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2025

THE STATE OF FOOD SECURITY AND NUTRITION IN THE WORLD

ADDRESSING HIGH FOOD PRICE INFLATION FOR FOOD SECURITY AND NUTRITION

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THAILAND. View of fresh fruit and vegetable market with umbrella coverings.

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2025 THE STATE OF FOOD SECURITY AND NUTRITION IN THE WORLD

ADDRESSING HIGH FOOD PRICE INFLATION FOR FOOD SECURITY AND NUTRITION

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, 2025

CONTENTS

FOREWORD vii
METHODOLOGY ix
ACKNOWLEDGEMENTS x
ABBREVIATIONS xii
CORE MESSAGES xiv
EXECUTIVE SUMMARY xvii

CHAPTER 1
INTRODUCTION: TACKLING FOOD PRICE INFLATION TO ACHIEVE ZERO HUNGER 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 21
2.3 The state of nutrition: progress towards global nutrition targets 28

CHAPTER 3
UNDERSTANDING THE 2021–2023 FOOD PRICE INFLATION SURGE: CAUSES AND CONSEQUENCES FOR FOOD SECURITY AND NUTRITION 41
3.1 Food price inflation: stylized facts 42
3.2 Why high food price inflation? 48
3.3 Food price inflation puts pressure on food security and nutrition outcomes 59
3.4 Price inflation of nutrient-dense foods relative to other foods: Are there differences? 71

CHAPTER 4
HOW COUNTRIES NAVIGATED THE PERFECT STORM: FISCAL, MONETARY AND TRADE POLICIES AND THEIR IMPLICATIONS FOR FOOD SECURITY AND NUTRITION 81
4.1 From relief to reflections 84
4.2 Patterns, policies and pathways: a trajectory analysis 98

CHAPTER 5
CONCLUSIONS 104

ANNEXES 107

ANNEX 1A
Statistical tables to Chapter 2 108

ANNEX 1B
Methodological notes for the food security and nutrition indicators 154

ANNEX 2
Glossary 175

NOTES 183

The supplementary material to *The State of Food Security and Nutrition in the World 2025* is available at: https://doi.org/10.4060/cd6008en-supplementary

TABLES

2.1 Prevalence of undernourishment, 2005–2024 8

2.2 Number of undernourished people, 2005–2024 9

2.3 Prevalence of food insecurity at severe level only, and at moderate or severe level, based on the Food Insecurity Experience Scale, 2015–2024 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, 2015–2024 17

2.5 The average cost of a healthy diet, 2019–2024 23

2.6 Proportion of the population and number of people unable to afford a healthy diet, 2019–2024 26

2.7 Global and regional trends in prevalence for seven nutrition indicators with global targets 34

2.8 Global and regional trends in numbers for seven nutrition indicators with global targets 35

3.1 Association between food prices and wasting, 1985–2023 70

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 and low birthweight 108

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 and number of babies born with low birthweight 123

A1.3 Prevalence of moderate or severe food insecurity, and severe food insecurity only, by degree of urbanization in 2024 138

A1.4 Prevalence of moderate or severe food insecurity, and severe food insecurity only, among adult men and women in 2024 139

A1.5 Cost of a healthy diet, 2017–2024 140

A1.6 Affordability of a healthy diet, 2017–2024 146

FIGURES

2.1 Updated global estimates point to a decrease in world hunger in recent years following the sharp increase from 2019 to 2021 5

2.2 Progress was made towards reducing hunger in South-eastern and Southern Asia and in South America, but hunger continues to climb in most subregions of Africa and in Western Asia 10

2.3 Eliminating hunger by 2030 remains an elusive target 13

2.4 Global food insecurity levels declined gradually from 2021 to 2024, with Latin America and the Caribbean showing notable progress 15

2.5 Globally and in most regions, the prevalence of food insecurity has remained consistently higher in rural areas than in urban areas since 2022, with notable improvements in urban areas in Asia and across urban, peri-urban and rural areas in Latin America and the Caribbean 19

2.6 The gender gap narrowed at the global level from 2021 to 2023, but increased slightly in 2024, with the prevalence of food insecurity remaining consistently higher among women than among men, globally and in all regions 20

2.7 The proportion of the population and number of people unable to afford a healthy diet in the world decreased from 2020 to 2024 25

2.8 Excluding India, there is an increasing trend in lower-middle-income countries in the number of people unable to afford a healthy diet 27

2.9 Accelerated progress is needed to achieve the 2030 global nutrition targets 31

2.10 Most countries either do not have sufficient data or are off track to achieve the 2030 global nutrition targets 36

2.11 Only one-third of children aged 6 to 23 months in the world are achieving Minimum Dietary Diversity for Children (MDD-C) 38

2.12 Two-thirds of women aged 15 to 49 years in the world are achieving Minimum Dietary Diversity for Women (MDD-W) 38

CONTENTS

3.1 Food price inflation has risen since late 2020, peaking in January 2023 43

3.2 Food price inflation was the highest in low-income countries, 2019–2024 47

3.3 Fiscal responses to the COVID-19 pandemic 49

3.4 The COVID-19 pandemic and the war in Ukraine contributed to commodity price fluctuations 55

3.5 Effects of commodity shocks on food price inflation were higher in the United States of America than in the euro area 57

3.6 Food security and nutrition dimensions and determinants 60

3.7 The global fallout and recovery process of average employee monthly earnings has been highly uneven, as shown in the cases of Egypt, Mexico, Mongolia and Peru 62

3.8 Low- and lower-middle-income countries experienced high levels of moderate or severe food insecurity and food price inflation 65

3.9 Relationship between food insecurity and food prices, 2014–2024 66

3.10 Highly unequal countries, women and rural populations are more vulnerable to increases in moderate or severe food insecurity associated with food price inflation 68

3.11 The cost of basic starchy staples is consistently lower than that of more nutrient-dense food groups 73

3.12 Ultra-processed foods are more affordable than less processed alternatives 74

3.13 The price of starchy staples and oils faced the highest increase in Mexico, Nigeria and Pakistan 76

3.14 Price indices of items selected for least-cost healthy diets 77

3.15 Price trends by NOVA processing category relative to basic starchy staples in Mexico, Nigeria and Pakistan 78

4.1 Policies can both contribute to food price inflation and serve as a part of the solution 83

4.2 Surge in social protection measures since 2022 87

4.3 Shortening policy durations: a trend towards quick reversals 91

4.4 Global cereal stocks on the rise after price volatility 93

4.5 Distinctive trajectories of food security and food price inflation, 2015–2023 99

4.6 Observed policy implementation rates across countries by food insecurity (2023 levels) and trajectory group 101

BOXES

2.1 Updates in the series of prevalence of undernourishment estimates 6

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 New targets for global nutrition indicators 29

2.4 Progress on anaemia in women aged 15 to 49 years in context 32

3.1 Definitions and concepts: What is inflation? What is food price inflation? 44

3.2 Tracking prices of food and agricultural products 45

3.3 The interplay between exchange rate and local inflation 51

3.4 Real food wage analysis in selected conflict-affected countries 63

4.1 Humanitarian cash and in-kind transfers in high inflation contexts 89

4.2 Export bans and trade restrictions shaped global prices of phosphate fertilizers 92

4.3 Innovative market information tools supporting smallholder farmers 96

FOREWORD

Despite adequate global food production, millions of people go hungry or are malnourished because safe and nutritious food is not available, not accessible or, more often, not affordable. This reality threatens not only the achievement of Sustainable Development Goal 2 (SDG 2) and the global nutrition targets, but also the whole 2030 Agenda for Sustainable Development, by undermining people's health and livelihoods, as well as the stability of global agrifood systems. This year's edition of *The State of Food Security and Nutrition in the World* both examines this dynamic and shows how coordinated, evidence-based policies are essential to end hunger (SDG Target 2.1) and all forms of malnutrition (SDG Target 2.2), especially among children and youth, women, and vulnerable populations.

Low-income countries and communities bear the brunt of hunger, food insecurity, and malnutrition, and are disproportionately affected by food price inflation. In these contexts, poorer households spend a larger share of their income on food, meaning that even modest price increases can put food out of reach. At the same time, the costs of agrifood systems are getting higher and higher, which leaves small producers and family farmers with less income. In addition, food items that constitute a healthy diet tend to be the most expensive. Even in high-income countries, rising food prices are straining purchasing power, consumer confidence, and policy responses.

In 2020, food price inflation began to steadily rise and, despite a gradual decline in 2023, it outpaced the income growth of many vulnerable populations. This has hindered the recovery from the COVID-19 pandemic, leaving hundreds of millions of people facing chronic hunger, and billions unable to afford healthy diets, with millions of children stunted, wasted or overweight. With less than five years remaining to achieve the 2030 Agenda, keeping the global pledge to end hunger and malnutrition is under serious threat.

The 2025 edition of *The State of Food Security and Nutrition in the World* illustrates the status of key food security and nutrition indicators according to the latest available data, and calls for global coordination and targeted, evidence-based, country-led actions. These efforts must be inclusive, context-specific and aligned with the needs and priorities of each country to address

today's interconnected challenges. They must also be equitable, delivering tangible benefits for groups such as small-scale producers, women, children, youth and Indigenous Peoples.

We will continue to uphold the right to adequate food and nutrition, and to work together to support countries to build more efficient, more inclusive, more resilient, more sustainable and more just agrifood systems to ensure that affordable nutritious foods reach every community. We stand by our shared commitments to fulfil the promise of the Sustainable Development Goals and the Pact for the Future, so that safe and nutritious foods are available, accessible and affordable for all, today and tomorrow.

Qu Dongyu
FAO Director-General

Alvaro Lario
IFAD President

Catherine Russell
UNICEF Executive Director

Cindy Hensley McCain
WFP Executive Director

Tedros Adhanom Ghebreyesus
WHO Director-General

METHODOLOGY

The State of Food Security and Nutrition in the World 2025 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. Ada Ignaciuk coordinated the work and served as Chief Editor of the publication. They are all 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: Marco V. Sánchez Cantillo (Chair, FAO), Carola Alvarez (IFAD), Joan Matji (UNICEF), Arif Husain (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 Ada Ignaciuk (FAO), and comprising Carlo Cafiero, Giovanni Carrasco Azzini, Valentina Conti, Anne Kepple, Lucia Latino, Olivier Lavagne d'Ortigue, Sravya Mamidanna, Eduardo Nakasone Uechi, Kwame Akoto Osei, Sara Viviani and Trudy Wijnhoven (FAO), Caterina Ruggeri Laderchi and Tisorn Songsermsawas (IFAD), Mauro Brero, Joel Conkle and Chika Hayashi (UNICEF), Angela Di Perna and Stefan Meyer (WFP), Elaine Borghi, Richard Kumapley, Katrina Lundberg and Ann Mizumoto (WHO).

Chapter 1 of the report was written by Ada Ignaciuk (FAO).

Chapter 2 of the report was coordinated by Anne Kepple (FAO). Section 2.1 was written by Carlo Cafiero, Anne Kepple, David Laborde and Sara Viviani, with key inputs from Adeeba Ishaq, Abdul Sattar and Firas Yassin (FAO). Section 2.2 was written by Valentina Conti, with inputs from Carlo Cafiero (FAO), Yan Bai, Marko Olavi Rissanen and Mizuki Yamanaka (World Bank). Section 2.3 was written by Joel Conkle (UNICEF) and Kwame Akoto Osei (FAO), with key inputs from Chika Hayashi and Vrinda Mehra (UNICEF), Elaine Borghi, Richard Kumapley and Ann Mizumoto (WHO) and Anne Kepple (FAO). Box 2.4 was written by Lynnette Neufeld with input from Anne Kepple, José Rosero Moncayo and Kwame Akoto Osei (FAO) and Luz Maria De Regil (WHO). Olivier Lavagne d'Ortigue (FAO) provided data visualization support for this chapter.

Chapter 3 of the report was written by Ada Ignaciuk and Eduardo Nakasone Uechi (FAO). Gert Peersman (University of Gent) contributed to Section 3.2 and Leah Costlow, Rachel Gilbert, Elena Martínez and William A. Masters (Tufts University) contributed to Section 3.4. Box 3.2 was written by David Laborde and Monika Tothova (FAO). Box 3.3 was written by El Mamoun Amrouk and Emiliano Magrini (FAO), and Box 3.4 was written by Angela Di Perna and Stefan Meyer (WFP).

Chapter 4 of the report was written by Ada Ignaciuk and Giovanni Carrasco Azzini (FAO). Elsa Olivetti (FAO) contributed to Section 4.1 and Sravya Mamidanna (FAO) contributed to Section 4.2. Box 4.1 was written by Angela Di Perna, Guadalupe Galambos, Stefan Meyer and Priya Singh (WFP), and Box 4.2 was written by Enrique Hennings and Jessica Murcia Poulsen (IFAD).

Chapter 5 of the report was written by Ada Ignaciuk (FAO).

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Data inputs

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ABBREVIATIONS

ADER	average dietary energy requirement
AFS	African swine fever
AMIS	Agricultural Market Information System
ARIMAX	Autoregressive Integrated Moving Average with External Explanatory Variable
BMI	body mass index
CoAHD	cost and affordability of a healthy diet
COFECE	Federal Economic Competition Commission
CoHD	cost of a healthy diet
COMESA	Common Market for Eastern and Southern Africa
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
ECB	European Central Bank
EUROSTAT	Statistical Office of the European Union
FAO	Food and Agriculture Organization of the United Nations
FBDGs	food-based dietary guidelines
FBS	food balance sheet
FFPI	FAO Food Price Index
FIES	Food Insecurity Experience Scale
FIES-SM	Food Insecurity Experience Scale Survey Module
$FI_{mod+sev}$	prevalence of moderate or severe food insecurity
FI_{sev}	prevalence of severe food insecurity
food CPI	food consumer price index
GDP	gross domestic product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
GWP	Gallup© World Poll
HCES	household consumption and expenditure survey
HDB	Healthy Diet Basket
HICs	high-income countries
IBRD	International Bank for Reconstruction and Development
ICP	International Comparison Program
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
ILO	International Labour Organization
IMF	International Monetary Fund
IPC/CH	Integrated Food Security Phase Classification/Cadre Harmonisé
IQR	interquartile range
JME	Joint Child Malnutrition Estimates
LCU	local currency unit
LDC	least developed country
LICs	low-income countries
LMICs	lower-middle-income 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
MICs	middle-income countries
MICS	Multiple Indicator Cluster Surveys
MIS	market information system
MSP	minimum support price
NCD	non-communicable disease
NoU	number of undernourished
NUA	number of people unable to afford a healthy diet
OECD	Organisation for Economic Cooperation and Development
PAL	physical activity level
PoU	prevalence of undernourishment
PPP	purchasing power parity
PUA	prevalence of unaffordability of a healthy diet
R&D	research and development
SD	standard deviation
SDG	Sustainable Development Goal
SDI	sociodemographic index
SMART	Standardized Monitoring and Assessment of Relief and Transition
SME	small and medium-sized enterprise
SUA	supply utilization account
UMICs	upper-middle-income countries
UNCTAD	United Nations Conference on Trade and Development
UN DESA	United Nations Department of Economic and Social Affairs
UN-Habitat	United Nations Human Settlements Programme
UNICEF	United Nations Children's Fund
VAT	value added tax
VMNIS	Vitamin and Mineral Nutrition Information System
WDI	World Development Indicators
WFP	World Food Programme
WHA	World Health Assembly
WHO	World Health Organization
WTO	World Trade Organization

CORE MESSAGES

➔ **Updated global estimates point to signs of a decrease in world hunger in recent years.** An estimated 8.2 percent of the global population may have faced hunger in 2024, down from 8.5 percent in 2023 and 8.7 percent in 2022. The progress is driven by notable improvement in South-eastern Asia, Southern Asia and South America in contrast to the continuing rise in hunger in most subregions of Africa and in Western Asia.

➔ **It is estimated that between 638 and 720 million people, corresponding to 7.8 and 8.8 percent of the global population, respectively, faced hunger in 2024.** Considering the point estimate (673 million), this indicates a decrease of 22 million compared to 2022. In 2024, hunger affected about 307 million people in Africa, 323 million in Asia and 34 million in Latin America and the Caribbean – 20.2, 6.7 and 5.1 percent of the population, respectively. The global number of undernourished is expected to decrease, but 512 million people are still projected to be facing hunger in 2030, of whom nearly 60 percent will be in Africa.

➔ **About 2.3 billion people in the world are estimated to have been moderately or severely food insecure in 2024.** The global prevalence of moderate or severe food insecurity has declined gradually since 2021, reaching 28.0 percent in 2024. Food insecurity is on the rise in Africa and falling in Latin America and the Caribbean; it has been decreasing gradually in Asia for several consecutive years, while in Oceania and in Northern America and Europe, new estimates point to a slight decline from 2023 to 2024 following a several-year rise. Globally and in almost every region, food insecurity is more prevalent in rural areas than in urban areas and affects more women than men.

➔ **Food prices rose throughout 2023 and 2024, pushing up the average cost of a healthy diet globally** to 4.46 purchasing power parity (PPP) dollars per person per day, up from 4.30 PPP dollars in 2023 and 4.01 PPP dollars in 2022.

➔ **Despite the increase in food prices during 2024, the number of people unable to afford a healthy diet in the world fell from 2.76 billion in 2019 to 2.60 billion in 2024.** However, the number increased in Africa from 864 million to just over 1 billion in this period (from 64 to 66.6 percent). In low-income countries, the number increased from 464 million in 2019 to 545 million (72 percent of the population) in 2024, and in lower-middle-income countries (excluding India), from 791 to 869 million (52 percent of the population) in the same period.

➔ **Accelerated progress is needed to achieve the 2030 global targets for key indicators of child malnutrition.** The world has made progress to reduce child stunting, with a decrease in the prevalence from 26.4 percent in 2012 to 23.2 percent in 2024. The global prevalence of child wasting and of child overweight remained largely unchanged during this period, estimated at 6.6 percent and 5.5 percent in 2024, respectively. On the other hand, the percentage of infants under six months of age receiving the important benefits of exclusive breastfeeding increased significantly from 37.0 percent in 2012 to 47.8 percent in 2023. Actions to promote exclusive breastfeeding can contribute to improving nutritional status throughout life.

➔ **New updates of the prevalence of anaemia in women aged 15 to 49 years reveal an increase in the global prevalence from 27.6 to 30.7 percent.** There was either no improvement or an increase in prevalence in nearly all regions from 2012 to 2023. Adult obesity has also been on the rise, from 12.1 percent in 2012 to 15.8 percent in 2022.

➔ **Globally, about one-third of children aged 6 to 23 months and two-thirds of women aged 15 to 49 years achieved minimum dietary diversity**, according to the latest estimates of a new global nutrition indicator to monitor SDG Target 2.2. Actions are needed to enable consumption of diverse diets for women and children.

➔ **Global food markets have faced persistent pressures in recent years, with food price inflation emerging as a major concern since 2021.** Food price inflation has slowed down the post-COVID-19 pandemic recovery process in terms of food security; indeed, based on the substantial economic rebound, a greater improvement in food security might have been expected. Since 2020, global food price inflation has outpaced headline inflation, highlighting persistent pressures within agricultural and food markets. This divergence peaked in January 2023, with food price inflation reaching 13.6 percent – 5.1 percentage points higher than headline inflation at 8.5 percent. Although both rates began to show signs of a downward trend by mid-2023, they remained elevated throughout the rest of the year. By 2024, food price inflation had reached its 2019 pre-pandemic levels.

➔ **A disproportionate burden has been placed on low-income economies.** Low-income countries have borne the brunt of recent food price increases. While median global food price inflation rose from 2.3 percent in December 2020 to 13.6 percent in January 2023, low-income countries experienced significantly steeper increases, with inflation peaking at 30 percent in May 2023. This trend has undermined household purchasing power, with likely consequences for food security and nutrition.

➔ **Compounded global shocks have intensified food price inflation worldwide.** Two major disruptions – the pandemic and the war in Ukraine – triggered sharp increases in global food commodity prices during 2021 and 2022, further amplified by rising energy costs. For example, these factors accounted for 47 percent and 35 percent of peak food price inflation in the United States of America and the euro area, respectively. The remaining 53 percent in the United States and 65 percent in the euro area were driven by non-commodity-related factors, including higher labour costs, exchange rate fluctuations, and potential increased profit margins along the supply chain.

➔ **Fiscal and monetary policy responses amplified inflationary pressures.** The economic policy environment during the pandemic – including expansive fiscal stimuli and accommodative monetary policies – interacted with supply-side constraints, forming a unique inflationary environment.

➔ **Wage recovery lagged during the 2021 to 2023 period of high food price inflation, including in conflict-affected countries.** Across countries, wage recovery was uneven. While some economies experienced real wage growth keeping pace with rising food prices, others, including those affected by conflict, saw real incomes decline.

➔ **High food price inflation may worsen food security, particularly in low-income countries.** A 10 percent increase in food prices is associated with a 3.5 percent rise in moderate to severe food insecurity, and a 1.8 percent increase in severe food insecurity. At the peak of inflation, 65 percent of low-income and 61 percent of lower-middle-income countries, home to 1.5 billion people, faced food price inflation above 10 percent, deepening inequalities and threatening progress on poverty reduction and food security and nutrition.

