dietary diversity (MDD)
A measure of the diversity of a person's diet through a simple count of the number of different food groups consumed within a specific time frame, typically a day. For children aged 6 to 23 months, MDD is achieved when they consumed foods from at least five out of eight defined food groups the previous day. For women aged 15 to 49 years, MDD is achieved when they consumed at least five out of ten defined food groups the previous day. Achieving MDD indicates a greater likelihood that the diet is sufficient in essential nutrients, such as vitamins and minerals. See **Annex 1B** for the full description of the methodology.

Moderate food insecurity
The level of severity of food insecurity, based on the Food Insecurity Experience Scale, at which people face uncertainties about their ability to obtain food and have been forced to reduce, at times during the year, the quality and/or quantity of food they consume due to lack of money or other resources. It thus refers to a lack of consistent access to food, which diminishes dietary quality, disrupts normal eating patterns, and can have negative consequences for nutrition, health and well-being. See **Annex 1B** for the full description of the methodology.

Multifactor productivity (MFP)
The ratio of output to aggregated primary and intermediate inputs. It represents a Hicks-neutral, input-augmenting technology parameter. Multifactor productivity growth captures uniform input-saving technological change, reducing unit production costs proportionally to the productivity gains.[41]

Nominal rate of protection (NRP)
A measure of the extent to which trade and market policies raise or lower the producer price of a commodity above or below the international reference price. As such, it measures how such policies incentivize (i.e. protect) or disincentivize (i.e. penalize) producers. It is therefore the measure used to estimate price incentives provided to agricultural producers.

Non-tariff measures
Policy measures, other than ordinary customs tariffs, with a potential economic effect on international trade, changing quantities of goods traded, or prices, or both.[42]

Nutrient-dense foods
Foods with a high content of nutrients with respect to their mass or volume.

Nutritional status
The physiological state of an individual that results from the relationship between nutrient intake and requirements and the body's ability to digest, absorb and use these nutrients.

Nutritious foods
Safe foods that contribute essential nutrients such as vitamins and minerals (micronutrients), fibre and other components to healthy diets that are beneficial for growth, and health and development, guarding against malnutrition. In nutritious foods, the presence of nutrients of public health concern including saturated fats, free sugars, and salt/sodium is minimized, industrially produced trans fats are eliminated, and salt is iodized.

Overweight and obesity
Body weight that is above normal for height as a result of an excessive accumulation of fat. It is usually a manifestation of expending less energy than is consumed. In adults, overweight is defined as a body mass index (BMI) of 25 kg/m^2 or more, and obesity as a BMI of 30 kg/m^2 or more. In children under five years of age, overweight is defined as weight-for-height greater than 2 SD above the WHO Child Growth Standards median, and obesity as weight-for-height greater than 3 SD above the WHO Child Growth Standards median.[43] See **Annex 1B** for the full description of the methodology.

Post-harvest losses
Measurable quantitative and qualitative reductions in food occurring from harvest through to, but excluding, the retail stage, along the various phases of the post-harvest system, including on-farm handling, storage, transport, processing and wholesale distribution.

Prevalence of undernourishment (PoU)
An estimate of the proportion of the population that lacks enough dietary energy for a healthy, active life. It is FAO's traditional indicator used to monitor hunger at the global and regional level, as well as SDG Indicator 2.1.1. See **Annex 1B** for the full description of the methodology.

Price transmission
The process through which price changes in one part of the supply chain or market (often international) are passed through to other levels, such as wholesale, retail or consumer prices.

Price volatility
A measure of how much and how frequently prices fluctuate over time, often unpredictably. High price volatility means prices change rapidly and significantly, while low volatility indicates relatively stable prices.

Purchasing power parity (PPP)
Rates of currency conversion that aim to equalize the purchasing power of different currencies by eliminating differences in price levels between countries. The basket of goods and services priced represents a sample of all those included in final consumption expenditure, actual consumption, gross fixed capital formation, and total goods and services.[44]

Resilience
The ability of individuals, households, communities, cities, institutions, systems and societies to prevent, resist, absorb, adapt, respond and recover positively, efficiently and effectively when faced with a wide range of risks, while maintaining an acceptable level of functioning and without compromising long-term prospects for sustainable development, peace and security, human rights and well-being for all.[45]

Risk
The probability or likelihood of the occurrence of hazardous events or trends multiplied by the impacts if these events or trends occur. Risk to food insecurity is the probability of food insecurity resulting from interactions between a natural or human-induced hazard, shock or stress and vulnerable conditions.