➔ **Structural and gender inequalities amplify the impact of food price inflation, particularly in countries with high income inequality.** Vulnerable groups, especially women and rural populations, are disproportionately affected due to limited resources, weaker social protection mechanisms, and fewer coping strategies.

➔ **Child malnutrition can worsen with food price inflation.** The 2021 to 2023 food price surge is associated with higher rates of wasting among children under five years of age. A 10 percent increase in food prices is associated with a 2.7 to 4.3 percent rise in overall wasting and a 4.8 to 6.1 percent increase in severe wasting among children under five years of age.

CORE MESSAGES

➔ **Relative food prices across food groups and processing levels remained fairly stable globally between 2011 and 2021.** Nutrient-dense foods such as fruits and vegetables continue to be the most expensive per kilocalorie. In general, ultra-processed foods tend to have lower prices per kilocalorie compared to less processed alternatives. Ultra-processed foods are increasingly displacing more nutritious alternatives despite growing evidence of their adverse health impacts.

➔ **Rising staple food prices have put additional pressure on the diets of low-income households.** From 2019 to 2024, the steepest food price increases in countries like Mexico, Nigeria and Pakistan were in starchy staple foods and oils. As starchy staple foods form the core of diets for the poorest households, such increases can undermine food security and nutrition; however, access to low-cost items in other food groups may help sustain dietary adequacy despite food price inflation.

➔ **In response to the wide-ranging impacts of high food prices – and to prevent future inflationary episodes – a mix of policy measures is essential:**

- **Protect vulnerable populations with well-designed fiscal responses.** Time-bound and targeted fiscal measures, such as temporary tax relief on essential goods and social protection programmes, can help shield vulnerable households during food price spikes. To be effective, these interventions should be aligned with broader policy frameworks, include clear exit strategies and graduation targets, and be carefully monitored to ensure that benefits reach consumers.

- **Align fiscal and monetary policies to stabilize markets.** Credible and transparent monetary policy, paired with sound fiscal interventions, helps anchor inflation expectations and support market stability. Strategic public spending, including investments to support food security and nutrition, and realistic fiscal planning can reinforce resilience and protect long-term economic health.

- **Prioritize structural and trade-related measures for lasting impact.** Short-term price controls offer limited relief but risk market distortions and undermine incentives for long term investments. A longer-term strategy should focus on enhancing adequate strategic food reserves, increasing market transparency, and investing in trade-related infrastructure, while reducing trade disturbance, to ensure integrated markets and reduce the frequency and severity of price shocks.

- **Strengthen and invest in data and information flows.** Robust agricultural market information systems are key to managing price volatility and preventing speculation. These need to be strengthened by up-to-date high-quality data. Transparent, timely data support more effective decision-making and help smallholder farmers and consumers navigate changing market conditions.

- **Invest in resilient agrifood systems.** To reduce the likelihood of future high food price episodes, sustained investments are needed in agriculture, research and development, and infrastructure. Improving storage, transport and productivity enhances supply chain efficiency and strengthens overall agrifood systems resilience against the drivers of food price inflation.

EXECUTIVE SUMMARY

INTRODUCTION: TACKLING FOOD PRICE INFLATION TO ACHIEVE ZERO HUNGER

As 2030 nears, the world is significantly behind on achieving Sustainable Development Goal 2 (SDG 2) – end hunger, achieve food security and improved nutrition, and promote sustainable agriculture – with setbacks worsened by extreme weather events, the COVID-19 pandemic, food price surges, and geopolitical disruptions such as the war in Ukraine. These crises have elevated global hunger and food insecurity above pre-2015 levels, disproportionately affecting low-income populations and threatening other development goals such as poverty reduction and health. While there have been signs of recovery in recent years, persistent inflation has slowed this progress, continuing to undermine purchasing power and access to healthy diets. Although global food prices have somewhat stabilized, inflation remains high in many countries. *The State of Food Security and Nutrition in the World 2025* explores the causes and impacts of food price inflation, analyses its effects on different food groups and diet affordability, and presents successful policy interventions to help countries in ending hunger, food insecurity, and all forms of malnutrition, while making healthy diets affordable for all.

FOOD SECURITY AND NUTRITION AROUND THE WORLD

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

The latest assessment of world hunger, measured by the prevalence of undernourishment (PoU) (SDG Indicator 2.1.1), reveals signs of improvement in recent years. The PoU had begun to rise slowly in 2017 and then increased sharply in 2020 and 2021 in the wake of the pandemic. However, the latest assessment points to encouraging progress from 2022 to 2024. An estimated 8.2 percent of the global population may have faced hunger in 2024, down from 8.5 percent in 2023 and 8.7 percent in 2022. It is estimated that between 638 and 720 million people (7.8 to 8.8 percent of the global population) faced hunger in 2024. Considering the point estimate (673 million), this indicates a decrease of 15 million compared to 2023 and of 22 million compared to 2022.

The progress seen at the global level is driven by notable improvement in South-eastern Asia, Southern Asia – which mainly reflects the impact of new data from India – **and South America**. The PoU in Asia decreased from 7.9 percent in 2022 to 6.7 percent (323 million people) in 2024. Progress was also made in Latin America and the Caribbean, where the latest estimates show the PoU decreasing to 5.1 percent in 2024 after peaking at 6.1 percent in 2020.

Unfortunately, this positive trend contrasts with the steady rise in hunger in most subregions of Africa and in Western Asia. The PoU in Africa surpassed 20 percent in 2024, and in Western Asia it rose to 12.7 percent.

According to the current projection, 512 million people in the world may be chronically undernourished in 2030, of whom nearly 60 percent will be in Africa, highlighting the immense challenge of achieving SDG 2 (Zero Hunger).

SDG Indicator 2.1.2 – the prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale – aims to track progress towards the broader goal outlined in SDG Target 2.1 of ensuring access for all people to safe, nutritious and sufficient food all year round.

At the global level, the prevalence of food insecurity has declined very gradually since 2021, following the sharp increase in the wake of the pandemic in 2020. From 2023 to 2024, the global prevalence of moderate or severe food insecurity decreased slightly, from 28.4 to 28.0 percent. It is estimated that about 2.3 billion people in the world were moderately or severely food insecure in 2024, which is still 335 million more than in 2019, before the pandemic, and 683 million more compared to 2015, when the 2030 Agenda for Sustainable Development was launched.

The trends at the regional level differ notably, with food insecurity on the rise in Africa, falling in Latin America and the Caribbean, and decreasing gradually in Asia for several consecutive years, while in Oceania and in Northern America and Europe, new estimates point to a slight decline from 2023 to 2024 following a several-year rise. The prevalence of moderate or severe food insecurity in Africa (58.9 percent) is more than double the global average of 28 percent, whereas in Latin America and the Caribbean, Asia and Oceania, it is below the global estimate – 25.2, 23.3 and 26.3 percent, respectively.

About 32.0 percent of people living in rural areas in the world were moderately or severely food insecure in 2024, compared to about 28.6 percent in *peri-urban* areas and 23.9 percent in *urban* areas. Comparing the assessment in 2024 with 2022, the prevalence of moderate or severe food insecurity decreased only in urban areas, from 25.7 to 23.9 percent, while remaining virtually unchanged in rural and peri-urban areas.

Persistent inequalities between men and women are also evident, with food insecurity still more prevalent among adult women than men in every region of the world. The gender gap widened considerably at the global level in the wake of the pandemic, most notably in 2021; it then grew smaller for two consecutive years. But new estimates point to a widening of the gap at the global level between 2023 and 2024.

Cost and affordability of a healthy diet

Monitoring the affordability of healthy diets is essential for informing policies aimed at improving food security and nutritional outcomes, thereby contributing to the achievement of SDG Targets 2.1 and 2.2. The cost of a healthy diet (CoHD) for each country is an estimate of the minimum cost of acquiring a healthy diet, defined as a diet comprising a variety of locally available foods that meet energy and most nutrient requirements. The CoHD is compared to national income distributions to estimate the prevalence of unaffordability of a healthy diet (PUA) and the number of people unable to afford a healthy diet (NUA).

Worldwide, the CoHD has risen since 2017, reaching an average of 4.46 purchasing power parity (PPP) dollars per person per day in 2024. In 2024, the CoHD was highest in Latin America and the Caribbean (5.16 PPP dollars), followed by Asia (4.43 PPP dollars), Africa (4.41 PPP dollars), Northern America and Europe (4.02 PPP dollars) and Oceania (3.86 PPP dollars). Africa had the greatest increase among all world regions from 2023 to 2024.

Over the same period, incomes also grew, thus limiting the potentially negative impact of rising costs. Worldwide, an estimated 31.9 percent of people (2.60 billion) were unable to afford a healthy diet in 2024, compared to 33.5 percent (2.68 billion) in 2022, equivalent to nearly 80 million fewer people in two years.

However, the recovery has been uneven across regions. In recent years, unaffordability has been decreasing significantly in Asia and marginally in Latin America and the Caribbean, Northern America and Europe, and Oceania. Conversely, it has increased substantially in Africa, where the NUA rose above 1 billion in 2024.

The unequal recovery is even more evident across country income groups. The recovery path is slower for low-income countries (LICs), where the NUA has been steadily increasing since 2017. In 2024, a healthy diet was out of reach for 544.7 million people in LICs, equivalent to 72 percent of the population. In upper-middle- and high-income countries (UMICs and HICs), on the other hand, the PUA and the NUA have been declining since 2020. In lower-middle-income countries (LMICs), the NUA decreased between 2020 and 2024, but this improvement is mainly explained by the significant decrease in unaffordability in India.

Economic access to food is a key dimension of food security. People who are unable to afford even a least-cost healthy diet are likely experiencing some level of food insecurity, which can compromise the quality of their diet. Inadequate diets, in turn, play a critical role in shaping nutritional outcomes.

The state of nutrition: progress towards global nutrition targets

Ending malnutrition is foundational to the achievement of nearly all the SDGs. Among the indicators of child nutritional status, only stunting has undergone a significant change, improving from 26.4 percent in 2012 to 23.2 percent in 2024. There were no significant changes at the global level for child overweight (5.3 percent in 2012 to 5.5 percent in 2024) and for child wasting (7.4 percent in 2012 and 6.6 percent in 2024). Encouragingly, no regions experienced worsening in the prevalence of child wasting between 2012 and 2024, and decreases occurred in Western Africa (from 8.2 to 6.5 percent) and Central Asia (from 3.8 to 2.1 percent). Also, the percentage of children in the world benefiting from exclusive breastfeeding increased substantially: from 37.0 percent in 2012 to 47.8 percent in 2023. Nevertheless, all indicators of child nutrition need accelerated progress to achieve the 2030 targets.

There was deterioration in both nutrition indicators for older age groups. For adult obesity, the prevalence rose from 12.1 percent in 2012 to 15.8 percent in 2022. For anaemia in women aged 15 to 49 years, new updated data reflect no improvement or an increase in prevalence in nearly all regions from 2012 to 2023, and the global prevalence increased from 27.6 to 30.7 percent.

More than half of countries with data to assess progress on child wasting (74 out of 132) are on track to achieve the 2030 target. For child stunting, 35 percent of countries (56 out of 160) are on track; and for child overweight, 21 percent of countries with progress data (34 out of 162) are on track. Low birthweight has the lowest percentage of on-track countries of all the child nutritional status indicators, at 8 percent (12 out of 158). Despite considerable improvement over the last decade, only 19 percent of countries with progress data (21 out of 112) are on track to achieve the 2030 exclusive breastfeeding target. For anaemia in women aged 15 to 49 years and adult obesity, very few countries are on track.

In March 2025, the United Nations Statistical Commission officially endorsed the prevalence of minimum dietary diversity (MDD) as a new indicator for monitoring progress towards SDG Target 2.2 – to end all forms of malnutrition by 2030. Minimum dietary diversity captures the diversity of diets of two nutritionally vulnerable populations – children aged 6 to 23 months (MDD-C) and women aged 15 to 49 years (MDD-W).

Globally, only one-third (34 percent) of children aged 6 to 23 months and two-thirds (65 percent) of women aged 15 to 49 years achieved minimum dietary diversity. In other words, one-third of women and – even more worryingly – about two-thirds of children aged 6 to 23 months in the world consumed diets that were not sufficiently diverse, thereby putting them at risk of inadequate intake of essential vitamins and minerals required for good nutrition and health.

UNDERSTANDING THE 2021–2023 FOOD PRICE INFLATION SURGE: CAUSES AND CONSEQUENCES FOR FOOD SECURITY AND NUTRITION

Food price inflation: stylized facts

Since late 2020, domestic food retail prices have risen significantly across most countries, posing considerable challenges for both consumers and policymakers. Year-on-year global *average food price inflation* surged from 5.8 percent in December 2020 to a staggering 23.3 percent in December 2022. These figures are heavily influenced by countries that experienced hyperinflation, such as the Sudan, the Bolivarian Republic of Venezuela, and Zimbabwe, where year-on-year inflation peaks reached levels well above 350 percent. Using the median provides a more accurate reflection of global inflation levels: *median food price inflation* increased sharply from 2.3 percent in December 2020 to 13.6 percent in January 2023.

Global food price inflation has significantly outpaced headline inflation since 2020, reflecting the heightened volatility and persistent pressures within agricultural and food markets. At the onset of the pandemic in early 2020, overall inflation remained relatively low. Though still modest, food price inflation was significantly higher than headline inflation. At its peak in January 2023, food price inflation was 5.1 percentage points higher than headline inflation (i.e. 13.6 percent vs 8.5 percent). Throughout 2023, both inflation rates remained at high levels but with a decreasing trend.

Food price inflation has been particularly acute in LICs. Most households, even those dependent on agriculture for their livelihoods, rely on markets for their food supplies. Market-based food sourcing leaves households vulnerable to sharp price increases, exacerbating food insecurity, deepening poverty, and limiting access to and consumption of healthy diets. Smallholder farmers and agricultural labourers are often net food buyers, so rising food prices typically outweigh any income gains they receive from selling their produce. Consequently, rising food prices not only strain household budgets but also challenge rural livelihoods, undermining progress towards poverty reduction and food security and nutrition.

Why high food price inflation?

The global policy response to the pandemic was unprecedented, with massive fiscal and monetary interventions critical to averting economic collapse – while also laying the groundwork for the inflationary pressures that followed. Governments mobilized around USD 17 trillion in fiscal support, with HICs deploying the bulk of this stimulus to protect jobs, sustain demand and stabilize markets. This support was equivalent to nearly 10 percent of global gross domestic product over two years. At the same time, central banks reduced interest rates, launched large-scale bond purchases, and provided emergency liquidity to keep financial systems functioning. These actions softened the economic blow of the pandemic. However, as supply chains remained strained and global demand rebounded sharply, the expansive policy environment contributed to rising inflation. Central banks eventually shifted course, tightening monetary policy to curb price surges.

The war in Ukraine, amplified by multiple extreme weather events, marked a second major global shock to food markets, disrupting trade routes, amplifying uncertainty, and reinforcing inflationary pressures set in motion by the pandemic. As major exporters of wheat, maize, and sunflower oil, Ukraine and the Russian Federation jointly accounted for roughly 12 percent of globally traded calories in 2021. Hostilities in the Black Sea region – along with additional disruptions in the Red Sea – curtailed exports of grains and fertilizers, particularly affecting LICs and middle-income countries (MICs) reliant on global cereal markets.

These geopolitical shocks compounded the inflationary effects of earlier pandemic-era disruptions, generating two distinct but reinforcing waves of agricultural commodity price surges in 2020. Initial price pressures on agricultural and energy commodities stemmed from fears of supply chain breakdowns, labour shortages, and precautionary trade measures at the onset of the pandemic, pushing prices up by about 15 percentage points. This first surge was briefly tempered by a collapse in global demand, but resumed as economies reopened and fiscal and monetary stimuli took effect. The second, more acute price surge – adding another 18 percentage points – was triggered by the outbreak of the war in Ukraine, which disrupted critical trade flows and curtailed fertilizer exports. Simultaneously, energy markets, destabilized by sanctions on the Russian Federation and shifting trade patterns, saw sharp price increases that fed through to agriculture, as fuel and fertilizers became more expensive.

Agricultural and energy commodity prices were key contributors to recent food price inflation. The rapid increase in food and energy commodity prices after 2020 directly contributed to higher food price inflation. Food prices in 2022 and 2023 rose

well above their historical trend. The exogenous effects of agricultural and energy shocks contributed 14 percent and 18 percent to an increase in food prices in the United States of America and the euro area, respectively, at the inflation peak (in United States the inflation peak was in the third quarter of 2022 and in the euro area it was in the first quarter of 2023).

Broader macroeconomic conditions amplified the impact on food price inflation. When accounting for additional pressures from broader macroeconomic developments, such as commodity input costs for food producers and retailers, the estimated contribution of commodity price dynamics accounts for 47 percent and 35 percent of food price inflation in the United States of America and the euro area, respectively. These figures underscore the significant pass-through of agricultural and energy commodity price increases to retail food prices during 2022 to 2023.

However, commodity-driven inflation does not fully explain the extent of the price pressures observed. Actual peaks in food price inflation reached 10.6 percent in the United States of America and 15.7 percent in the euro area, pointing to other contributing factors such as rising labour costs, exchange rate fluctuations and potential increases in profit margins along the supply chain. These factors significantly contributed to food price inflation. In the United States, 53 percent of the increase was driven by markets unrelated to agricultural and energy commodities, compared to 65 percent in the euro area.

Food price inflation puts pressure on food security and nutrition outcomes

The recent surge in global inflation has had adverse effects on living conditions. Global real wages decreased by 0.9 percent in 2022 as inflationary pressures intensified, consistent with evidence that large-scale economic shocks can lead to surges in inflation and a consequent decline in real wages.

The recovery of real wages has been highly uneven across countries, with food price inflation outpacing earnings growth in many contexts. Some countries have seen wages and food prices move in relative tandem, helping to maintain stable food-adjusted earnings. In contrast, others have faced sustained real wage declines. In Egypt, surging food prices, driven by import dependency and foreign currency shortages, have significantly outpaced wage increases since mid-2022, straining household food access. Similarly, in Peru, real wages have not kept pace with inflation: by late 2023, food prices had risen by 34.5 percent relative to their pre-pandemic (early 2020) levels, while earnings had grown only 6.6 percent.

Food price inflation has become a key challenge of rising food insecurity across all income groups, with the steepest increases observed in LICs. From 2019 to 2024, LICs faced an average annual food price inflation rate of 11.4 percent, which coincided with a 6.7 percentage point increase in moderate or severe food insecurity and a 3.5 percentage point rise in severe food insecurity.

Lower-middle-income countries (LMICs) have also seen sharp increases in food insecurity despite facing lower food price inflation than LICs. Between 2019 and 2024, food price inflation in LMICs averaged 7 percent per year, yet moderate or severe food insecurity rose by 5.6 percentage points, and severe food insecurity by 1.6 percentage points. These outcomes likely reflect not only the economic strain of rising food prices, but also the impact of ongoing conflicts (e.g. Lebanon and Myanmar), as well as the broader economic vulnerabilities affecting larger populations (e.g. Nigeria and Pakistan).

Food price inflation is associated with a rise in food insecurity, with its impact varying across contexts. A 10 percent increase in food prices is linked to a rise in moderate or severe food insecurity (3.5 percent) and in severe food insecurity (1.8 percent). Country-specific characteristics, including economic resilience, institutional strength, and exposure to external shocks, determine the extent of vulnerability.

Rising food prices disproportionately undermine food security in contexts of inequality, where structural disparities across income, gender and geography amplify both exposure to shocks and barriers to effective response. In more unequal countries, weaker social protection systems, limited fiscal space, and larger vulnerable populations leave disadvantaged groups, especially women and rural households, at greater risk. Gender-based constraints, such as lower earnings, caregiving responsibilities, and restricted access to resources, reduce women's capacity to cope with inflation, often forcing them to cut back on food intake during crises. Addressing these intersecting inequalities is essential to mitigating the impacts of food price volatility and building more inclusive, resilient agrifood systems.

Recent food price inflation has heightened the risk of child wasting, underscoring the profound nutritional consequences of price shocks. A 10 percent increase in food prices is associated with a 2.7 to 4.3 percent rise in wasting prevalence and a 4.8 to 6.1 percent increase in severe wasting among children under five years of age. The effects remain robust even after controlling for access to essential services, including clean water, sanitation, and public health services.

The surge in global food price inflation since 2022 has likely exacerbated acute malnutrition, placing millions of children in LICs and LMICs at increased risk. From January 2022 to January 2023, global food prices rose by 13.6 percent, with inflation reaching 25.2 percent in LICs and 11.8 percent in LMICs. During this period, over 65 percent of LICs and 61 percent of LMICs – together home to nearly 1.5 billion people – experienced food price inflation above 10 percent. These regions also report higher levels of child wasting. By 2024, the prevalence of wasting was 6.4 and 9.5 percent in LICs and MICs, respectively (see **Annex 1A**).

Price inflation of nutrient-dense foods relative to other foods: Are there differences?

Global food price data from 2011, 2017 and 2021 reveal a persistent and stable disparity in the costs of different food groups. Basic starchy staples and oils and fats remain the least expensive sources of dietary energy across all countries. In contrast, more nutritious food groups, such as animal source foods, fruits and vegetables, consistently rank as the most expensive.

Ultra-processed foods are consistently cheaper than foods at any other stage of processing. Despite growing evidence of their adverse health impacts, these products typically contain few or no whole foods and are often high in saturated fats, trans fats, and salt, and depleted of fibre, micronutrients and other bioactive compounds. By 2021, ultra-processed foods were, on average, 47 percent less expensive than unprocessed or minimally processed foods, and 50 percent less expensive than processed foods.

Food price inflation between 2021 and 2023 (and in some countries up to 2024) varied markedly across food groups. Prices for basic starchy staples, such as wheat, starchy tubers, and rice, rose faster than overall food price inflation, while oils and fats also saw steep increases. Case studies show that food price inflation in Mexico, Nigeria and Pakistan substantially outpaced general inflation, with spikes in prices of staples and edible oils. These price surges were especially pronounced in early to mid-2022, aligned with the global cereal market disruptions driven by the war in Ukraine – a major exporter of wheat and oilseeds.

Price premiums for nutrient-rich foods, particularly vegetables, fruits and animal source foods, remain substantial and volatile, reinforcing economic barriers to dietary diversity. These food groups consistently command higher prices than basic starchy staples, which continue to account for the largest share of food expenditures in many developing countries.

Each food group typically includes at least one or two low-cost items that can contribute to a nutritious diet; however, access to healthy diets is shaped not only by prices but also by cultural preferences and dietary habits. Through mid-2023, the CoHD declined in Nigeria before rising again, fluctuated in Pakistan due to seasonality, and steadily increased in Mexico. These findings highlight how the affordability of a healthy diet can vary widely across countries, even under similar inflationary pressures.

HOW COUNTRIES NAVIGATED THE PERFECT STORM: FISCAL, MONETARY AND TRADE POLICIES AND THEIR IMPLICATIONS FOR FOOD SECURITY AND NUTRITION

From relief to reflections

Addressing food price spikes requires a comprehensive policy approach that balances short-term relief with long-term resilience. Rising food prices, driven by demand or supply shocks, global market volatility, and macroeconomic instability, can have severe consequences for food security, particularly among low-income and vulnerable populations. To mitigate these impacts and prevent future crises, governments can deploy a mix of targeted fiscal interventions, robust social protection systems, coordinated macroeconomic policies, structural and trade-related reforms, and strategic investments in data, infrastructure and innovation. The following measures provide a policy roadmap for managing current pressures while strengthening the foundations of more resilient and equitable agrifood systems.

Designing effective responses to food price inflation

Targeted fiscal measures play a critical role in supporting vulnerable populations during episodes of high food price inflation. These interventions should be carefully aligned with the broader macroeconomic and policy environment of each country. To ensure long-term sustainability, fiscal responses must be timebound and include well-defined exit strategies. This prevents the risk of permanent budgetary commitments that could constrain future fiscal space or bring public debt to unsustainable levels.

Tax reductions on essential goods, including food, can provide immediate relief to households facing rising living costs. However, such measures must be weighed against the need for sustainable public revenues, particularly in countries with limited fiscal capacity. Where tax exemptions are implemented, governments should monitor whether the benefits are effectively passed on to consumers, ensuring that interventions achieve their intended impact.

Strengthening social protection in inflationary environments

Social protection systems – through cash or in-kind transfers – are indispensable for cushioning the effects of food price crises on low-income households. However, in high-inflation contexts, the value of these transfers can erode. Programmes must therefore be calibrated to respond to inflationary pressures, with flexible mechanisms to adjust transfer values and avoid price increases.

Effective social protection requires not only adequate financing but also strong design and delivery systems. Targeting mechanisms should be transparent and responsive, and interventions should complement broader food security and nutrition strategies. In this way, social protection can serve as both a safety net and a stabilizing force during periods of high food prices.

Enhancing monetary–fiscal policy coordination

Macroeconomic stability is essential for addressing food price inflation. Sound fiscal policy must complement credible and transparent monetary policy to anchor inflation expectations and stabilize domestic markets, including agrifood systems. Coordinated actions can help prevent large currency devaluations, mitigate financial volatility, and reinforce investor confidence.

Improving structural and trade-related policy responses

Short-term price interventions, such as price controls or subsidies, may provide temporary relief but often distort markets and are inefficient over time. Governments should instead adopt a stable, coordinated and transparent strategy to manage long-term food price trends. This includes strengthening food reserves, improving market transparency, and investing in trade-related infrastructure.

Export restrictions can ease domestic price pressures in the short term but often disrupt global markets and harm long-term producer incentives. Policymakers should align trade measures with broader food security and risk management goals to minimize unintended impacts.

Maintaining strategic food reserves can help cushion supply shocks and stabilize prices, but these mechanisms must be carefully designed. Policymakers should balance food security and nutrition objectives against potential fiscal and market risks. Embedding food reserves within a broader risk management framework enhances their effectiveness and reduces unintended consequences.

Building resilience through market information and investment

Strengthening agricultural market information systems (MIS) is essential for preventing market disruptions and ensuring price stability. Transparent, reliable and timely data help reduce speculation, support smallholder participation in markets, and improve overall market efficiency. In increasingly complex global agrifood systems, enhanced MIS can be a critical tool for resilience.

Beyond information systems, long-term resilience requires sustained investment in agricultural productivity, infrastructure and innovation. Investments in research and development, storage, and transport infrastructure are particularly important to reduce food loss, improve supply chain functioning, and mitigate future food price shocks. These efforts can lay the foundation for more inclusive and sustainable agrifood systems.

Patterns, policies and pathways: a trajectory analysis

Countries experience diverse food security outcomes in response to food price inflation, despite being exposed to similar global price pressures. Between 2015 and 2023, domestic food price inflation and food security levels varied significantly across countries, revealing critical insights into the role of national policy responses. This heterogeneity offers a valuable opportunity to identify and understand which interventions have effectively mitigated food price shocks and safeguarded food security. The assessment of 153 countries shows that even among those starting from comparable levels of food insecurity, outcomes diverged; some countries maintained stability or improved, while others experienced sharp declines in food security.

An in-depth review of more than 10 000 policy records and 35 distinct policy instruments highlights significant variation in policy responses across countries with different food security trajectories. These findings underscore the importance of context-specific strategies: interventions that yield positive outcomes in one context may be less effective – or even counterproductive – in another. Recognizing and adapting to these contextual differences is essential for designing policy responses that are both immediately effective and sustainable over time.

Countries with lower-medium and high food insecurity tend to rely more heavily on price control measures and agricultural production subsidies. In lower-medium food-insecure countries, price controls were observed in over 25 percent of country-year observations, while in high food-insecure countries, the figure reached 30 percent – both notably higher than in countries with more stable food security. Production subsidies were also significantly more prevalent in these settings. For instance, among high food-insecure countries facing deteriorating food security with mild inflation, nearly 37.2 percent adopted such subsidies. Interestingly, in lower-medium

food-insecure countries experiencing improvements in food security despite severe inflation, subsidies were also frequently used (23.2 percent), highlighting the potential effectiveness of well-targeted production support in offsetting inflationary pressures.

In contrast, low food-insecure countries with stable or improving outcomes were more likely to deploy a strategic mix of trade policy instruments. Export restrictions were most common among countries with low baseline food insecurity, particularly those that managed to sustain or improve food security. As baseline food insecurity increased, the frequency of export restrictions declined markedly. Among high food-insecure countries, those with deteriorating food security and only mild inflation often implemented import restrictions (37.2 percent). However, in similar countries that saw food security recover after earlier setbacks, even amid severe inflation, use of import restrictions was far less frequent (5.4 percent). A parallel trend emerged in lower-medium food-insecure countries, where import tariff liberalization was far more common among those with declining food security (38.9 percent) than among those on improving trajectories (4.2 percent), suggesting that reactive, uncoordinated trade policies may undermine long-term food security improvements.

CONCLUSIONS

The recent period of food inflationary pressure has again tested the resilience of the world's agrifood systems in achieving SDG Targets 2.1 and 2.2 – end hunger, food insecurity, and all forms of malnutrition by 2030. While the challenges have been substantial and unprecedented, a clear message emerges: this time, the world has responded more effectively. Signs of improvement in hunger and food insecurity trends suggest that global efforts to recover from recent setbacks have had a positive impact. However, diverging regional trends highlight persistent disparities in the challenges countries face and the policy tools available to them.

Compared to previous crises such as the 2007 to 2008 food price spikes, the global response from 2021 to 2023 was more coordinated, measured and informed. Governments avoided widespread export bans and implemented more targeted, temporary interventions that helped keep agricultural trade flowing and markets functional. Initiatives such as the Agricultural Market Information System enhanced transparency, reduced speculation, and encouraged more rational policy decisions. Countries with strong institutions and social protection systems were able to respond more quickly and support vulnerable populations more effectively. Although inflation placed a significant burden on households, particularly the poorest, these policy improvements and institutional frameworks helped mitigate the sharpest effects. ■

UNITED REPUBLIC OF TANZANIA, ZANZIBAR
Baskets with different rice varieties and price labels on a market.
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CHAPTER 1 INTRODUCTION: TACKLING FOOD PRICE INFLATION TO ACHIEVE ZERO HUNGER

As 2030 approaches, the world remains far off track from achieving Sustainable Development Goal 2 (SDG 2) – end hunger, achieve food security and improved nutrition, and promote sustainable agriculture.

Even before the COVID-19 pandemic, progress had stalled, with food security already presenting signs of deterioration, and nutrition indicators showing little improvement. The pandemic and subsequent food price increases further exacerbated these trends, pushing global undernourishment well above pre-pandemic levels. While updated global estimates point to signs of improvement in recent years, global levels of hunger and food insecurity remain far above those recorded when the 2030 Agenda for Sustainable Development was launched in 2015.

As global economies began recovering from the pandemic and its disruptions, a series of cascading challenges unravelled, driving up food price inflation. The post-pandemic surge in demand, spurred by aggressive fiscal relief measures, was soon followed by supply-side pressures from geopolitical disruptions such as the war in Ukraine, and trade route disturbances, exacerbated by different extreme events. Together, these factors have led to international food price increases comparable to those seen in historical food crises such as in those of 1973 to 1974 and 2007 to 2008, once again placing food security and nutrition at the forefront of the global policy agenda.

Rising food prices disproportionately affect low-income households, which allocate a significant share of their income to food. While international agricultural commodity prices gradually returned to lower levels towards the end of 2022, domestic food price inflation remains a problem in several countries. Without proportional increases in income, higher prices erode purchasing power, not only threatening food security and nutritional outcomes but jeopardizing the achievement of multiple SDGs beyond Zero Hunger (SDG 2), such as No Poverty (SDG 1) and Good Health and Well-being (SDG 3). Beyond the most food-insecure people, high food price inflation has reverberated through the whole social system, increasing people's frustration and putting pressure on policymakers around the globe. In addition, as food makes up a significant share of the consumer price index in most economies, rising food price inflation has become a growing concern for many central banks, which have had to address broader inflationary pressures. Yet, comprehensive analyses of the pass-through effects of rising commodity prices on food price inflation and their impact on food security and nutrition – including through various food groups across selected countries – remain scarce. Similarly, evaluating policy responses and identifying the most effective interventions to limit the negative impacts of food price inflation on vulnerable populations are essential for developing targeted and evidence-based strategies for enhancing resilience and promoting food security.

The State of Food Security and Nutrition in the World 2025 analyses the root causes of recent food price inflation and its impact on global food security and nutrition. It specifically investigates how rising food prices have affected consumers' disposable income and their ability to access food. The report also explores the effects of inflation across different food groups and examines changes in the affordability of healthy diets. Additionally, it highlights successful policy responses at the country level, identifying practical solutions to address the twin challenges of rising food prices and increasing levels of food insecurity and malnutrition.

This 2025 edition provides policymakers with a suite of policies necessary for addressing food price inflation while advancing global progress towards ending hunger, food insecurity and all forms of malnutrition, and making healthy diets affordable for all. ■

KENYA
Processing groundnuts as part of a project for sustainable income generation and nutrition security.
© FAO/Judith Mulinge

CHAPTER 2 FOOD SECURITY AND NUTRITION AROUND THE WORLD

In the ten years since the 193 Member States of the United Nations endorsed the 2030 Agenda for Sustainable Development, the world has endured a global pandemic and economic downturns as well as a growing number of conflicts and extreme weather events. Last year's edition of this report presented stubbornly high rates of hunger and food insecurity at levels exceeding those reported for 2015 when the 2030 Agenda was launched. Some progress was reported on key indicators of nutrition, including several that lay the groundwork for children to achieve their full potential for growth and development, but rising rates of obesity foreshadowed major challenges for the health and well-being of all age groups.

This chapter presents an updated global assessment of food insecurity and nutrition up to the year 2024 and a report on progress towards meeting 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. Updates on food security and nutrition indicators are provided at global, regional and subregional levels, while country-level estimates can be found in **Annex 1A.**

Section 2.1 presents an updated assessment of the state of food security and progress towards achieving the hunger and food insecurity target (SDG 2.1). It includes updated estimates and discussion of the trends for the two SDG Target 2.1 indicators: SDG Indicator 2.1.1 on the prevalence of undernourishment (PoU) and SDG Indicator 2.1.2 on the prevalence of moderate or severe food insecurity based on the Food Insecurity Experience Scale (FIES). **Section 2.2** contributes evidence on economic access to diverse, nutritious foods globally, based on estimates of the cost and affordability of a healthy diet. **Section 2.3** focuses on the state of nutrition in the world and progress towards the global nutrition targets defined by the World Health Assembly (WHA) in 2012 and the 2030 Agenda for Sustainable Development (Target 2.2), including a spotlight on a new SDG indicator on dietary diversity.

Every year FAO uses newly available national data to refine, improve and update the estimates of how many people are facing hunger and food insecurity in the world and of the cost and affordability of a healthy diet. In particular, this year's edition benefited from new national data from the populous country of India which, as it accounts for more than one-sixth of the global population, led to important updates of the estimates of the PoU and of how many people in the world are unable to afford a healthy diet. ■

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

KEY MESSAGES

➔ Updated global estimates point to signs of a decrease in world hunger in recent years. An estimated 8.2 percent of the global population may have faced hunger in 2024, down from 8.5 percent in 2023 and 8.7 percent in 2022.

➔ The progress seen at the global level is driven by notable improvement in South-eastern Asia and Southern Asia – which reflects new data from India – and in South America. Unfortunately, this positive trend contrasts with the continuing rise in hunger in most subregions of Africa and in Western Asia.

➔ It is estimated that between 638 and 720 million people, corresponding to 7.8 and 8.8 percent of the global population, respectively, faced hunger in 2024. Considering the point estimate (673 million in 2024), this indicates a decrease of 15 million people compared to 2023 and 22 million compared to 2022.

➔ In 2024, hunger affected about 307 million people in Africa, 323 million in Asia and 34 million in Latin America and the Caribbean – 20.2, 6.7 and 5.1 percent of the population, respectively.

➔ From 2025 to 2030, the global number of undernourished is expected to decrease, but 512 million people are still projected to be facing hunger in 2030, of whom nearly 60 percent will be in Africa.

➔ At the global level, the prevalence of food insecurity has declined gradually since 2021, the year when trends began to show signs of improvement following the sharp increase in the wake of the COVID-19 pandemic. The global prevalence of moderate or severe food insecurity decreased marginally from 28.4 percent in 2023 to 28.0 percent in 2024.

➔ About 2.3 billion people in the world are estimated to have been moderately or severely food insecure in 2024 – 335 million more than in 2019, before the pandemic, and 683 million more than in 2015 when the 2030 Agenda for Sustainable Development was launched.

➔ Trends at the regional level differ notably, with food insecurity on the rise in Africa, falling in Latin America and the Caribbean, and decreasing gradually in Asia for several consecutive years, while in Oceania and in Northern America and Europe, new estimates point to a slight decline from 2023 to 2024 following a several-year rise.

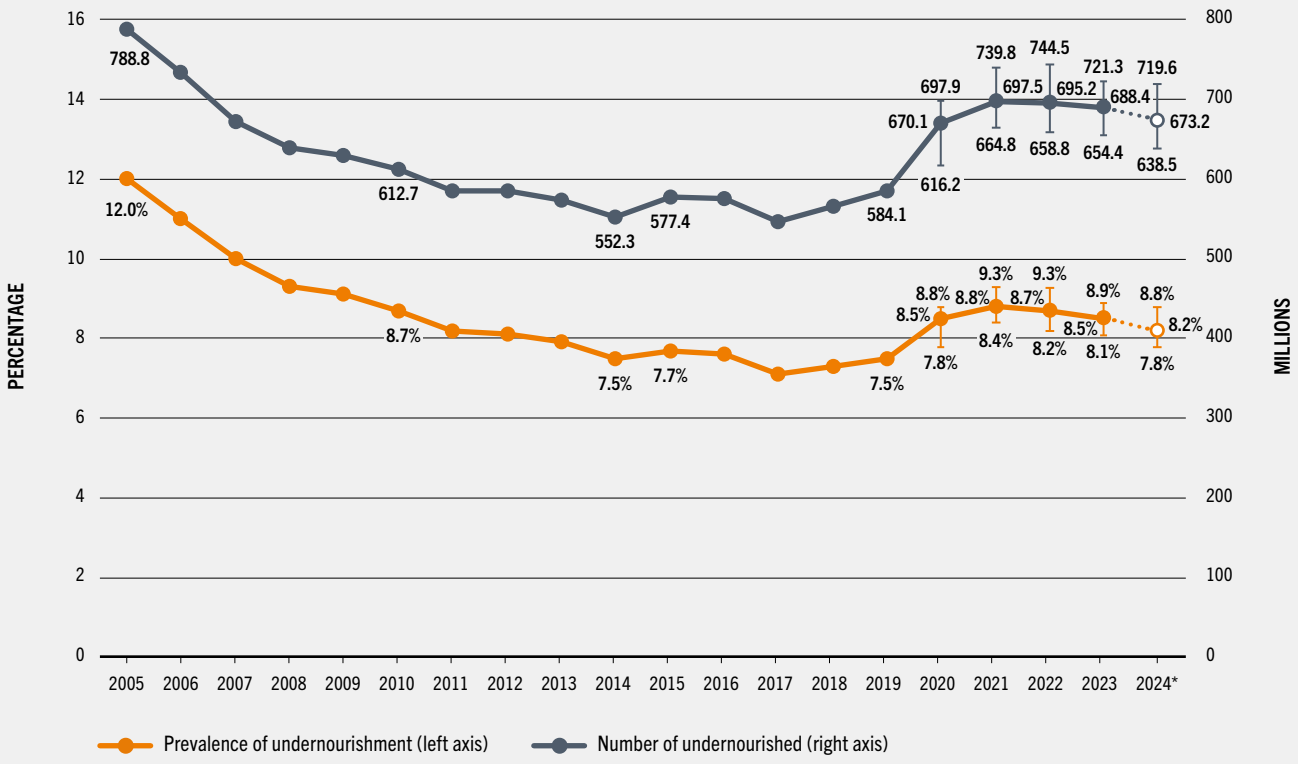
➔ Globally and in every region of the world except Northern America and Europe, the prevalence of moderate or severe food insecurity is higher in rural areas than in urban areas, while the relative situation in peri-urban areas differs among regions. From 2022 to 2024, food insecurity improved only in urban areas at the global level and in Asia. Improvements were distributed more equally across rural, peri-urban and urban areas in Latin America and the Caribbean, while in Africa, food insecurity worsened in both rural and urban areas and remained virtually unchanged in peri-urban areas.

➔ The gender gap narrowed at the global level from 2021 to 2023 but increased slightly in 2024, with the prevalence of food insecurity remaining consistently higher among women than among men, globally and in all regions.

2.1.1 SDG Indicator 2.1.1 Prevalence of undernourishment

FAO has produced estimates of the prevalence of undernourishment (PoU) since 1975 to capture the proportion of the population in each country who, on a regular basis, consume food in amounts that are insufficient to provide the energy required for a normal, active and healthy life. These figures have been used to report on the extent of world hunger since 1977. They serve as an indicator to monitor progress towards the goals agreed to at the World Food Summit in 1996, the Millennium Development Goals established in 1999, and finally SDG 2 of the 2030 Agenda for Sustainable Development, launched in 2015.

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: Bars show lower and upper bounds of the estimated range. * Projections based on nowcasts for 2024 are illustrated by dotted lines.