Severe food insecurity
The level of severity of food insecurity at which people have likely run out of food, experienced hunger and, at the most extreme, gone for days without eating, putting their health and well-being at grave risk, based on the Food Insecurity Experience Scale. See **Annex 1B** for the full description of the methodology.

Social protection
Public intervention in the form of policies and programmes designed to reduce poverty and vulnerability by assisting the poor, at risk and vulnerable groups such as, but not limited to, women, children, youth, persons with disabilities, migrant workers, older people, families and communities to enhance their capacities to better manage risks and facilitate equal access to essential services and opportunities based on rights/needs.[46]

Starchy staples
One of the six food groups used in the Healthy Diet Basket. Starchy staples comprise grains (such as rice, wheat, maize, sorghum and millet), white roots and tubers (such as potato, cassava, yam and white-fleshed sweet potato), and plantains.[47]

Stunting
Low height-for-age, reflecting a past episode or episodes of sustained undernutrition. In children under five years of age, stunting is defined as height-for-age less than –2 SD below the WHO Child Growth Standards median. See **Annex 1B** for the full description of the methodology.

Subsidies
Government actions that provide an advantage to consumers or producers in order to supplement their income or lower their costs.[48]

Tariffs
Taxes or financial charges imposed by a government on goods and services imported from other countries. They provide a price advantage to domestically produced goods over similar imported ones and increase government revenues.

Total factor productivity (TFP)
A measurement of the total outputs of a sector relative to the total inputs of land, labour, capital and materials.[49]

Unaffordability
See **Affordability of a healthy diet** definition and **Annex 1B** for the full description of the methodology.

Undernourishment
The condition in which an individual's habitual food consumption is insufficient to provide the amount of dietary energy required to maintain a normal, active and healthy life. For the purposes of this report, hunger is defined as being synonymous with chronic undernourishment. The prevalence of undernourishment is used to measure hunger.

Undernutrition
The outcome of poor nutritional intake in terms of quantity and/or quality, and/or poor absorption and/or poor biological use of nutrients consumed

as a result of repeated instances of disease. It includes being underweight for one's age, too short for one's age (stunted), dangerously thin for one's height (suffering from wasting) or deficient in vitamins and minerals (suffering from micronutrient deficiency).

Vulnerability

The conditions determined by physical, social, economic and environmental factors or processes that increase the susceptibility of an individual, community, assets or systems to the impacts of hazards.[50] Vulnerability to food insecurity is the range of conditions that increase the susceptibility of a household to the impact on food security in case of a shock or hazard.

Wasting

Low weight-for-height, generally the result of weight loss associated with a recent period of inadequate dietary energy intake and/or disease. In children under five years of age, wasting is defined as weight for height less than –2 SD below the WHO Child Growth Standards median. See **Annex 1B** for the full description of the methodology.

NOTES

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CHAPTER 2

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CHAPTER 4

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NOTES ON GEOGRAPHIC REGIONS IN STATISTICAL TABLES IN CHAPTER 2 AND ANNEX 1

Countries revise their official statistics regularly for past periods as well as for the latest reporting period. The same holds for statistics presented in this report. Whenever this happens, estimates are revised accordingly. Therefore, users are advised to refer to changes in estimates over time only within the same edition of *The State of Food Security and Nutrition in the World* and refrain from comparing data published in editions for different years.

Geographic regions

This publication follows the composition of geographic regions as presented by the Statistics Division of the United Nations Secretariat primarily for use in its publications and databases (https://unstats.un.org/unsd/methodology/m49). The assignment of countries or areas to specific groupings is for statistical convenience and does not imply any assumption regarding political or other affiliation of countries or territories by the United Nations. Please refer to the list below for the country composition of each region in the tables of **Chapter 2** and **Annex 1**.