SOURCE: FAO. 2025. FAOSTAT: Suite of Food Security Indicators. [Accessed on 28 July 2025]. https://www.fao.org/faostat/en/#data/FS. Licence: CC-BY-4.0.

https://doi.org/10.4060/cd6008en-fig2.1

The latest assessment of world hunger, measured by the PoU (SDG Indicator 2.1.1), reveals signs of improvement in recent years. The level of PoU had begun to rise slowly in 2017 and then increased sharply in 2020 and 2021 in the wake of the COVID-19 pandemic. However, the latest assessment, which benefited from important data updates from various countries, in particular the populous country of India (see Box 2.1), points to encouraging progress from 2022 to 2024. An estimated 8.2 percent of the global population may have faced hunger in 2024, down from 8.5 percent in 2023 and 8.7 percent in 2022.

It is estimated that between 638 and 720 million people (7.8 to 8.8 percent of the global population) faced hunger in 2024.[a] Considering the point estimate (673 million), this indicates a decrease of 15 million people compared to 2023 and 22 million compared to 2022.

Notwithstanding the progress in recent years, the global estimates for 2024 are still far above »

a Though not based on formal statistical inference models, the range indicates the extent of uncertainty around the point estimates. See Supplementary material to Chapter 2 for further details.

BOX 2.1 UPDATES IN THE SERIES OF PREVALENCE OF UNDERNOURISHMENT ESTIMATES

As in every new edition of this report, the series of estimates of the prevalence of undernourishment (PoU) have been fully updated. The new, complete series are available through FAOSTAT, FAO's corporate statistical database.[1]

In addition to the new data points added every year (i.e. for 2024 in this edition), the new series differ from those published previously due to revisions that cover the entire monitored period. Thorough revisions of the series are needed when FAO receives new or updated data and information after publication of the previous edition. As some of these data and information cover past years, the revisions lead to improved estimates of key parameters used to estimate the PoU also for earlier years. For this reason, readers are urged to avoid comparing figures published in different editions of the report.

ROUTINE UPDATES INDUCED BY NEW DATA*

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 new data on production, trade and utilization of food commodities not only for the previous year, but often for the past several years. This adjustment can affect all years for which new data are received. However, the adjustment is especially important for the preceding year (in this case, the values published for 2023 in the 2024 edition of this report), because those estimates are always computed as "nowcasts" based on projections of food supply from major commodities provided by the Markets and Trade Division of FAO (see Supplementary material to Chapter 2). The DES values used for 2023 in this edition of the report are now fully derived from the newly compiled food balance sheets (FBS), which rely on official data provided to FAO by countries through the annual Production and Utilization Questionnaire. This new evidence reveals that, for many countries, nowcasts of food supply in 2023 had been overly pessimistic. Actual data indicating greater availability of food (together with other evidence noted below) contributed to a revision of the trend, which now points to a reduction in the number of undernourished people from 2022 to 2023 rather than no change, as had been previously reported.

New data on population estimates

In this edition, major revisions were induced by the need to reflect new estimates of the population size and structure for all countries published in the *World Population Prospects 2024*,[2] released on 11 June 2024 (after the deadline for consideration in the previous report).

The revision of a country's population size has various implications for the estimates of the PoU and of the number of undernourished (NoU). First, the estimate of the total DES in the country needs to be reassessed in view of the new population size. Second, the estimated PoU for the country is multiplied by the revised population size to compute the NoU, which may therefore differ from previously reported values.

Related to the first point, when population estimates undergo substantial revision – as was the case for several countries** in this edition – a thorough review and recompilation of the supply utilization account/food balance sheet (SUA/FBS) series is necessary, as the simple adjustment of the DES to the new estimates of the population size would result in unrealistically low or high per capita values. Such a review and recompilation were completed for most countries (see Supplementary material to Chapter 2).

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 the report. The analysis of these data led to new values of the coefficient of variation (CV) of dietary energy consumption (DEC) in the population for several countries. This revision involved the analysis of the information contained in 25 household surveys from 14 different countries.***

Of particular relevance for the global series of undernourishment is the impact of the revised assessment of food consumption inequality in India, based on a thorough re-analysis of the data contained in the recent, back-to-back, household consumption and expenditure surveys (HCES) conducted by the Ministry of Statistics and Program Implementation from August 2022 through July 2024.

BOX 2.1 (Continued)

An initial assessment of the impact of the HCES 2022/23 data had already been reflected in the PoU series published in last year's edition of the report. New household consumption data collected over most of 2024, however, point to a reduction in inequality in food access, which leads to a new value for the CV – and hence the PoU – for India in the three-year period 2022 to 2024. Given the size of the Indian population, the impact of the update can also be clearly noted in the global series of PoU in 2023, estimated to be closer to the lower bound published in last year's edition of the report, with a downward trend from 2022 to 2024.

INNOVATIONS IN REPRESENTING UNCERTAINTY AROUND GLOBAL HUNGER FIGURES

To better reflect the level of uncertainty that inevitably accompanies FAO estimates of undernourishment, special attention has been devoted this year to the computation of the upper and lower bounds around the point estimates of the PoU and the NoU (represented by the bars in Figure 2.1), which were introduced for the first time with the 2021 edition of the report. The new approach now considers three independent sources of uncertainty, two of which had not been explicitly considered before.

First, as in previous editions of the report since 2021, the lack of recent household surveys induces persistent uncertainty around estimates of the CV for many countries. For all countries for which the most recent consumption survey dates back to 2020 or earlier, rather than keeping the value of the CV constant at the level estimated from the last survey data, it is nowcasted following signals provided by Food Insecurity Experience Scale (FIES) data collected in recent years in those countries, following the approach used in previous editions of the report (see Supplementary material to Chapter 2). As the number of countries conducting household surveys increases, this element of uncertainty around the PoU gradually decreases.

Second, to reflect the uncertainty induced by the need to nowcast the DES given the absence of official data on actual production and trade of major food commodities, a new element has been added in the estimation of the upper and lower bounds around the point estimates of the PoU for 2024. In addition to the normal "nowcasting" based on evidence from FAO's Food Outlook reports,[3] an additional scenario is considered for each country of unchanged per capita food supply. This results in two possible levels of per capita DES for each country, which are used to compute the upper and lower bounds of the point estimates for regional and global PoU for 2024 (see Supplementary material to Chapter 2 for further details).

Third, the uncertainty regarding the amount of food waste occurring at the retail and household levels (which explains the difference between average levels of dietary energy *supply* and dietary energy *consumption*) is taken into account. A 10 percent margin of error around the waste factor coefficient is considered when computing the upper and lower bounds of the PoU for each country.

NOTES: * An analysis of the contribution that each of the different data updates has on the difference between the global NoU estimate for 2023 presented in the 2024 edition of the report and the one presented in this edition, can be found in the Supplementary material to Chapter 2.
** Among the countries with increases in the average population exceeding 3 percent for the period 2010 to 2024 were: Côte d'Ivoire (+7.0 percent); Democratic Republic of the Congo (+3.2 percent); Nigeria (+3.0 percent); Pakistan (+3.0 percent); Sudan (+4.8 percent); and Yemen (+9.7 percent). Among the countries with decreases in the average population exceeding 3 percent for the period 2010 to 2024 were: Central African Republic (–5.4 percent); Saudi Arabia (–13.3 percent); and Sierra Leone (–3.4 percent). *** The revisions cover the following countries and years: Benin (2022), Burkina Faso (2022), Cambodia (2021 and 2023), Georgia (2022 and 2023), Guinea-Bissau (2022), India (2022/23 and 2023/24), Jordan (2022), Kazakhstan (2021 and 2023), Mongolia (2022 and 2023), Myanmar (2015), Peru (2023), Somalia (2022), Thailand (2016, 2017, 2018, 2019, 2020, 2021 and 2023) and Togo (2022).

TABLE 2.1 PREVALENCE OF UNDERNOURISHMENT, 2005–2024

	Prevalence of undernourishment									
	2005	2010	2015	2018	2019	2020*	2021*	2022*	2023*	2024*
	(%)									
WORLD	**12.0**	**8.7**	**7.7**	**7.3**	**7.5**	**8.5**	**8.8**	**8.7**	**8.5**	**8.2**
AFRICA	**18.9**	**15.9**	**15.9**	**16.6**	**17.4**	**18.5**	**18.9**	**18.9**	**20.0**	**20.2**
Northern Africa	6.8	5.6	5.8	6.0	5.9	6.6	7.5	7.8	10.5	10.7
Sub-Saharan Africa	22.0	18.4	18.2	19.0	20.0	21.2	21.5	21.3	22.1	22.3
Eastern Africa	31.4	24.6	23.9	24.8	27.0	26.6	27.1	25.7	25.9	25.9
Middle Africa	28.4	23.1	23.8	24.9	25.4	28.3	28.2	28.7	29.7	30.2
Southern Africa	4.7	6.9	8.5	7.5	8.0	9.5	11.2	10.3	11.1	11.4
Western Africa	12.7	11.8	11.5	12.1	11.9	14.1	14.1	15.1	16.3	16.5
ASIA	**13.8**	**9.4**	**7.7**	**6.5**	**6.6**	**7.8**	**8.1**	**7.9**	**7.3**	**6.7**
Asia excluding India	*10.5*	*7.0*	*5.4*	*5.1*	*4.6*	*5.1*	*5.2*	*5.4*	*5.3*	*5.2*
Central Asia	13.1	6.5	4.0	3.0	2.7	3.3	3.2	3.0	2.8	2.8
Eastern Asia	6.7	2.7	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
South-eastern Asia	16.8	11.7	7.9	6.0	5.7	5.8	5.7	5.2	5.2	4.9
Southern Asia	20.1	15.1	12.9	10.6	11.0	13.6	14.2	13.9	12.2	11.0
Western Asia	10.3	6.1	9.3	10.6	10.6	10.9	11.4	11.9	12.5	12.7
Western Asia and Northern Africa	*8.6*	*5.9*	*7.7*	*8.4*	*8.4*	*8.9*	*9.6*	*10.0*	*11.6*	*11.8*
LATIN AMERICA AND THE CARIBBEAN	**8.5**	**5.9**	**5.0**	**5.7**	**5.5**	**6.1**	**5.9**	**5.7**	**5.3**	**5.1**
Caribbean	17.8	14.1	12.7	13.6	13.7	14.8	14.7	17.6	17.4	17.5
Latin America	7.8	5.3	4.5	5.1	4.9	5.5	5.3	4.8	4.5	4.2
Central America	7.3	6.3	6.2	5.8	5.4	5.5	5.3	5.1	5.0	5.0
South America	8.0	4.9	3.8	4.9	4.6	5.5	5.3	4.7	4.2	3.8
OCEANIA	**6.7**	**7.4**	**7.1**	**7.4**	**7.4**	**7.0**	**7.8**	**7.5**	**7.7**	**7.6**
NORTHERN AMERICA AND EUROPE	**<2.5**	**<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 values of upper and lower bounds of the estimated ranges for 2022 to 2024 can be found in the Supplementary material to Chapter 2.

SOURCE: FAO. 2025. FAOSTAT: Suite of Food Security Indicators. [Accessed on 28 July 2025]. https://www.fao.org/faostat/en/#data/FS.
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» pre-pandemic levels and even further above 2015 levels, when the 2030 Agenda was launched (Figure 2.1). About 96 million more people in the world are estimated to have been facing chronic hunger in 2024 compared to 2015.

The differences among the regions of the world are stark. The progress seen at the global level is driven by notable improvement in South-eastern Asia, Southern Asia – which mainly reflects the impact of new data from India – and Latin America. Unfortunately, this positive trend contrasts with the continuing rise in hunger in most subregions of Africa and in Western Asia (Figure 2.2).

The PoU in **Africa** surpassed 20 percent in 2024. It is estimated that more than one in five people living in Africa are facing chronic hunger, equivalent to nearly 307 million people (Table 2.1 and Table 2.2). Hunger is on the rise in all subregions except Eastern Africa, with the most notable increases in Middle Africa, which had

TABLE 2.2 NUMBER OF UNDERNOURISHED PEOPLE, 2005–2024

	Number of undernourished									
	2005	2010	2015	2018	2019	2020*	2021*	2022*	2023*	2024*
	(millions)									
WORLD	**788.8**	**612.7**	**577.4**	**564.9**	**584.1**	**670.1**	**697.5**	**695.2**	**688.4**	**673.2**
AFRICA	**178.0**	**170.1**	**193.7**	**217.9**	**233.9**	**255.2**	**267.3**	**272.9**	**296.2**	**306.5**
Northern Africa	13.0	11.8	13.5	14.8	15.0	16.8	19.5	20.5	28.1	29.1
Sub-Saharan Africa	165.0	158.3	180.2	203.2	218.9	238.3	247.9	252.4	268.1	277.5
Eastern Africa	93.9	85.1	94.3	106.1	118.7	119.9	125.3	121.9	126.1	129.7
Middle Africa	32.9	31.4	38.0	44.0	46.4	53.2	54.7	57.4	61.2	64.3
Southern Africa	2.7	4.1	5.5	5.0	5.4	6.5	7.8	7.3	8.0	8.3
Western Africa	35.5	37.7	42.4	48.0	48.4	58.6	60.0	65.7	72.7	75.1
ASIA	**552.2**	**397.5**	**343.0**	**301.8**	**306.7**	**366.2**	**382.2**	**375.7**	**347.2**	**323.4**
Asia excluding India	*297.9*	*209.7*	*169.4*	*163.6*	*150.4*	*167.1*	*172.5*	*178.7*	*177.9*	*173.5*
Central Asia	7.8	4.1	2.8	2.2	2.0	2.5	2.5	2.4	2.3	2.3
Eastern Asia	102.7	43.5	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
South-eastern Asia	95.0	70.6	50.7	40.1	38.2	39.3	38.7	35.8	35.6	33.8
Southern Asia	325.1	264.9	240.9	206.3	215.7	269.9	285.2	280.4	249.2	226.7
Western Asia	21.6	14.4	24.8	29.6	30.0	31.5	33.3	35.5	38.1	39.3
Western Asia and Northern Africa	*34.6*	*26.3*	*38.2*	*44.3*	*45.0*	*48.3*	*52.8*	*56.0*	*66.2*	*68.3*
LATIN AMERICA AND THE CARIBBEAN	**47.2**	**35.0**	**31.2**	**36.4**	**35.0**	**39.8**	**38.4**	**37.1**	**35.1**	**33.6**
Caribbean	7.1	5.9	5.4	5.9	5.9	6.5	6.4	7.8	7.7	7.8
Latin America	40.1	29.1	25.8	30.6	29.1	33.3	32.0	29.3	27.4	25.9
Central America	10.6	9.8	10.4	10.1	9.4	9.6	9.4	9.2	9.1	9.1
South America	29.5	19.3	15.4	20.4	19.7	23.6	22.6	20.1	18.2	16.7
OCEANIA	**2.3**	**2.8**	**2.9**	**3.2**	**3.2**	**3.1**	**3.5**	**3.4**	**3.5**	**3.5**
NORTHERN AMERICA AND EUROPE	**n.r.**	**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 values of upper and lower bounds of the estimated ranges for 2022 to 2024 can be found in the Supplementary material to Chapter 2.

SOURCE: FAO. 2025. FAOSTAT: Suite of Food Security Indicators. [Accessed on 28 July 2025]. https://www.fao.org/faostat/en/#data/FS.
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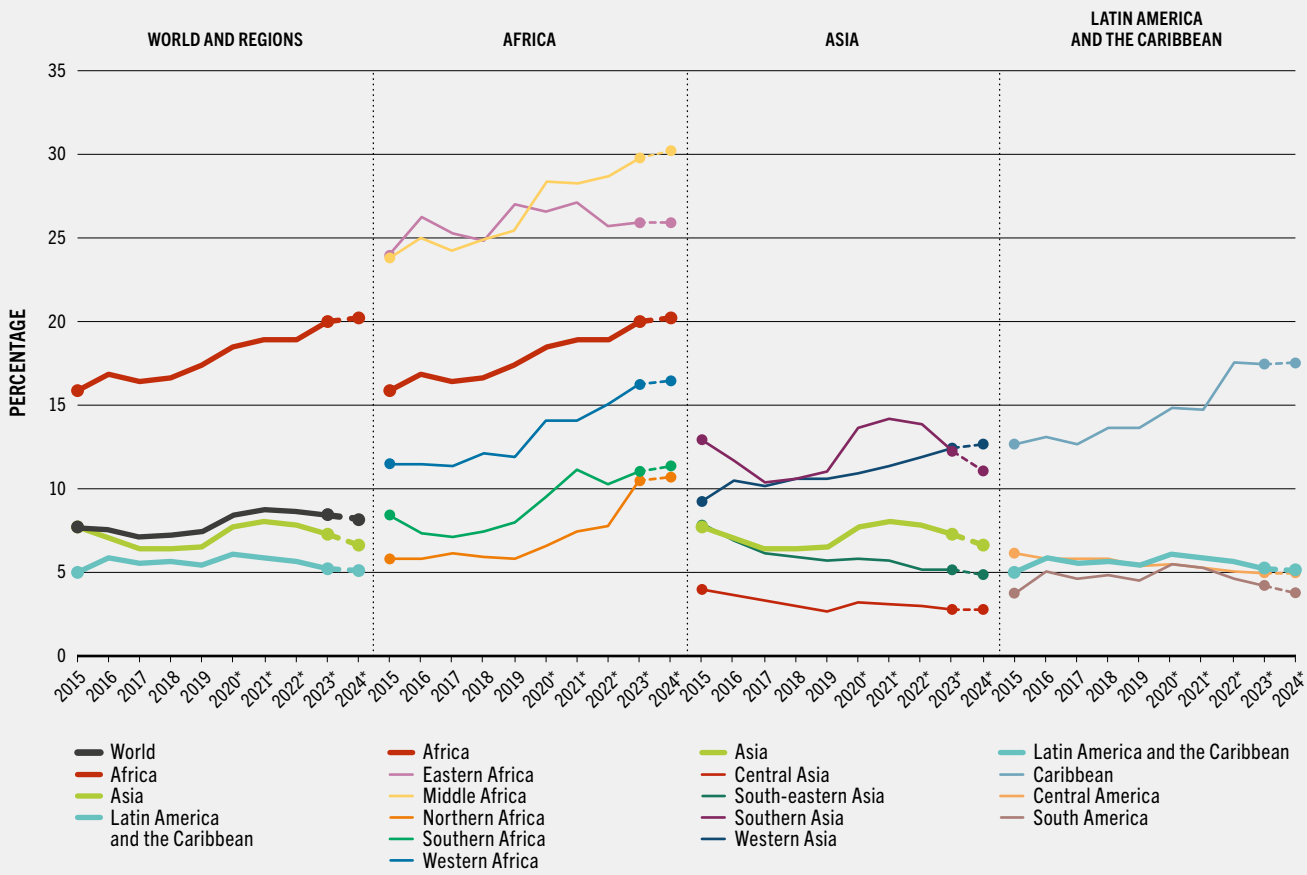
the highest PoU in Africa and the world in 2024 (30.2 percent), and in Northern Africa, where the PoU increased from 7.8 percent in 2022 to 10.7 percent in 2024. The PoU also continued to rise in Southern Africa and Western Africa in this period, although at a slower pace, reaching 11.4 and 16.5 percent, respectively. The number of people facing chronic undernourishment in Africa has increased by 113 million since 2015, when the 2030 Agenda was launched.

The most progress towards reducing hunger in recent years has been made in **Asia**, driven by the above-mentioned notable decrease in Southern Asia, which includes India. The PoU in Asia decreased from 7.9 percent in 2022 to 7.3 percent in 2023, and further to 6.7 percent (323 million people) in 2024 – a decrease of 52 million people in two years. The PoU of Southern Asia decreased from 13.9 to 11.0 percent in the same period. However, it is

FIGURE 2.2 PROGRESS WAS MADE TOWARDS REDUCING HUNGER IN SOUTH-EASTERN AND SOUTHERN ASIA AND IN SOUTH AMERICA, BUT HUNGER CONTINUES TO CLIMB IN MOST SUBREGIONS OF AFRICA AND IN WESTERN ASIA



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 2010. * Values are based on the point estimates. The full ranges of the 2022 to 2024 values can be found in the Supplementary material to Chapter 2.

SOURCE: FAO. 2025. FAOSTAT: Suite of Food Security Indicators. [Accessed on 28 July 2025]. https://www.fao.org/faostat/en/#data/FS. Licence: CC-BY-4.0.

https://doi.org/10.4060/cd6008en-fig2.2

important to note that progress in Asia is due to improvements in many countries, as the PoU for Asia excluding India also showed a slight decline from 2022 to 2024 (Table 2.1). Some progress was also made in South-eastern Asia, where the PoU had been gradually declining for several years and reached 4.9 percent in 2024. No change occurred from 2023 to 2024 in Central Asia, which has the lowest PoU in the region (2.8 percent) except for Eastern Asia, where the PoU has remained below 2.5 percent since 2015.

On the other hand, the situation is very different in Western Asia, which is the only subregion in Asia where chronic undernourishment has been steadily on the rise since 2015, reaching 12.7 percent in 2024. It is important to note that this subregion includes some of the countries most affected by persisting crises and for which lack of solid data poses a challenge for estimating the PoU. Assessments of acute food insecurity can provide important insights into the situation in these countries (see Box 2.2).