Countries, areas and territories for which there were insufficient or unreliable data for conducting the assessment are not reported and not included in the aggregates. Specifically, with respect to the M49 classification:

- **Northern Africa:** In addition to the countries listed in the table, PoU and food insecurity based on the FIES include an estimate for Western Sahara. Child wasting, stunting and overweight, low birthweight, adult obesity, exclusive breastfeeding and anaemia estimates exclude Western Sahara.
- **Eastern Africa:** This grouping excludes Chagos Archipelago, French Southern Territories, Mayotte and Réunion.
- **Western Africa:** This grouping excludes Ascension, Saint Helena and Tristan da Cunha.
- **Caribbean:** This grouping excludes Anguilla, Aruba, Bonaire, Sint Eustatius and Saba, British Virgin Islands, Cayman Islands, Curaçao, Guadeloupe, Martinique, Montserrat, Saint Barthélemy, Saint Martin (French Part), Sint Maarten (Dutch part), and Turks and Caicos Islands. Adult obesity, child wasting, low birthweight and exclusive breastfeeding also exclude Puerto Rico and United States Virgin Islands, but exclusive breastfeeding, child wasting, child stunting and child overweight do not exclude Turks and Caicos Islands.
- **South America:** This grouping excludes Bouvet Island, Falkland Islands (Malvinas), French Guyana, and South Georgia and the South Sandwich Islands.
- **Australia and New Zealand:** This grouping excludes Christmas Island, Cocos (Keeling) Islands, Heard Island and McDonald Islands, and Norfolk Island.
- **Melanesia:** Anaemia, child wasting, stunting and overweight, low birthweight and exclusive breastfeeding estimates exclude New Caledonia.
- **Micronesia:** Adult obesity, anaemia, child wasting, low birthweight and exclusive breastfeeding estimates exclude Guam, Northern Mariana Islands and US Minor Outlying Islands. Aggregates for child stunting and overweight exclude only US Minor Outlying Islands.
- **Polynesia:** This grouping excludes Pitcairn, and Wallis and Futuna Islands. Adult obesity, child wasting, low birthweight and exclusive breastfeeding estimates exclude American Samoa, French Polynesia and Tokelau (Associate Member). Aggregates for child stunting and overweight exclude only French Polynesia.
- **Northern America:** This grouping excludes Saint Pierre and Miquelon. Adult obesity, anaemia, low birthweight and exclusive breastfeeding aggregates also exclude Bermuda and Greenland.
- **Northern Europe:** This grouping excludes Åland Islands, Channel Islands, Faroe Islands (Associate Member), Isle of Man, and Svalbard and Jan Mayen Islands.
- **Southern Europe:** This grouping excludes Gibraltar, Holy See and San Marino. However, anaemia, child stunting, overweight and low birthweight estimates include San Marino.
- **Western Europe:** This grouping excludes Liechtenstein and Monaco. However, child stunting, overweight, anaemia and low birthweight estimates include Monaco.

Other groupings

Least Developed Countries, Landlocked Developing Countries and Small Island Developing States groupings include the countries as presented by the Statistics Division of the United Nations (https://unstats.un.org/unsd/methodology/m49).

Small Island Developing States: Estimates for child stunting, wasting and overweight, adult obesity, exclusive breastfeeding and low birthweight exclude Anguilla, Aruba, Bonaire, Sint Eustatius and Saba, British Virgin Islands, Curaçao, French Polynesia, Montserrat, New Caledonia and Sint Maarten (Dutch part). In addition, estimates for child wasting, adult obesity, exclusive breastfeeding and low birthweight also exclude American Samoa and Puerto Rico.

High-income, upper-middle-income, lower-middle-income and low-income countries include the countries as presented by the World Bank classification for the 2025/26 fiscal year (https://datahelpdesk.worldbank.org/knowledgebase/articles/906519).

Low-income food-deficit countries (2026): Afghanistan, Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Comoros, Congo, Democratic People's Republic of Korea, Democratic Republic of the Congo, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kenya, Kyrgyzstan, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Nepal, Niger, Rwanda, Senegal, Sierra Leone, Somalia, South Sudan, Sudan, Syrian Arab Republic, Tajikistan, Togo, Uganda and Yemen.

Composition of geographic regions

AFRICA

Northern Africa: Algeria, Egypt, Libya, Morocco, Sudan, Tunisia and Western Sahara.