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 2025 *Global Report on Food Crises*[4] 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* 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 on *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 rapid assessments are conducted by local teams of analysts through a consultative process among the main food security partners in the country, including government counterparts, 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 and that 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

Progress towards the Zero Hunger target was also made in **Latin America and the Caribbean**, where the latest estimates show the PoU decreasing to 5.1 percent in 2024 after peaking at 6.1 percent in 2020. There was no improvement in the Caribbean, where for the last three years, around 17.5 percent of the population may have faced hunger. This period of stagnation followed a sharp increase in 2022, such that the PoU in the Caribbean in 2024 was more than three times the regional average. South America, on the other hand, has made progress for several consecutive years, with a steady decline in the PoU from 5.5 percent in 2020 to 3.8 percent in 2024. No change occurred in Central America from 2023 to 2024 following a period of gradual improvement during the previous three years.

In 2024, an estimated 7.8 million people in the Caribbean, 9.1 million in Central America and 16.7 million in South America faced chronic hunger.

The PoU has changed little in recent years in **Oceania**, where 7.6 percent of the population was estimated to be chronically undernourished in 2024.

When considering these results, it is also important to keep in mind the deteriorating food insecurity situation in countries affected by evolving humanitarian crises, which may not be fully reflected in the PoU nowcast for 2024 (see Box 2.2).

BOX 2.2 (Continued)

the prevalence of undernourishment and those based on the Food Insecurity Experience Scale, which are 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 2025, the *Global Report on Food Crises* covered 53 countries and territories experiencing food crises, where acute food insecurity is most severe and widespread. 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 crisis-affected contexts.

The different messaging – improvement in chronic food insecurity at the global level reported in this edition of *The State of Food Security and Nutrition in the World*, versus the continued rise in acute food insecurity in crisis-affected countries highlighted by the *Global Report on Food Crises 2025* – is therefore not a contradiction, but a reflection of these different objectives, scopes and data coverage. While global indicators, in the aggregate, may show modest recovery, many specific countries remain engulfed in emergencies where acute hunger continues to deepen and where urgent humanitarian response is most 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 this distinction is essential for interpreting the data and using both reports effectively to guide long-term development strategies and short-term humanitarian response.

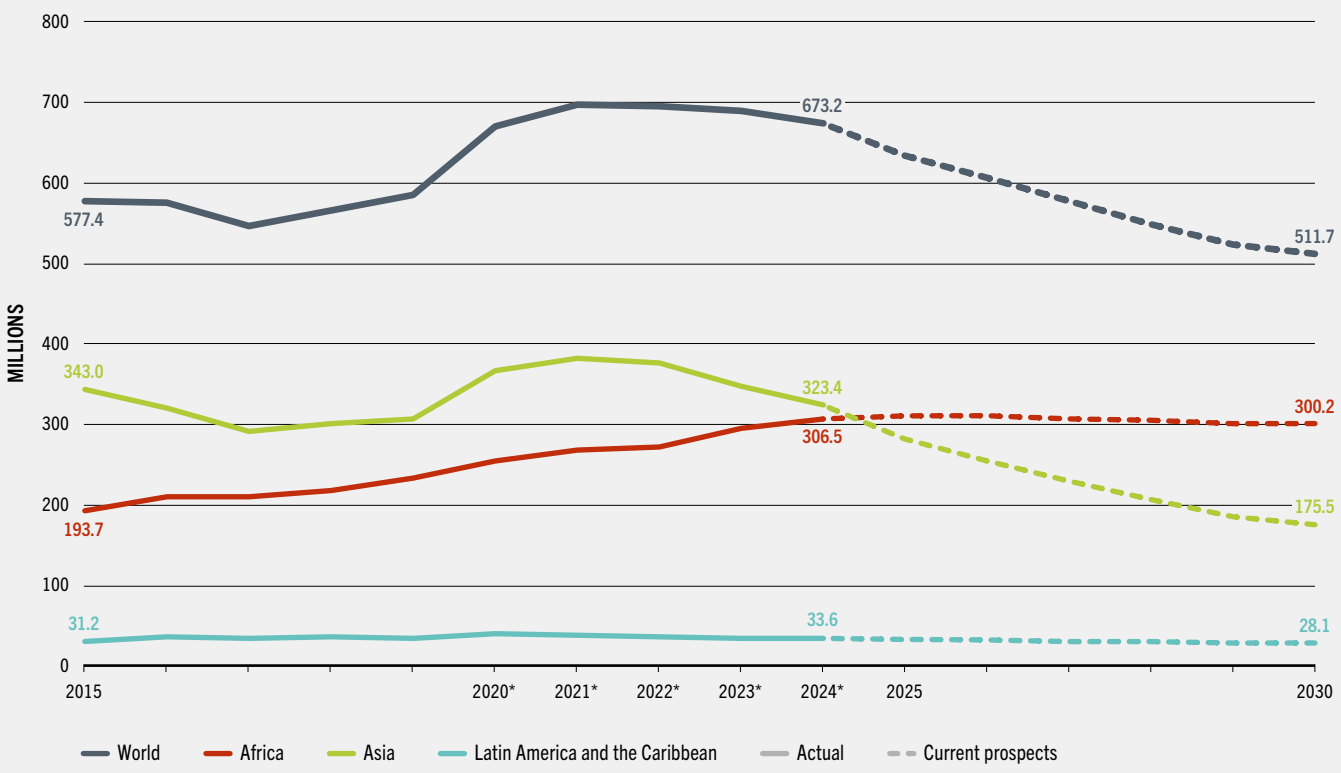
According to the *Global Report on Food Crises 2025*, around 295 million people faced high levels of acute food insecurity (IPC/CH 3+) in the 53 food-crisis countries and territories that were included in the analysis in 2024. Of these, more than 35 million were in IPC Phase 4 (Emergency) and almost 2 million in IPC Phase 5 (Catastrophe).* The five countries with the largest numbers of people facing high levels of acute food insecurity were, in descending order, Nigeria, the Sudan, the Democratic Republic of the Congo, Bangladesh and Ethiopia, while the countries with the largest share of the analysed population facing high levels of acute food insecurity were Palestine (Gaza Strip), South Sudan, the Sudan, Yemen and Haiti. One hundred percent of the population of the Gaza Strip faced high levels of acute food insecurity, as did more than half of the people living in South Sudan and the Sudan, and nearly half the population of Yemen and Haiti.

Almost 2 million people in five countries and territories** were estimated or projected to be facing Catastrophe (IPC/CH Phase 5) levels of acute food insecurity in 2024, more than half of them (1 106 900) in the Gaza Strip. This figure was nearly twice the 576 600 people estimated to be in this phase at the end of 2023 – a number that was already the highest ever recorded in any country or territory in IPC history.

These are some of the most serious humanitarian crises in the world that are posing daunting challenges for the realization of the right to adequate food. Humanitarian aid, including in the form of emergency agriculture, nutrition and food assistance, is urgently needed, together with an end to the hostilities, access to populations in need, and rebuilding of essential infrastructure and institutions crucial for guaranteeing people's livelihoods and access to basic necessities. The seeds of future peace, food security and shared prosperity must be planted today.

NOTES: * High levels of acute food insecurity are those that correspond to IPC 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 levels and exceeds the local resources and capacities to respond. ** Haiti, Mali, Palestine (Gaza Strip), South Sudan and Sudan.

FIGURE 2.3 ELIMINATING HUNGER BY 2030 REMAINS AN ELUSIVE TARGET



NOTES: Only regions for which data were available for all the subregions and the prevalence of undernourishment was above 2.5 percent are shown.
* Values are based on the projected point estimates.

SOURCE: Authors' (FAO) own elaboration.

https://doi.org/10.4060/cd6008en-fig2.3

» 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).

Trajectories showing "current prospects", which aim to capture current projections to 2030, are based on the April 2025 edition of the International Monetary Fund World Economic Outlook database.[7] According to the current projection, 512 million people, or 6 percent of the global population, may be chronically undernourished in 2030, highlighting the immense challenge of achieving SDG 2 (Zero Hunger) (Figure 2.3). It is projected that by 2030, the number of undernourished people will have fallen by only 65 million – from 577 million to 512 million – since the 2030 Agenda was launched in 2015.

While improvements are expected in all regions over the next five years, significant differences remain (Figure 2.3). By 2030, 60 percent of the undernourished people in the world will be in Africa, where 17.6 percent of the population will be facing chronic hunger. In Asia, as well as in Latin America and the Caribbean, the prevalence of undernourishment will fall below 5 percent.

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

SDG Indicator 2.1.2 – the prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES) – was introduced in the SDG global monitoring framework with the specific aim of tracking progress towards the broader goal outlined in SDG Target 2.1 of ensuring access for all people to safe, nutritious and sufficient food all year round. Improvement in this indicator is a positive sign of progress towards the realization of the right 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. Although obtained using very different methodologies and sources of data, both the prevalence of severe food insecurity and the prevalence of undernourishment are indicators of severe constraints on access to food.

At the global level, the prevalence of food insecurity, both for moderate and severe food insecurity combined and for severe food insecurity only, has declined very gradually since 2021, following the sharp increase in the wake of the COVID-19 pandemic in 2020. From 2023 to 2024, the global prevalence of moderate or severe food insecurity decreased slightly, from 28.4 to 28.0 percent (Figure 2.4 and Table 2.3). It is now estimated that about 2.3 billion people in the world were moderately or severely food insecure in 2024, which is still 335 million more than in 2019, before the pandemic, and 683 million more compared to 2015, when the 2030 Agenda was launched (Table 2.4).

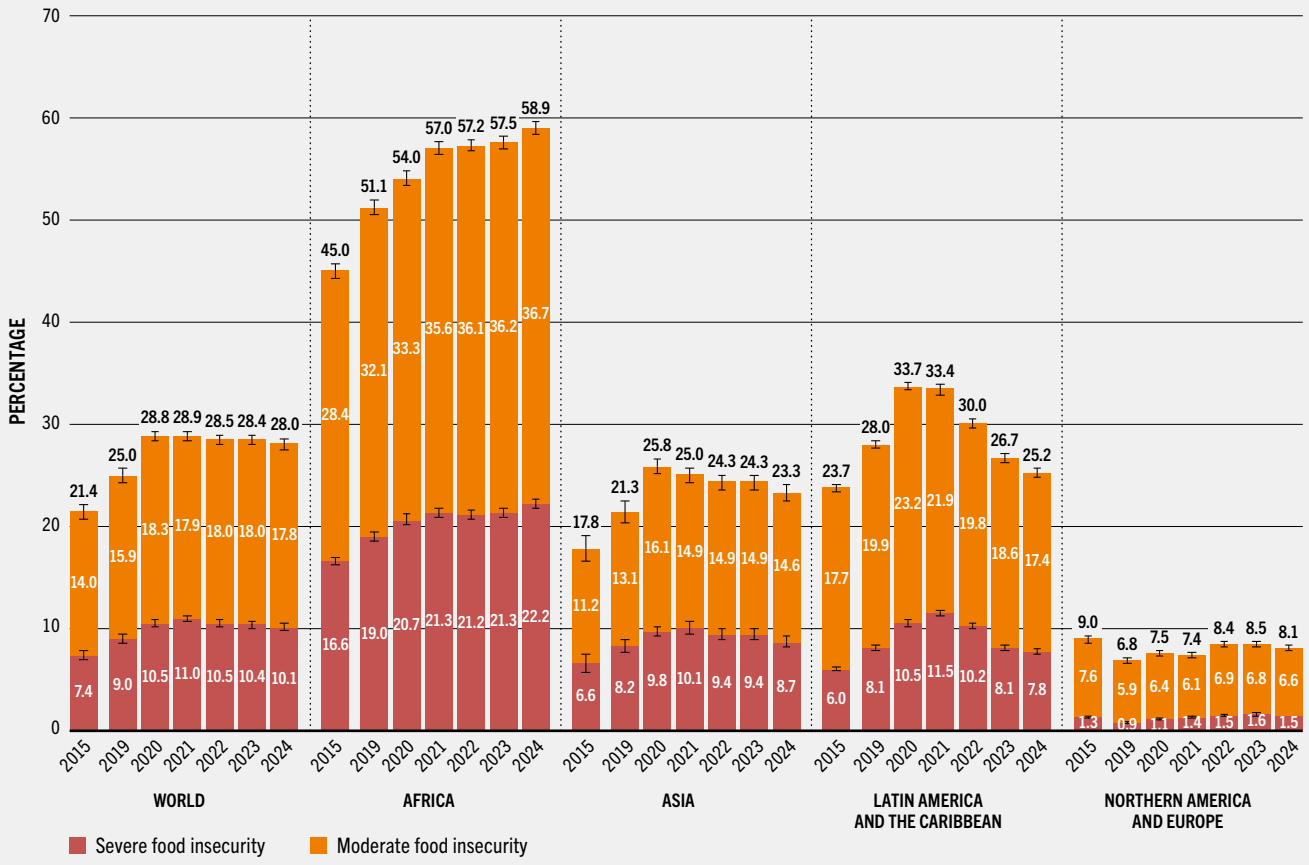
Of the approximately 2.3 billion people in the world facing moderate or severe food insecurity in 2024, an estimated 828 million were severely food insecure. The prevalence of severe food insecurity decreased marginally from 10.4 percent in 2023 to 10.1 percent in 2024.

Trends at the regional level differ notably, with food insecurity on the rise in Africa, falling in Latin America and the Caribbean, and decreasing gradually in Asia for several consecutive years, while in Oceania and in Northern America and Europe, new estimates point to a slight decline from 2023 to 2024 following a several-year rise (Table 2.3, Table 2.4 and Figure 2.4).

The prevalence of moderate or severe food insecurity in **Africa** appears to have risen from 57.5 percent in 2023 to 58.9 percent in 2024 – an increase of nearly 41 million people in one year. An estimated 893 million people in Africa were moderately or severely food insecure in 2024; of these, 337 million were possibly facing food insecurity at severe levels. The rise in food insecurity in Africa from 2023 to 2024 is due to the combined effect of marginal increases in all subregions of Africa. In 2024, moderate or severe food insecurity may have affected more than one-quarter of the population in Southern Africa, more than one-third in Northern Africa (although the estimates do not include an update for the Sudan), nearly two-thirds in Eastern and Western Africa, and more than three-quarters in Middle Africa.

Food insecurity levels continued to decrease slightly in **Asia**, with estimates of the prevalence of moderate or severe food insecurity declining from 24.3 percent in 2023 to 23.3 percent in 2024, equivalent to a decrease of about 38 million people in one year. It is estimated that about 1.1 billion people in Asia were facing moderate or severe food insecurity in 2024; of these, 418 million (8.7 percent of the population of the region) may have been severely food insecure. The region as a whole has been making gradual progress since 2020. All subregions of Asia showed signs of improvement from 2023 to 2024.

FIGURE 2.4 GLOBAL FOOD INSECURITY LEVELS DECLINED GRADUALLY FROM 2021 TO 2024, WITH LATIN AMERICA AND THE CARIBBEAN SHOWING NOTABLE PROGRESS



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

SOURCE: FAO. 2025. FAOSTAT: Suite of Food Security Indicators. [Accessed on 28 July 2025]. https://www.fao.org/faostat/en/#data/FS. Licence: CC-BY-4.0.

https://doi.org/10.4060/cd6008en-fig2.4

Southern Asia and Western Asia had the highest estimated prevalence of moderate or severe food insecurity (both around 38 percent) in 2024, although Southern Asia saw the largest decrease from 2023 to 2024 (nearly 2 percentage points). Eastern Asia revealed the lowest prevalence, estimated at 6.2 percent of the population.

The most improvement occurred in **Latin America and the Caribbean**, where steady progress has been made since 2021. The number of people affected by moderate or severe food insecurity may have fallen by nearly 9 million in one year, from about 176 million to 167 million, with estimates dropping from 26.7 percent of the population in 2023 to 25.2 percent in 2024, driven mainly by progress in South America. The most recent trends in the estimates reveal that food security appears to be improving in all subregions of Latin America and the Caribbean, but most significantly in South America, where the estimated prevalence of moderate or severe food insecurity was nearly 10 percentage points lower in 2024 than in 2021, »

TABLE 2.3 PREVALENCE OF FOOD INSECURITY AT SEVERE LEVEL ONLY, AND AT MODERATE OR SEVERE LEVEL, BASED ON THE FOOD INSECURITY EXPERIENCE SCALE, 2015–2024

	Prevalence of severe food insecurity								Prevalence of moderate or severe food insecurity							
	2015	…	2019	2020	2021	2022	2023	2024	2015	…	2019	2020	2021	2022	2023	2024
	(%)								(%)							
WORLD	**7.4**	**…**	**9.0**	**10.5**	**11.0**	**10.5**	**10.4**	**10.1**	**21.4**	**…**	**25.0**	**28.8**	**28.9**	**28.5**	**28.4**	**28.0**
AFRICA	**16.6**	**…**	**19.0**	**20.7**	**21.3**	**21.2**	**21.3**	**22.2**	**45.0**	**…**	**51.1**	**54.0**	**57.0**	**57.2**	**57.5**	**58.9**
Northern Africa	9.0	…	8.8	9.5	11.3	12.0	11.9	12.4	26.3	…	29.0	30.3	34.1	32.6	33.9	35.1
Sub-Saharan Africa	18.4	…	21.3	23.2	23.6	23.2	23.4	24.4	49.4	…	56.2	59.4	62.1	62.8	62.8	64.1
Eastern Africa	20.8	…	23.5	26.3	26.3	24.9	23.8	24.8	56.3	…	62.8	65.1	63.9	65.5	63.5	64.9
Middle Africa	n.a.	…	n.a.	35.5	36.0	36.6	36.8	37.0	n.a.	…	n.a.	70.0	74.9	76.4	77.0	77.3
Southern Africa	9.1	…	9.2	10.7	10.7	10.6	10.8	10.7	21.5	…	21.9	24.4	24.4	22.7	26.4	26.5
Western Africa	11.0	…	14.5	16.4	17.1	17.3	18.8	20.2	39.2	…	48.7	54.1	60.7	60.1	61.4	63.2
ASIA	**6.6**	**…**	**8.2**	**9.8**	**10.1**	**9.4**	**9.4**	**8.7**	**17.8**	**…**	**21.3**	**25.8**	**25.0**	**24.3**	**24.3**	**23.3**
Central Asia	1.4	…	2.3	4.7	4.9	4.5	3.4	2.9	9.1	…	13.4	17.7	20.0	17.3	16.4	16.2
Eastern Asia	0.8	…	1.3	2.0	1.0	1.0	1.0	1.0	5.9	…	7.4	7.8	6.1	6.2	6.3	6.2
South-eastern Asia	1.6	…	1.6	1.8	1.7	1.8	2.2	1.9	14.4	…	14.3	15.3	14.8	14.8	14.5	14.0
Southern Asia	13.1	…	16.2	18.8	20.2	18.4	18.3	16.6	27.7	…	34.2	43.1	41.9	40.5	40.4	38.3
Western Asia	9.7	…	11.0	12.3	13.3	13.8	13.3	13.4	32.4	…	32.6	37.8	41.5	38.7	37.8	37.7
Western Asia and Northern Africa	*9.4*	*…*	*9.9*	*11.0*	*12.3*	*12.9*	*12.6*	*12.9*	*29.5*	*…*	*30.9*	*34.3*	*38.0*	*35.8*	*36.0*	*36.5*
LATIN AMERICA AND THE CARIBBEAN	**6.0**	**…**	**8.1**	**10.5**	**11.5**	**10.2**	**8.1**	**7.8**	**23.7**	**…**	**28.0**	**33.7**	**33.4**	**30.0**	**26.7**	**25.2**
Caribbean	n.a.	…	n.a.	29.1	23.2	25.4	25.0	24.8	n.a.	…	n.a.	61.0	54.1	55.3	53.3	51.9
Latin America	4.4	…	6.8	9.2	10.7	9.1	6.8	6.6	21.4	…	26.0	31.7	31.9	28.2	24.8	23.3
Central America	6.3	…	7.1	7.3	7.3	6.9	7.1	7.1	28.9	…	29.8	34.1	30.9	26.2	26.4	25.9
South America	3.7	…	6.6	10.0	12.1	10.0	6.7	6.4	18.4	…	24.5	30.7	32.3	29.0	24.1	22.2
OCEANIA	**8.5**	**…**	**9.5**	**8.6**	**10.1**	**9.3**	**10.4**	**9.6**	**21.3**	**…**	**24.4**	**23.2**	**24.1**	**24.2**	**26.9**	**26.3**
NORTHERN AMERICA AND EUROPE	**1.3**	**…**	**0.9**	**1.1**	**1.4**	**1.5**	**1.6**	**1.5**	**9.0**	**…**	**6.8**	**7.5**	**7.4**	**8.4**	**8.5**	**8.1**
Europe	1.5	…	0.9	1.3	1.7	1.8	1.9	1.8	8.3	…	6.4	7.2	7.3	7.8	7.5	6.8
Eastern Europe	1.5	…	0.8	1.4	1.7	1.9	1.8	1.3	11.4	…	8.1	10.0	10.3	10.4	9.0	7.9
Northern Europe	1.8	…	0.9	1.2	1.8	2.0	3.0	3.6	6.8	…	5.1	4.2	4.5	6.6	7.7	7.5
Southern Europe	1.4	…	1.3	2.0	1.7	1.4	1.3	1.1	7.4	…	6.8	8.0	6.9	6.4	6.2	5.1
Western Europe	1.4	…	0.7	0.8	1.7	1.8	2.0	1.9	5.0	…	4.3	3.9	4.9	5.7	6.1	6.2
Northern America	1.0	…	0.8	0.7	0.7	0.9	1.1	1.1	10.3	…	7.6	8.3	7.5	9.7	10.4	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 to 2024 include Caribbean countries whose combined populations represent between 60 percent and 65 percent of the subregional population. The countries included in the 2024 estimate 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. The estimates for Northern Africa do not reflect any recent updates for the Sudan as the high level of conflict has impeded data collection.

SOURCE: FAO. 2025. FAOSTAT: Suite of Food Security Indicators. [Accessed on 28 July 2025]. 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, 2015–2024

	Number of severely food-insecure people								Number of moderately or severely food-insecure people							
	2015	…	2019	2020	2021	2022	2023	2024	2015	…	2019	2020	2021	2022	2023	2024
	(millions)								(millions)							
WORLD	**553.2**	**…**	**705.3**	**827.6**	**872.0**	**840.0**	**841.4**	**828.0**	**1 602.2**	**…**	**1 949.4**	**2 268.7**	**2 296.6**	**2 283.9**	**2 295.0**	**2 284.8**
AFRICA	**202.4**	**…**	**256.1**	**285.3**	**301.7**	**306.2**	**315.6**	**336.9**	**548.6**	**…**	**689.3**	**745.2**	**805.5**	**828.2**	**852.1**	**892.7**
Northern Africa	20.9	…	22.1	24.4	29.4	31.8	32.0	33.8	61.2	…	73.0	77.7	88.9	86.3	91.2	95.5
Sub-Saharan Africa	181.5	…	234.0	260.9	272.3	274.4	283.6	303.0	487.4	…	616.3	667.5	716.7	741.9	760.9	797.2
Eastern Africa	82.1	…	103.4	118.5	122.0	118.3	116.1	124.1	222.4	…	275.8	293.7	295.9	311.2	309.6	325.1
Middle Africa	n.a.	…	n.a.	66.6	69.7	73.0	75.8	78.8	n.a.	…	n.a.	131.6	145.2	152.6	158.6	164.6
Southern Africa	5.9	…	6.3	7.4	7.5	7.6	7.8	7.9	13.9	…	14.9	16.9	17.1	16.2	19.1	19.4
Western Africa	40.4	…	59.1	68.3	73.1	75.5	83.8	92.3	144.1	…	197.9	225.3	258.5	262.0	273.7	288.1
ASIA	**295.5**	**…**	**383.3**	**457.9**	**475.5**	**445.8**	**449.4**	**417.5**	**798.8**	**…**	**993.1**	**1 210.5**	**1 179.6**	**1 153.2**	**1 159.2**	**1 120.8**
Central Asia	1.0	…	1.7	3.6	3.8	3.6	2.8	2.4	6.3	…	10.1	13.5	15.6	13.7	13.3	13.3
Eastern Asia	12.4	…	21.4	33.4	17.1	16.1	17.2	16.8	95.9	…	123.2	129.2	102.3	103.4	105.0	102.5
South-eastern Asia	10.5	…	10.8	12.3	11.3	12.6	15.0	13.4	92.8	…	95.8	103.5	100.9	101.5	99.8	97.2
Southern Asia	245.9	…	318.2	373.3	404.5	372.6	374.1	343.5	518.0	…	671.5	855.5	839.5	819.4	826.1	791.1
Western Asia	25.8	…	31.2	35.3	38.8	41.0	40.3	41.5	85.8	…	92.5	108.8	121.3	115.1	115.0	116.8
Western Asia and Northern Africa	*46.7*	*…*	*53.3*	*59.7*	*68.2*	*72.8*	*72.3*	*75.3*	*147.0*	*…*	*165.5*	*186.6*	*210.1*	*201.4*	*206.2*	*212.2*
LATIN AMERICA AND THE CARIBBEAN	**37.4**	**…**	**51.9**	**68.0**	**74.9**	**66.9**	**53.1**	**51.8**	**147.1**	**…**	**179.7**	**217.9**	**217.3**	**196.5**	**175.8**	**167.2**
Caribbean	n.a.	…	n.a.	12.7	10.2	11.2	11.1	11.0	n.a.	…	n.a.	26.7	23.8	24.4	23.6	23.1
Latin America	25.6	…	40.4	55.3	64.7	55.7	42.0	40.7	123.7	…	155.9	191.2	193.5	172.2	152.2	144.1
Central America	10.6	…	12.5	12.8	13.0	12.5	12.9	13.0	48.5	…	52.2	60.3	55.0	47.2	47.9	47.5
South America	15.0	…	27.9	42.5	51.8	43.2	29.1	27.7	75.2	…	103.7	130.9	138.5	125.0	104.3	96.5
OCEANIA	**3.4**	**…**	**4.1**	**3.8**	**4.5**	**4.2**	**4.8**	**4.4**	**8.7**	**…**	**10.6**	**10.2**	**10.7**	**10.9**	**12.2**	**12.1**
NORTHERN AMERICA AND EUROPE	**14.6**	**…**	**9.8**	**12.7**	**15.3**	**16.9**	**18.6**	**17.4**	**99.1**	**…**	**76.7**	**84.8**	**83.5**	**95.2**	**95.7**	**92.0**
Europe	11.1	…	6.8	9.9	12.6	13.3	14.4	13.1	61.7	…	48.0	53.6	55.0	58.2	55.7	50.8
Eastern Europe	4.4	…	2.3	4.0	4.8	5.5	5.2	3.6	33.7	…	23.8	29.3	30.0	30.1	25.8	22.7
Northern Europe	1.9	…	1.0	1.3	1.9	2.1	3.3	4.0	7.0	…	5.4	4.4	4.7	7.1	8.4	8.2
Southern Europe	2.1	…	2.0	3.0	2.6	2.1	1.9	1.7	11.3	…	10.5	12.2	10.5	9.7	9.4	7.7
Western Europe	2.7	…	1.4	1.6	3.3	3.6	4.0	3.8	9.7	…	8.4	7.8	9.8	11.4	12.2	12.3
Northern America	3.5	…	3.1	2.8	2.7	3.5	4.2	4.4	37.4	…	28.6	31.2	28.6	36.9	39.9	41.2

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 to 2024 include Caribbean countries whose combined populations represent between 60 percent and 65 percent of the subregional population. The countries included in the 2024 estimate 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. The estimates for Northern Africa do not reflect any recent updates for the Sudan as the high level of conflict has impeded data collection.

SOURCE: FAO. 2025. FAOSTAT: Suite of Food Security Indicators. [Accessed on 28 July 2025]. www.fao.org/faostat/en/#data/FS. Licence: CC-BY-4.0.

» a difference that is equivalent to a reduction of more than 40 million people experiencing food insecurity. More than half the covered population of the Caribbean was estimated to be moderately or severely food insecure in 2024, compared to approximately one-quarter of the population in both Central America and South America. The proportion of the total food-insecure population in the Caribbean that is facing food insecurity at severe levels is also larger – nearly half.

Food insecurity improved marginally in **Oceania**. However, over 26 percent of the region's population (about 12 million people) may still have faced moderate or severe food insecurity in 2024, including 9.6 percent (4.4 million) who may have been severely food insecure. This points to possible signs of a positive turnaround in the trend for the region, where food insecurity had been increasing since 2020.

There were also signs of a positive turnaround in **Northern America and Europe**, where a marginal improvement was seen from 2023 to 2024. Current estimates point to slightly over 8 percent of the population (92 million people) being moderately or severely food insecure in 2024, and 1.5 percent (17.4 million people) possibly facing severe food insecurity. The situation is the result of different trends in the two regions, with the estimated prevalence of moderate or severe food insecurity decreasing in Europe, from 7.5 percent in 2023 to 6.8 percent in 2024, but marginally increasing in Northern America, from 10.4 percent to 10.7 percent.

Nearly half of the total number of moderately or severely food-insecure people in the world live in Asia, given its very large population, even though the prevalence of people who are food insecure is much higher in Africa (Table 2.3 and Table 2.4). It is also worth noting that the share of food-insecure people facing severe food insecurity varies by region. In Africa, Asia and Oceania, between 36 and 38 percent of the total number of food-insecure people are severely food insecure, compared to 31 percent in Latin America and the Caribbean and only 19 percent in Northern America and Europe.

Differences in food insecurity across rural, peri-urban and urban areas and between men and women

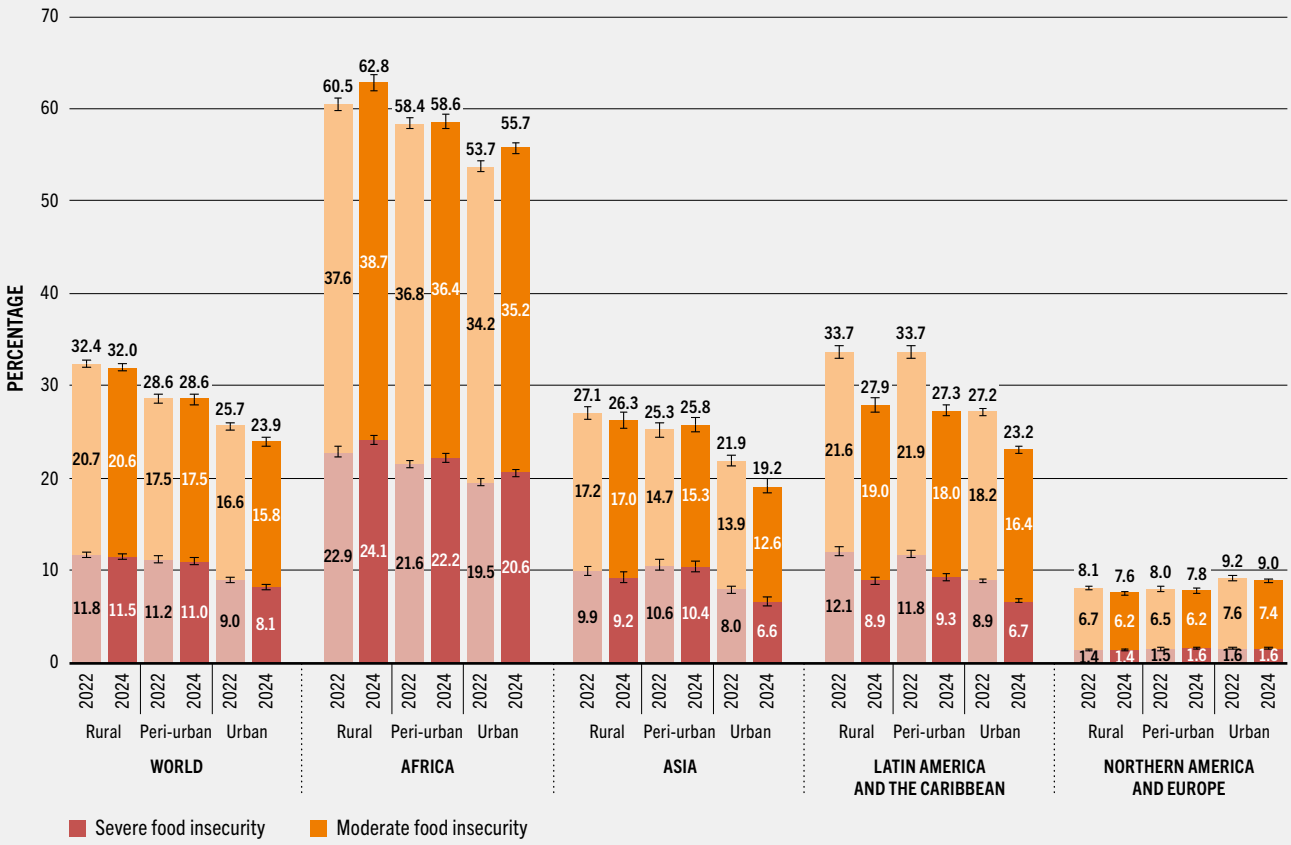
One of the key guiding principles of the 2030 Agenda is leaving no one behind. Efforts to uphold this principle require evidence on specific subpopulations to understand whether some groups are more food insecure than others and what policies may be needed to address their specific needs.

Globally and in every region of the world except Northern America and Europe, people living in rural areas tend to be more food insecure than those living in urban areas, while the relative situation of peri-urban populations differs among the regions (Figure 2.5).[b] About 32.0 percent of people living in *rural* areas in the world were moderately or severely food insecure in 2024, compared to about 28.6 percent in *peri-urban* areas and 23.9 percent in *urban* areas. Focusing specifically on severe food insecurity only, a similar pattern emerges; around 11.5 percent of the rural population in the world is severely food insecure compared to 11.0 percent of the peri-urban population and 8.1 percent of the urban population.

The pattern of decreasing food insecurity with increasing degree of urbanization is clear in Africa, where an estimated 62.8 percent of people living in rural areas were moderately or severely food insecure, compared to 58.6 percent in peri-urban areas and 55.7 percent in urban areas. Rural populations are notably more food insecure than urban populations in Asia and Latin America and the Caribbean as well, but the relative situation of peri-urban populations differs from that in Africa. In Asia and Latin America and the Caribbean, there is virtually no difference between rural and peri-urban populations for moderate or severe food insecurity, and for severe food insecurity, there are even signs of slightly higher levels

b FAO uses the Degree of Urbanization (DEGURBA) classification,[8] 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 2.5 GLOBALLY AND IN MOST REGIONS, THE PREVALENCE OF FOOD INSECURITY HAS REMAINED CONSISTENTLY HIGHER IN RURAL AREAS THAN IN URBAN AREAS SINCE 2022, WITH NOTABLE IMPROVEMENTS IN URBAN AREAS IN ASIA AND ACROSS URBAN, PERI-URBAN AND RURAL AREAS IN LATIN AMERICA AND THE CARIBBEAN



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. 2025. FAOSTAT: Suite of Food Security Indicators. [Accessed on 28 July 2025]. https://www.fao.org/faostat/en/#data/FS.
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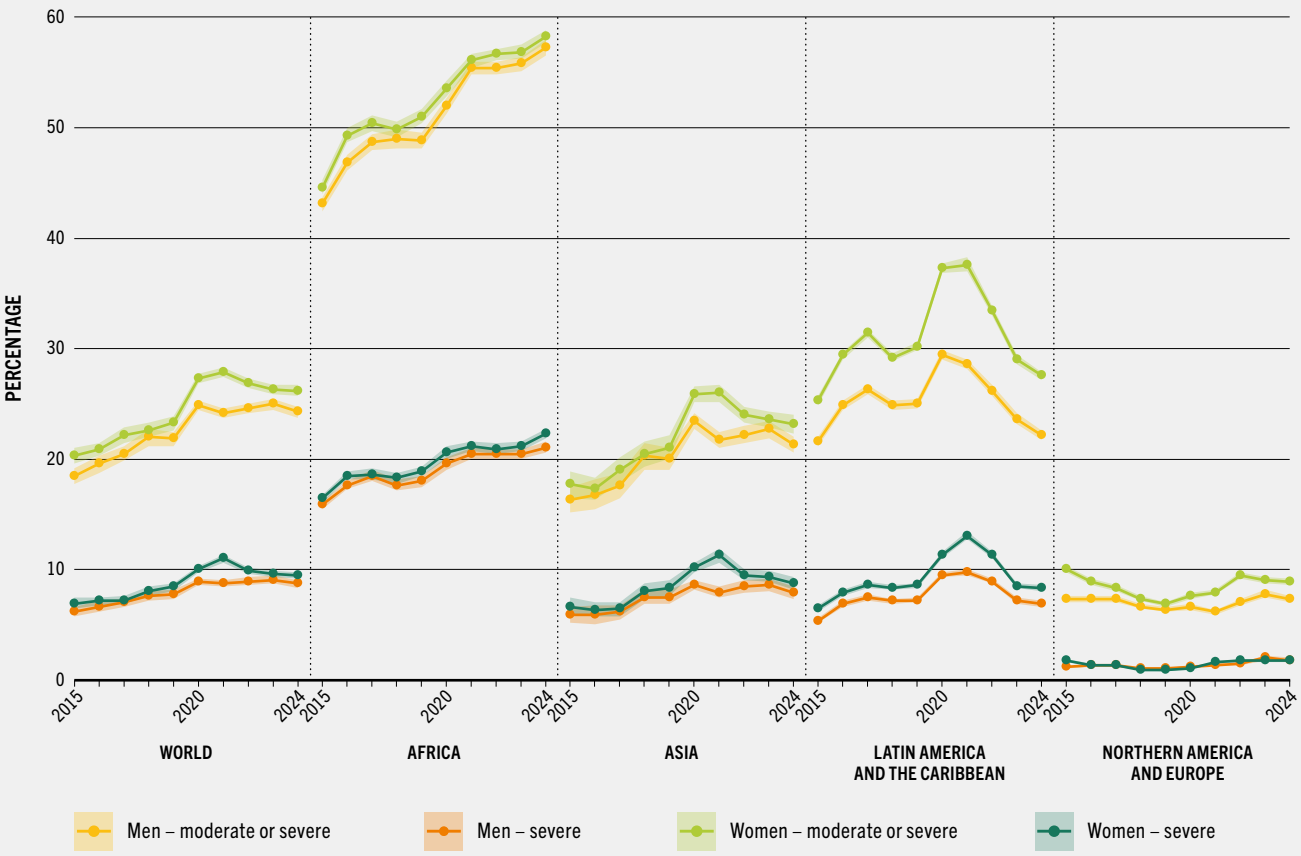
https://doi.org/10.4060/cd6008en-fig2.5

in peri-urban areas. The only region where there are indications that food insecurity may increase slightly with increasing urbanization is Northern America and Europe (considered together for this analysis).[c]

Comparing the assessment in 2024 with the baseline of 2022 – the first year FAO disseminated the disaggregation by degree of urbanization for SDG Indicator 2.1.2 – a clear pattern emerges: at the global level the prevalence of moderate or severe food insecurity decreases only in urban areas, from 25.7 to 23.9 percent, while remaining virtually unchanged in rural and peri-urban areas. The same pattern is observed in Asia, where people's access to food improves mostly in urban areas, as reflected in the drop in the

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 2024 by region and subregion. See Supplementary material to Chapter 2 for details on the methods used to obtain disaggregated estimates.

FIGURE 2.6 THE GENDER GAP NARROWED AT THE GLOBAL LEVEL FROM 2021 TO 2023, BUT INCREASED SLIGHTLY IN 2024, WITH THE PREVALENCE OF FOOD INSECURITY REMAINING CONSISTENTLY HIGHER AMONG WOMEN THAN AMONG MEN, GLOBALLY AND IN ALL REGIONS



NOTE: Only regions for which data were available for all the subregions are shown.

SOURCE: FAO. 2025. FAOSTAT: Suite of Food Security Indicators. [Accessed on 28 July 2025]. https://www.fao.org/faostat/en/#data/FS. Licence: CC-BY-4.0.

https://doi.org/10.4060/cd6008en-fig2.6

prevalence of moderate or severe food insecurity from 21.9 percent in 2022 to 19.2 percent in 2024. Notably, in Latin America and the Caribbean, improvements were distributed more equally across rural, peri-urban and urban areas, while in Africa, food security worsened in both rural and urban areas and remained virtually unchanged in peri-urban areas. In Northern America and Europe, there were signs of marginal improvement in all areas.

Persistent inequalities between men and women are also evident, with food insecurity still more prevalent among adult women than men in every region of the world (Figure 2.6).[d] The gender gap widened considerably at the global level in the wake of the COVID-19 pandemic, most

d See Table A1.4 in **Annex 1A** for prevalence of moderate or severe food insecurity, and severe food insecurity only, by sex in 2024 by region and subregion, and Supplementary material to Chapter 2 for details on the methods used to obtain disaggregated estimates.

notably in 2021; it then grew smaller for two consecutive years. But new estimates point to a widening of the gap at the global level between 2023 and 2024. During this period, the difference in the prevalence of moderate or severe food insecurity between women and men increased from 1.3 to 1.9 percentage points, and for severe food insecurity, from 0.6 to 0.8 percentage points. After these fluctuations over the past nine years, the gender gap in 2024 was about the same as it was in 2015, when the 2030 Agenda was launched.

For moderate or severe food insecurity, the increase in the gender gap from 2023 to 2024 was driven mostly by Asia, where the difference in the prevalence between men and women grew from 1.0 to 1.9 percentage points, and by Northern America and Europe, where the gap increased from 1.2 to 1.6 percentage points.

For severe food insecurity, however, the increase is mostly due to Africa, where a worrisome increase was seen in the gender gap, from 0.7 percentage points in 2023 to 1.3 percentage points in 2024.

The gender gap in food insecurity changed little in Latin America and the Caribbean between 2023 and 2024. However, this remains the region with the largest differences in the prevalence of food insecurity between men and women in the world – 5.3 percentage points at moderate or severe level, and 1.3 percentage points at severe level, in 2024.