SUB-SAHARAN AFRICA

Eastern Africa: Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Mozambique, Rwanda, Seychelles, Somalia, South Sudan, Uganda, United Republic of Tanzania, Zambia and Zimbabwe.

Middle Africa: Angola, Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, and Sao Tome and Principe.

Southern Africa: Botswana, Eswatini, Lesotho, Namibia and South Africa.

Western Africa: Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone and Togo.

ASIA

Central Asia: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.

Eastern Asia: China, Democratic People's Republic of Korea, Japan, Mongolia and Republic of Korea.

South-eastern Asia: Brunei Darussalam, Cambodia, Indonesia, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste and Viet Nam.

Southern Asia: Afghanistan, Bangladesh, Bhutan, India, Iran (Islamic Republic of), Maldives, Nepal, Pakistan and Sri Lanka.

Western Asia: Armenia, Azerbaijan, Bahrain, Cyprus, Georgia, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syrian Arab Republic, Türkiye, United Arab Emirates and Yemen.

LATIN AMERICA AND THE CARIBBEAN

Caribbean: Antigua and Barbuda, Bahamas, Barbados, Cuba, Dominica, Dominican Republic, Grenada, Haiti, Jamaica, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, and Trinidad and Tobago.

LATIN AMERICA

Central America: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua and Panama.

South America: Argentina, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay and Venezuela (Bolivarian Republic of).

OCEANIA

Australia and New Zealand: Australia and New Zealand.

OCEANIA EXCLUDING AUSTRALIA AND NEW ZEALAND

Melanesia: Fiji, New Caledonia, Papua New Guinea, Solomon Islands and Vanuatu.

Micronesia: Kiribati, Marshall Islands, Micronesia (Federated States of), Naoero and Palau.

Polynesia: American Samoa, Cook Islands, French Polynesia, Niue, Samoa, Tokelau, Tonga and Tuvalu.

NORTHERN AMERICA AND EUROPE

Northern America: Bermuda, Canada, Greenland and United States of America.

EUROPE

Eastern Europe: Belarus, Bulgaria, Czechia, Hungary, Poland, Republic of Moldova, Romania, Russian Federation, Slovakia and Ukraine.

Northern Europe: Denmark, Estonia, Finland, Iceland, Ireland, Latvia, Lithuania, Norway, Sweden, and United Kingdom of Great Britain and Northern Ireland.

Southern Europe: Albania, Andorra, Bosnia and Herzegovina, Croatia, Greece, Italy, Malta, Montenegro, North Macedonia, Portugal, Serbia, Slovenia and Spain.

Western Europe: Austria, Belgium, France, Germany, Luxembourg, Netherlands (Kingdom of the) and Switzerland.

THE STATE OF THE WORLD

2026 THE STATE OF FOOD SECURITY AND NUTRITION IN THE WORLD

UNDERSTANDING AND ADDRESSING THE HIGH COST OF A HEALTHY DIET

Despite sustained, gradual improvement in recent years, global hunger and food insecurity remain far above the targets set by the 2030 Agenda for Sustainable Development. It is estimated that 645 million people faced hunger in 2025. Beyond ensuring access to sufficient dietary energy, populations must have economic access to safe, diverse and nutritious foods. Yet, healthy diets are unaffordable for about 2.7 billion people worldwide, with the crisis deepening particularly in Africa. The 2026 edition of *The State of Food Security and Nutrition in the World* evaluates this pressing challenge, exploring the structural drivers behind the persistently high cost of a healthy diet.

This report reveals that the high prices of nutrient-dense items – specifically animal source foods, fruits and vegetables – account for nearly 70 percent of the cost of a healthy diet. By leveraging existing data and analytical tools, it examines how geographical disparities, agricultural productivity deficits, and value chain inefficiencies, including food loss and waste, create formidable barriers to accessing a healthy diet.

To sustainably achieve Zero Hunger, policymakers must implement targeted, multisectoral interventions, from shifting agricultural subsidies towards horticulture, to investing in robust cold chains and transport networks. This report provides a comprehensive strategy for governments and stakeholders aiming to structurally lower diet costs and safeguard human capital, while avoiding the hidden costs of agrifood systems.

The State of Food Security and Nutrition in the World 2026 (supplementary material)

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