In summary, the updated trends in hunger and food insecurity point to progress in some regions in recent years towards SDG Target 2.1 of ending hunger and ensuring access by all people to sufficient food all year round. However, global levels of hunger and food insecurity remain far above those recorded at the beginning of the 2030 Agenda; hundreds of millions more people struggled to meet their basic food needs in 2024 than in 2015. The number of chronically undernourished people in the world has increased by nearly 17 percent since 2015, and the number of people who are moderately or severely food insecure has increased by more than 40 percent globally and in Asia, and by more than 60 percent in Africa. Zero Hunger by 2030 may seem out of reach, but commitment to urgent action aimed at the progressive realization of the right to adequate food for all is a global obligation that cannot be neglected. Everyone benefits from a world in which all people have access to enough food – especially nutritious food comprising a healthy diet. ■

2.2 COST AND AFFORDABILITY OF A HEALTHY DIET

KEY MESSAGES

➔ Food prices rose throughout 2023 and 2024, pushing up the average cost of a healthy diet globally to 4.46 purchasing power parity (PPP) dollars per person per day, up from 4.30 PPP dollars in 2023 and 4.01 PPP dollars in 2022.

➔ Despite the increase in food prices over 2024, the number of people unable to afford a healthy diet in the world fell from 2.76 billion in 2019 to 2.60 billion in 2024, fuelled by an economic recovery from the pandemic that has, nevertheless, been uneven across regions and country income groups.

➔ In recent years, the percentage and the number of people unable to afford a healthy diet decreased significantly in Asia and marginally in Latin America and the Caribbean, Northern America and Europe, and Oceania. In Africa, on the other hand, the percentage rose from 64.1 percent in 2019 to 66.6 percent in 2024, corresponding to an increase in the numbers from 864 million to 1 billion.

➔ The unequal recovery is even more evident across country income groups. The number of people unable to afford a healthy diet in low-income countries has been steadily increasing since 2017, whereas in upper-middle- and high-income countries, the number has been declining since 2020. In lower-middle-income countries, the number decreased from 2020 to 2024, but this improvement is mainly explained by the significant decrease in unaffordability in India.

Monitoring economic access to a healthy diet is essential for informing policies aimed at improving food security and nutritional outcomes, thereby contributing to the achievement of SDG Targets 2.1 and 2.2. A healthy diet includes whole grains, legumes, nuts, and an abundance and variety of fruits and vegetables, and can include moderate amounts of eggs, dairy, poultry and fish, and small amounts of red meat.[9] A healthy diet can vary widely across regions, but it has four universal characteristics. It is diverse, composed of a variety of foods and food groups; it is adequate in essential nutrients and bioactive compounds important for health; it is balanced across macronutrients (proteins, carbohydrates and fats); and it is moderate in dietary components that are detrimental to health if consumed in excess.[10] Eating a healthy diet throughout the life cycle is critical for preventing all forms of malnutrition, including child stunting and wasting, micronutrient deficiencies, and overweight or obesity. It also helps reduce the risk of non-communicable diseases (NCDs) such as cardiovascular diseases, diabetes and certain types of cancer.[11]

The cost of a healthy diet (CoHD) for each country is an estimate of the minimum cost of acquiring a healthy diet, defined as a diet comprising a variety of locally available foods that meet energy and most nutrient requirements.

After careful consideration of the portion of income required for essential non-food goods and services, the CoHD is compared to national income distributions to estimate the prevalence of unaffordability of a healthy diet (PUA) and the number of people unable to afford a healthy diet (NUA). These are measures of the proportion of the population and of the number of people in each country who are unable to afford even the least-cost option of a healthy diet. Together, the PUA and NUA serve as critical indicators for monitoring the inability of agrifood systems to deliver a least-cost healthy diet accessible for all, given existing levels of income inequality within countries.

FAO, in collaboration with the World Bank, systematically monitors these indicators and disseminates the time series through the FAOSTAT database. For the first time in this report, the indicators are reported up to one year prior to publication, whereas previous editions reported data up to two years before. This improvement was made possible by the timely availability of 2024 data on purchasing power parity (PPP) conversion factors, food consumer price indices (CPIs), and income distributions used by the World Bank for nowcasting poverty.

In this year's edition of the report, two major updates are introduced for calculating the cost of a healthy diet and the related affordability indicators (see **Annex 1B**).

First, newly available household consumption expenditure data for India were incorporated into the World Bank's Poverty and Inequality Platform to update income distributions. As a result, the affordability indicators for India were revised across the entire time series back to 2017, leading to a downward revision in both the PUA and the NUA. This, in turn, led to a downward revision at the global level.

Second, this year's calculations use updated PPP conversion factors from the 2021 round of the International Comparison Program (ICP). While last year's edition of the report updated the cost of a healthy diet indicator using 2021 ICP food prices, it continued to rely on PPP factors from the 2017 ICP round. This year, the full adoption of 2021 ICP data enabled the compilation of updated PPP factors that replaced the older series, enhancing the accuracy of affordability estimates.

2.2.1 The cost of a healthy diet

Food prices continued to rise in 2024, driving up the average cost of a healthy diet globally and across all regions. The CoHD indicator has risen worldwide since 2017 (the first year for which FAO disseminates estimates), reaching an average of 4.46 PPP dollars per person per day in 2024 (Table 2.5). As last year's report presented results up to 2022, it is worth noting that the CoHD rose significantly between 2022 and 2023 – though at a slower rate than from 2021 to 2022, when a sharp increase was observed. Globally, following a peak increase of 11.4 percent between 2021 and 2022, the CoHD rose by 7.2 percent in 2023, and by a more moderate 3.7 percent in 2024.

»

TABLE 2.5 THE AVERAGE COST OF A HEALTHY DIET, 2019–2024

	Cost of a healthy diet					
	2019	2020	2021	2022	2023	2024
	(PPP dollars)					
WORLD	**3.30**	**3.43**	**3.60**	**4.01**	**4.30**	**4.46**
AFRICA	**3.21**	**3.32**	**3.52**	**3.89**	**4.18**	**4.41**
Northern Africa	3.46	3.44	3.65	3.99	4.51	4.76
Sub-Saharan Africa	3.18	3.31	3.51	3.88	4.15	4.37
Eastern Africa	3.23	3.33	3.51	3.88	4.18	4.48
Middle Africa	3.25	3.40	3.64	4.02	4.24	4.39
Southern Africa	3.28	3.43	3.64	3.96	4.27	4.44
Western Africa	3.06	3.19	3.39	3.77	4.01	4.21
ASIA	**3.36**	**3.54**	**3.72**	**4.09**	**4.31**	**4.43**
Central Asia	3.10	3.26	3.38	3.70	3.81	3.78
Eastern Asia	4.36	4.66	4.89	5.39	5.74	5.95
South-eastern Asia	3.72	3.89	3.97	4.29	4.52	4.63
Southern Asia	3.43	3.57	3.79	4.20	4.41	4.57
Western Asia	2.85	3.03	3.16	3.60	3.81	3.92
LATIN AMERICA AND THE CARIBBEAN	**3.78**	**3.96**	**4.16**	**4.62**	**4.97**	**5.16**
Caribbean	4.04	4.23	4.42	4.90	5.24	5.48
Latin America	3.54	3.70	3.91	4.36	4.72	4.87
Central America	3.46	3.55	3.71	4.15	4.51	4.69
South America	3.60	3.80	4.03	4.49	4.85	4.98
OCEANIA	**2.84**	**2.94**	**3.09**	**3.45**	**3.75**	**3.86**
NORTHERN AMERICA AND EUROPE	**2.96**	**3.04**	**3.14**	**3.58**	**3.90**	**4.02**
Europe	2.97	3.05	3.14	3.59	3.91	4.03
Eastern Europe	3.06	3.18	3.25	3.73	4.05	4.18
Northern Europe	2.77	2.84	2.90	3.27	3.58	3.68
Southern Europe	3.35	3.39	3.53	4.11	4.49	4.63
Western Europe	2.52	2.60	2.65	2.97	3.24	3.31
Northern America	2.84	2.98	3.14	3.50	3.75	3.85
COUNTRY INCOME GROUP						
Low-income countries	3.07	3.24	3.47	3.83	4.12	4.41
Lower-middle-income countries	3.33	3.49	3.68	4.07	4.33	4.48
Upper-middle-income countries	3.57	3.70	3.88	4.35	4.68	4.83
High-income countries	3.16	3.27	3.40	3.79	4.08	4.22

NOTES: The cost of a healthy diet (CoHD) is expressed in purchasing power parity (PPP) dollars per person per day. It is reported as the arithmetic mean of the CoHD for the countries in the groups reported above.

SOURCE: FAO. 2025. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 28 July 2025]. www.fao.org/faostat/en/#data/CAHD. Licence: CC-BY-4.0.

» In a comparison of the cost of a healthy diet across regions in 2024, the CoHD was highest in Latin America and the Caribbean (an average of 5.16 PPP dollars), with an increase of 7.6 percent between 2022 and 2023, followed by a 3.8 percent increase between 2023 and 2024. In Asia, the average CoHD rose from 4.09 PPP dollars in 2022 to 4.43 PPP dollars in 2024, with Eastern Asia recording by far the highest average CoHD in the region (5.95 PPP dollars), followed by South-eastern Asia (4.63 PPP dollars). Africa saw a 7.5 percent increase in the CoHD from 3.89 PPP dollars in 2022 to 4.18 PPP dollars in 2023, with Northern Africa experiencing the largest surge of 13 percent followed by Southern Africa (7.8 percent) and Eastern Africa (7.7 percent). This upward trend continued in Africa between 2023 and 2024, with CoHD rising by 5.5 percent reaching an average of 4.41 PPP dollars – the greatest year-on-year increase among all world regions in this period. The largest surge in 2024 occurred in Eastern Africa (7.2 percent), followed by Northern Africa (5.5 percent).

Compared to the other regions, Northern America and Europe showed a moderate increase in the average cost of a healthy diet during the COVID-19 pandemic (from 2.96 PPP dollars in 2019 to 3.14 PPP dollars in 2021) but then experienced a substantial increase of 14 percent from 2021 to 2022, followed by an increase of 8.9 percent between 2022 and 2023. The situation slightly improved between 2023 and 2024, with a 3.1 percent increase in the CoHD, reaching 4.02 PPP dollars. In Oceania, the CoHD increased from 3.75 PPP dollars in 2023 to 3.86 PPP dollars in 2024.

When broken down by income group, upper- and lower-middle-income countries (UMICs and LMICs) recorded the highest average cost of a healthy diet in 2024 at 4.83 PPP dollars and 4.48 PPP dollars per day, respectively. Low-income countries (LICs) followed at 4.41 PPP dollars, and then high-income countries (HICs) at 4.22 PPP dollars. In LICs, the average CoHD increased by 7 percent between 2023 and 2024, following a 7.6 percent surge from 2022 to 2023 – the highest increase across income groups.

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

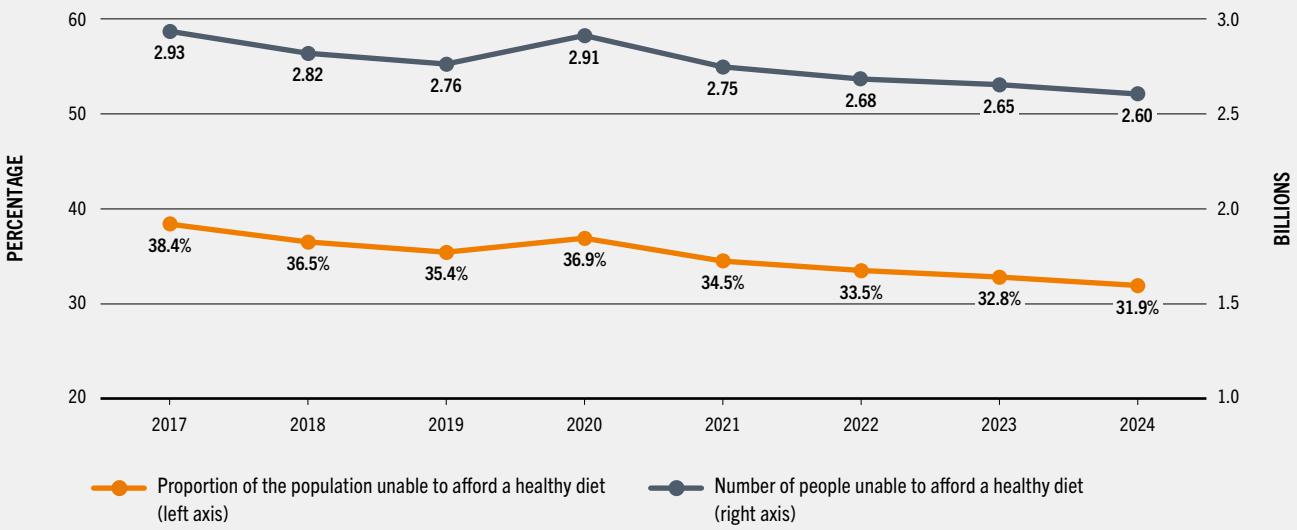
New estimates of the prevalence (PUA) and the number (NUA) of people unable to afford a healthy diet in the world indicate the continuation of a declining trend after 2020, despite the increase in food prices from 2023 to 2024. This is largely due to the path of economic growth since the pandemic. Furthermore, the update of income data for India, following the availability of new official household consumption survey data, contributed to a further reduction in the estimated number of people in the world who were unable to afford a healthy diet in 2024.

Worldwide, an estimated 31.9 percent of people (2.60 billion) were unable to afford a healthy diet in 2024, compared to 33.5 percent (2.68 billion) in 2022, equivalent to nearly 80 million fewer people in two years (Figure 2.7 and Table 2.6). After declining by 172 million, from 2.93 billion in 2017 to 2.76 billion in 2019, the NUA rose to 2.91 billion in 2020, coinciding with the COVID-19 pandemic. This rise was followed by a sharp decline in 2021 (2.75 billion) and a continued three-year declining trend in both the prevalence and the number of people unable to afford a healthy diet (Figure 2.7).

However, the recovery has been uneven across regions. In recent years, unaffordability has been decreasing significantly in Asia and only marginally in Latin America and the Caribbean, Northern America and Europe, and Oceania. Conversely, it increased substantially in Africa. Two-thirds of the population of Africa was unable to afford a healthy diet in 2024 – more than double the global percentage of 31.9 percent. The percentages in Asia and in Latin America and the Caribbean were just below the global average (28.1 percent and 27.4 percent, respectively), while a healthy diet was out of reach for 19.6 percent of the population in Oceania and 5.0 percent in Northern America (Table 2.6).

In **Africa**, the NUA rose to 1 008.9 million in 2024, up by 71.2 million from 2022 and by 144.9 million compared to 2019. Sub-Saharan Africa experienced a significant deterioration between 2022 and 2024, as the NUA rose by

FIGURE 2.7 THE PROPORTION OF THE POPULATION AND NUMBER OF PEOPLE UNABLE TO AFFORD A HEALTHY DIET IN THE WORLD DECREASED FROM 2020 TO 2024



SOURCE: FAO. 2025. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 28 July 2025]. www.fao.org/faostat/en/#data/CAHD. Licence: CC-BY-4.0.

https://doi.org/10.4060/cd6008en-fig2.7

43.3 million to reach 896.5 million. The majority of people lacking economic access to a healthy diet in 2024 lived in Eastern Africa (365.5 million) and Western Africa (319.6 million). These two regions combined saw an increase of 31.7 million in the NUA from 2022 to 2024. Northern Africa showed a decline from 2019 to 2022 (from 94.6 million to 84.5 million), followed by an uptick in 2023 and 2024. Although Northern Africa had the lowest prevalence in the region in 2024 (41.3 percent), the NUA increased by 27.9 million from 2022 to 2024. Middle Africa also experienced a substantial increase (10 million) in the same period, while Southern Africa showed the smallest increase in the region (1.6 million).

In **Asia**, a healthy diet was out of reach for 1.35 billion people in 2024 after four consecutive years of improvement; following a peak in 2020, affordability improved, with 291.6 million fewer people unable to afford a healthy diet in 2024 than in 2019. Southern Asia recorded a decline for the fourth consecutive year, with 206.4 million fewer people unable to afford a healthy diet in 2024 compared to 2020, fully offsetting the increase that had occurred in the wake of the pandemic in 2020, a result mostly due to India. Following a significant improvement in 2021 (126 million fewer people), Eastern Asia's recovery continued up to 2024, with 47.6 million fewer people unable to afford a healthy diet compared to 2022. South-eastern Asia also experienced an improvement between 2022 and 2024 as the NUA fell by 16.7 million, followed by Central Asia with a drop of 1.5 million. Western Asia was the only subregion to see the NUA increase in this period – by 6.5 million.

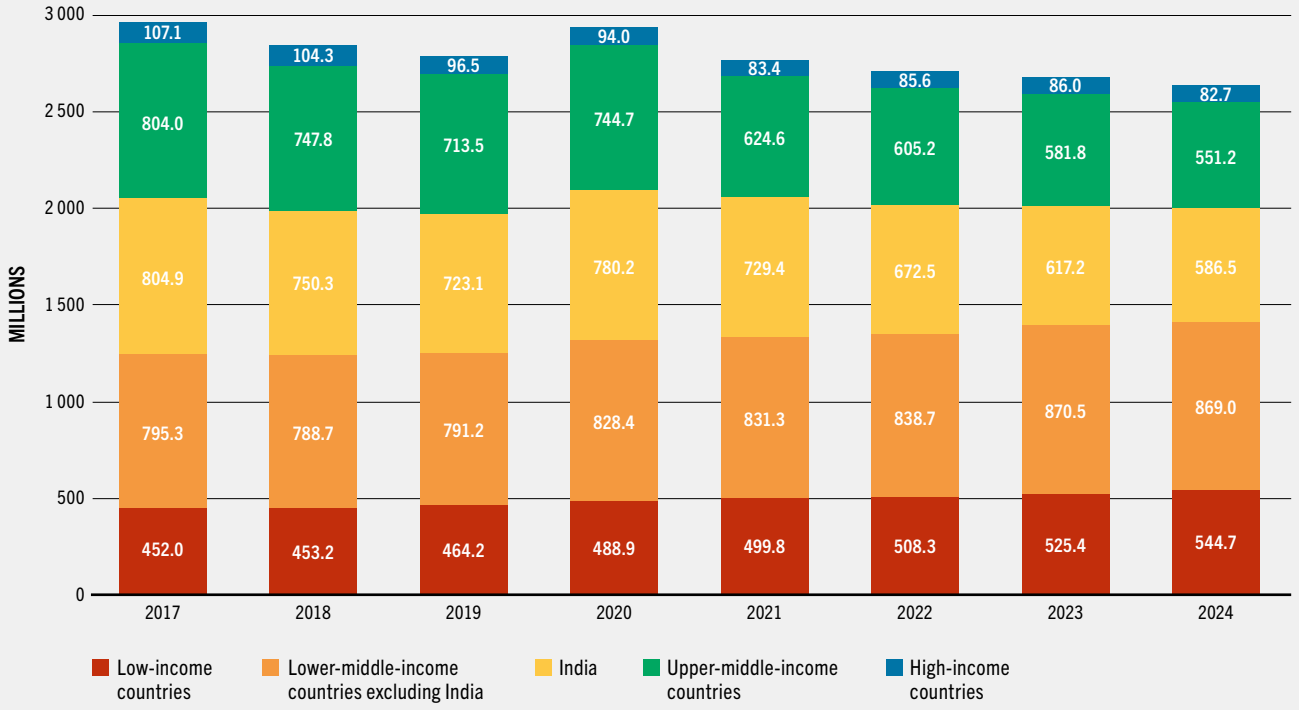
In **Latin America and the Caribbean**, the NUA rose by 7.9 million between 2020 and 2021, but this increase was more than offset by an improvement of 15.4 million from 2021 to 2022. In 2024, the total number reached 181.9 million »

TABLE 2.6 PROPORTION OF THE POPULATION AND NUMBER OF PEOPLE UNABLE TO AFFORD A HEALTHY DIET, 2019–2024

	Proportion of the population unable to afford a healthy diet						Number of people unable to afford a healthy diet					
	2019	2020	2021	2022	2023	2024	2019	2020	2021	2022	2023	2024
	(%)						(millions)					
WORLD	**35.4**	**36.9**	**34.5**	**33.5**	**32.8**	**31.9**	**2 762.1**	**2 911.4**	**2 746.7**	**2 683.7**	**2 653.4**	**2 604.6**
AFRICA	**64.1**	**65.2**	**64.7**	**64.8**	**66.2**	**66.6**	**864.0**	**900.1**	**915.1**	**937.7**	**979.6**	**1 008.9**
Northern Africa	37.6	36.6	32.6	31.9	39.4	41.3	94.6	93.7	84.9	84.5	105.9	112.4
Sub-Saharan Africa	70.2	71.7	72.0	72.2	72.1	72.1	769.3	806.4	830.2	853.2	873.7	896.5
Eastern Africa	72.4	73.4	73.8	73.9	73.2	73.0	318.0	331.4	341.9	351.1	357.1	365.5
Middle Africa	76.6	78.2	78.2	78.2	78.1	78.0	139.6	146.9	151.6	156.1	161.0	166.1
Southern Africa	60.7	62.4	61.6	61.4	62.0	62.0	41.2	43.1	43.2	43.7	44.8	45.3
Western Africa	66.5	68.5	68.9	69.3	69.7	70.0	270.5	285.0	293.4	302.3	310.8	319.6
ASIA	**35.3**	**37.3**	**33.2**	**31.5**	**29.8**	**28.1**	**1 640.2**	**1 747.0**	**1 568.4**	**1 495.8**	**1 423.5**	**1 348.6**
Central Asia	17.6	19.0	16.9	16.4	15.6	14.0	13.2	14.5	13.2	13.0	12.6	11.5
Eastern Asia	20.9	22.2	14.6	14.4	13.0	11.6	348.4	369.4	243.4	239.8	215.7	192.2
South-eastern Asia	35.0	36.6	36.9	35.7	34.5	32.7	234.3	246.8	250.8	244.3	238.2	227.6
Southern Asia	51.1	53.8	50.4	47.0	44.2	41.7	1 002.9	1 067.9	1 009.1	949.6	903.6	861.5
Western Asia	14.6	16.8	17.7	16.5	17.5	18.0	41.5	48.4	51.8	49.2	53.3	55.7
LATIN AMERICA AND THE CARIBBEAN	**28.1**	**29.3**	**30.3**	**27.8**	**27.7**	**27.4**	**180.3**	**189.4**	**197.3**	**181.9**	**182.4**	**181.9**
Caribbean	46.1	49.5	50.1	50.0	50.1	50.7	20.1	21.6	22.0	22.0	22.2	22.5
Latin America	26.8	27.8	28.9	26.2	26.1	25.7	160.2	167.7	175.3	159.9	160.2	159.4
Central America	28.7	32.9	28.5	26.5	26.2	25.9	50.2	58.2	50.8	47.6	47.5	47.5
South America	26.0	25.7	29.1	26.1	26.0	25.7	109.9	109.5	124.5	112.2	112.7	111.9
OCEANIA	**17.8**	**21.2**	**22.4**	**20.1**	**19.7**	**19.6**	**7.8**	**9.3**	**10.0**	**9.1**	**9.0**	**9.0**
NORTHERN AMERICA AND EUROPE	**6.2**	**5.8**	**5.0**	**5.3**	**5.2**	**5.0**	**69.9**	**65.6**	**56.0**	**59.3**	**58.9**	**56.2**
Europe	7.3	7.1	6.2	5.6	5.6	5.3	54.5	53.3	46.3	42.0	41.4	39.4
Eastern Europe	9.9	9.7	8.1	7.4	7.3	6.8	29.0	28.4	23.5	21.4	20.8	19.4
Northern Europe	3.6	2.9	3.0	2.6	2.9	2.6	3.8	3.1	3.2	2.8	3.1	2.9
Southern Europe	11.0	11.4	9.8	8.8	8.7	8.5	16.9	17.4	14.9	13.4	13.2	12.8
Western Europe	2.4	2.3	2.3	2.2	2.2	2.2	4.8	4.4	4.6	4.3	4.3	4.3
Northern America	4.1	3.2	2.5	4.5	4.6	4.3	15.4	12.3	9.7	17.3	17.5	16.7
COUNTRY INCOME GROUP												
Low-income countries	70.3	71.9	71.6	70.9	71.3	72.0	464.2	488.9	499.8	508.3	525.4	544.7
Lower-middle-income countries	51.7	54.2	51.9	49.6	48.2	46.6	1 514.4	1 609.1	1 560.6	1 510.1	1 485.5	1 452.9
Upper-middle-income countries	25.5	26.5	22.2	21.4	20.6	19.4	713.5	744.7	624.6	605.2	581.8	551.2
High-income countries	6.9	6.7	6.0	6.1	6.1	5.8	96.5	94.0	83.4	85.6	86.0	82.7

SOURCE: FAO. 2025. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 28 July 2025]. www.fao.org/faostat/en/#data/CAHD.
Licence: CC-BY-4.0.

FIGURE 2.8 EXCLUDING INDIA, THERE IS AN INCREASING TREND IN LOWER-MIDDLE-INCOME COUNTRIES IN THE NUMBER OF PEOPLE UNABLE TO AFFORD A HEALTHY DIET



SOURCE: FAO. 2025. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 28 July 2025]. www.fao.org/faostat/en/#data/CAHD. Licence: CC-BY-4.0.

https://doi.org/10.4060/cd6008en-fig2.8

» – 1.6 million more people than in 2019 because of the growth in total population – while the PUA dropped slightly, indicating some progress. In South America, there are signs of a slight decrease in the NUA from 2022 to 2024, while the Caribbean saw a marginal increase.

In **Northern America and Europe**, the NUA fell from 69.9 million in 2019 to 56.2 million in 2024 – corresponding to 13.7 million fewer people unable to afford a healthy diet. A slight decrease was noted in Northern America, where the PUA decreased from 4.5 percent in 2022 to 4.3 percent in 2024. Europe experienced a similar decrease, from 5.6 percent in 2022 to 5.3 percent in 2024, with 2.6 million fewer people unable to afford a healthy diet. This change was mainly driven by improvements in Eastern Europe.

Oceania saw an increase from 7.8 million in 2019 to 10 million people in 2021, and then a reduction to 9 million by 2023 and no change in 2024.

The unequal recovery is even more evident across country income groups (Table 2.6 and Figure 2.8). The recovery path is slower for low-income countries, where the NUA has been steadily increasing since 2017 (the first year for which FAO publishes estimates). In 2024, a healthy diet was out of reach for 544.7 million people in LICs, equivalent to 72 percent of the population. The halt in economic growth in recent years, coupled with the sharp rise in food prices, has clearly eroded substantially people's ability to afford nutritious foods especially in LICs, a topic explored in depth in **Chapter 3** of the report.

In upper-middle- and high-income countries, on the other hand, the PUA and the NUA have been declining since 2020. In lower-middle-income countries, the NUA decreased between 2020 and 2024, but this improvement is mainly explained by the significant decrease in unaffordability in India. Excluding India from the group shows that, in LMICs, the NUA actually increased from 791 million in 2019 to 869 million in 2024 (Figure 2.8).

Economic access to food is a key dimension of food security. People who are unable to afford even a least-cost healthy diet are likely experiencing some level of food insecurity, which can compromise the quality of their diet. Inadequate diets, in turn, play a critical role in shaping nutritional outcomes – an issue that is explored in the next section. ■

2.3 THE STATE OF NUTRITION: PROGRESS TOWARDS GLOBAL NUTRITION TARGETS

KEY MESSAGES

➔ The world made progress to reduce child stunting since the baseline year of 2012. The prevalence fell from 26.4 percent in 2012 to 23.2 percent in 2024, with Asia contributing the most to the improvement. However, the world is still not on track to achieve the 2030 target of 14 percent, and faster progress is needed.

➔ More than half of countries with progress data were on track to achieve the 2030 target for child wasting, but at the global level there was no meaningful change in prevalence, and accelerated progress is needed to achieve the 2030 global target of 3 percent.

➔ Child overweight remained largely unchanged, with a prevalence of 5.5 percent in 2024 and 5.3 percent in 2012. Actions aimed at preventing overweight in children must be stepped up to achieve the 2030 target of 3 percent.

➔ The percentage of infants under six months of age receiving the important benefits of exclusive breastfeeding increased significantly from 37.0 percent in 2012 to 47.8 percent in 2023. Continued and faster progress will help to achieve the 2030 target. Actions to promote exclusive breastfeeding can contribute to improving nutritional status throughout life.

➔ The latest available global estimates for low birthweight point to a prevalence of 14.7 percent in 2020, revealing little change since 2012 and confirming the need to reinforce efforts to achieve the 2030 global target of 10.5 percent.

➔ The prevalence of adult obesity increased from 12.1 percent in 2012 to 15.8 percent in 2022. Nearly all countries are off track to achieve the 2030 target, and urgent efforts are needed to turn this trend around.

➔ New updates of the prevalence of anaemia in women aged 15 to 49 years reveal either no improvement or an increase in prevalence in nearly all regions between 2012 and 2023, and an increase in the global prevalence from 27.6 to 30.7 percent. Concerted actions on various fronts are needed to address this critical health issue affecting women as well as their newborn children.

➔ In 2025, a new global nutrition indicator was endorsed to monitor SDG Target 2.2: minimum dietary diversity. Globally, about one-third of children aged 6 to 23 months and two-thirds of women aged 15 to 49 years achieved minimum dietary diversity, according to the latest estimates. Actions are needed to enable consumption of diverse diets for women and children.

There is expert consensus that reducing child malnutrition is one of the smartest development targets a country can focus on, because the investment is highly cost effective, returning on average USD 23 for every USD 1 spent.[12] In some countries, the return on investment could be as high as 160-fold.[13] Child malnutrition has long-lasting impacts on an individual, including reduced earnings and increased risk of chronic disease as an adult. Height at two years of age has been described as one of the best predictors of human capital,[14] and ending malnutrition is foundational to the achievement of nearly all the Sustainable Development Goals. The negative impact of malnutrition means that nutrition

BOX 2.3 NEW TARGETS FOR GLOBAL NUTRITION INDICATORS

The 2030 targets used in this edition of the report as well as previous editions since 2018 were originally proposed in a 2018 WHO–UNICEF discussion paper.[19] New official 2030 targets were recently endorsed at the Seventy-eighth World Health Assembly (WHA)[21] (Table A). Progress tracking based on the new targets will be reflected in the 2026 edition of this report.

TABLE A NEW GLOBAL NUTRITION TARGETS (FROM A 2012 BASELINE)

Indicator	2030 targets used since 2018	New 2030 targets endorsed by the WHA
Stunting in children under five years of age	50% reduction in number	40% reduction in number*
Wasting in children under five years of age	Less than 3%	Less than 5%*
Overweight in children under five years of age	Less than 3%	Less than 5%**
Low birthweight	30% reduction	30% reduction
Exclusive breastfeeding of infants under six months of age	At least 70%	At least 60%***
Anaemia in women aged 15 to 49 years	50% reduction	50% reduction*

NOTE: * Same as 2025 targets; ** 2025 target = no increase; *** 2025 target = at least 50 percent.
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

must be a cornerstone of national progress and an investment priority for the global health and development agenda.

In 2008 and 2013, the global research community documented the interventions that work for nutrition, and highlighted the importance of intervening on nutrition early (during pregnancy and the first two years of a child's life) in *The Lancet* series on maternal and child undernutrition.[15, 16] In 2022, in a special issue of the *American Journal of Public Health*, researchers reiterated the importance of early nutrition interventions to achieve optimal individual and national development.[17] The United Nations demonstrated its commitment to prioritizing nutrition with the proclamation of the United Nations Decade of Action on Nutrition 2016–2025. This year, in order to sustain momentum and align with the 2030 Agenda for Sustainable Development, the United Nations extended the period for prioritized action for nutrition to 2030.[18]

This section presents prevalence estimates and trends at global and regional levels for seven nutrition indicators with 2030 global targets: low birthweight, exclusive breastfeeding, child stunting, child wasting, child overweight, anaemia in women aged 15 to 49 years, and adult obesity. The World Health Assembly (WHA) endorsed six nutrition targets in 2012; these were initially 2025 targets but were subsequently proposed to be extended to 2030.[19] Very recently, revised targets were endorsed by the WHA (Box 2.3). The WHA adopted adult (18+ years) obesity as part of the Global Action Plan for the Prevention and Control of Non-Communicable Diseases in 2013.[20] All the targets are for indicators of nutritional status, with the exception of one – exclusive breastfeeding of infants under six months of age – which is a behavioural outcome. Four out of the seven indicators were also selected to monitor progress towards SDG Target 2.2, namely stunting, wasting and overweight in children under five years of age, and anaemia in women aged 15 to 49 years.

The section also provides a summary of country progress for the global nutrition targets and includes a spotlight on minimum dietary diversity (MDD), recently endorsed as a new addition to the indicators for global monitoring of SDG Target 2.2. The spotlight provides an overview of the MDD indicator and the most recent global and regional estimates.

2.3.1 Global and regional trends

Global trends from the baseline to the most recent estimate for seven nutrition indicators with global targets are shown in Figure 2.9. Among the indicators of child nutritional status, only stunting has undergone a significant change from the baseline year, improving from 26.4 percent in 2012 to 23.2 percent in 2024. The other indicators of child nutritional status – low birthweight, wasting and overweight – showed no meaningful changes from the baseline at the global level. All indicators of child nutritional status, including stunting, need accelerated progress to achieve the 2030 targets.

For child overweight, the latest estimate shows no significant change compared to the baseline (5.3 percent in 2012 to 5.5 percent in 2024). While this is sufficient to achieve the 2025 target of no increase, the 2030 target for child overweight calls for a reduction to below 3 percent; thus, improvement is needed over the next five years to achieve the 2030 target.

The percentage of children benefiting from exclusive breastfeeding increased substantially: from 37.0 percent in 2012 to 47.8 percent in 2023. The 2025 target is to increase the percentage of exclusively breastfed children to over 50 percent. While the 2025 target of 50 percent could be reached by the end of this year, and progress should be celebrated, it is also important to note that the 2030 target of 70 percent calls for even more accelerated improvement.

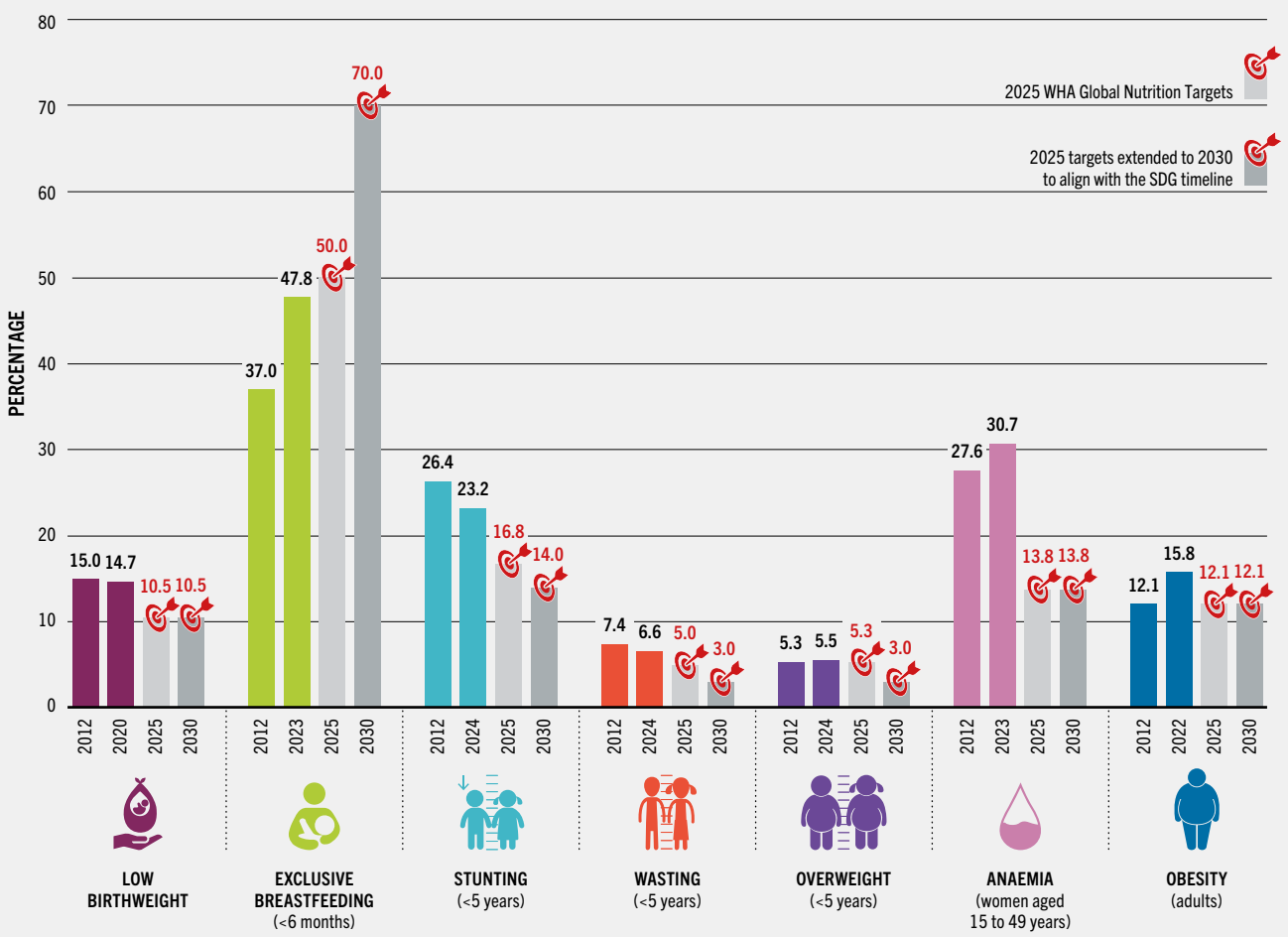
There was deterioration in both nutrition indicators for older age groups – adult obesity and anaemia in women aged 15 to 49 years. For adult obesity, the prevalence rose from 12.1 percent in 2012 to 15.8 percent in 2022. For anaemia, new updated data reflect no improvement or an increase in prevalence in nearly all regions from 2012 to 2023, and the global prevalence increased from 27.6 to 30.7 percent. As both indicators have worsened, the global nutrition targets are unlikely to be achieved by 2030 without substantial policy and programmatic changes to kickstart progress. Some of the unique challenges to addressing anaemia in women aged 15 to 49 years are presented in Box 2.4.

Table 2.7 shows the global and regional trends in prevalence for the selected indicators. While there was no significant change in child wasting prevalence at global level (7.4 percent in 2012 and 6.6 percent in 2024), there were improvements in some subregions. From 2012 to 2024, the largest decreases for child wasting prevalence occurred in Western Africa (from 8.2 to 6.5 percent) and Central Asia (from 3.8 to 2.1 percent). Encouragingly, no regions experienced worsening in child wasting prevalence.

Table 2.8 presents the global and regional trends in numbers for the seven global nutrition targets. The numbers are calculated from prevalence and should not be mistaken for annual burden, particularly for indicators that are likely to have repeated incident cases over the course of a year. For example, a child can have multiple episodes of wasting within a year, and the annual burden for this indicator should consider incidence. Another important consideration for interpretation of numbers over time is that they are affected by both prevalence and birth rate. From 2012 to 2024, the number of children under five years of age in the world decreased from 683.5 to 647.3 million, a 5.3 percent drop. While there was a global reduction in the number of children, the birth rate varied by region, and there was a notable increase in the under-five child population in Africa over the same period (from 181.4 to 214.1 million, up by 18.1 percent).

The child stunting target is the only global nutrition target that refers to the *number* of children rather than the prevalence. The 2025 and 2030 targets are to reduce the number of stunted children by 40 percent and 50 percent from the baseline, respectively. Globally, the number of stunted children decreased from 180.4 to 150.2 million from 2012 to 2024, a 16.8 percent drop. The subregions with the largest decreases in »

FIGURE 2.9 ACCELERATED PROGRESS IS NEEDED TO ACHIEVE THE 2030 GLOBAL NUTRITION TARGETS



NOTE: WHA = World Health Assembly; SDG = Sustainable Development Goal.

SOURCES: 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 4 April 2025]. 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 exclusive breastfeeding are based on UNICEF. 2024. Infant and young child feeding. In: *UNICEF*. [Cited 30 April 2025]. 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 28 April 2025]. https://data.unicef.org/topic/nutrition/low-birthweight; www.who.int/teams/nutrition-and-food-safety/monitoring-nutritional-status-and-food-safety-and-events/joint-low-birthweight-estimates; data for anaemia are based on WHO. 2025. *WHO Global Anaemia estimates, 2025 edition*. [Cited 8 May 2025]. https://www.who.int/data/gho/data/themes/topics/anaemia_in_women_and_children; data for adult obesity are based on WHO. 2024. Global Health Observatory: Prevalence of obesity among adults, BMI >= 30 (age-standardized estimate) (%). Estimates by country. [Accessed on 24 July 2024]. 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. The targets are drawn from: UNICEF & WHO. 2017. *Methodology for monitoring progress towards the global nutrition targets for 2025 – technical report*. New York, USA and Geneva, Switzerland. https://data.unicef.org/resources/methodology-for-monitoring-progress-towards-the-global-nutrition-targets-for-2025; and UNICEF & WHO. 2018. *The Extension of the 2025 Maternal, Infant and Young Child Nutrition Targets to 2030 – WHO/UNICEF discussion paper*. New York, USA and Geneva, Switzerland. https://data.unicef.org/resources/extension-of-2025-maternal-infant-young-child-nutrition-targets-2030

https://doi.org/10.4060/cd6008en-fig2.9

BOX 2.4 PROGRESS ON ANAEMIA IN WOMEN AGED 15 TO 49 YEARS IN CONTEXT

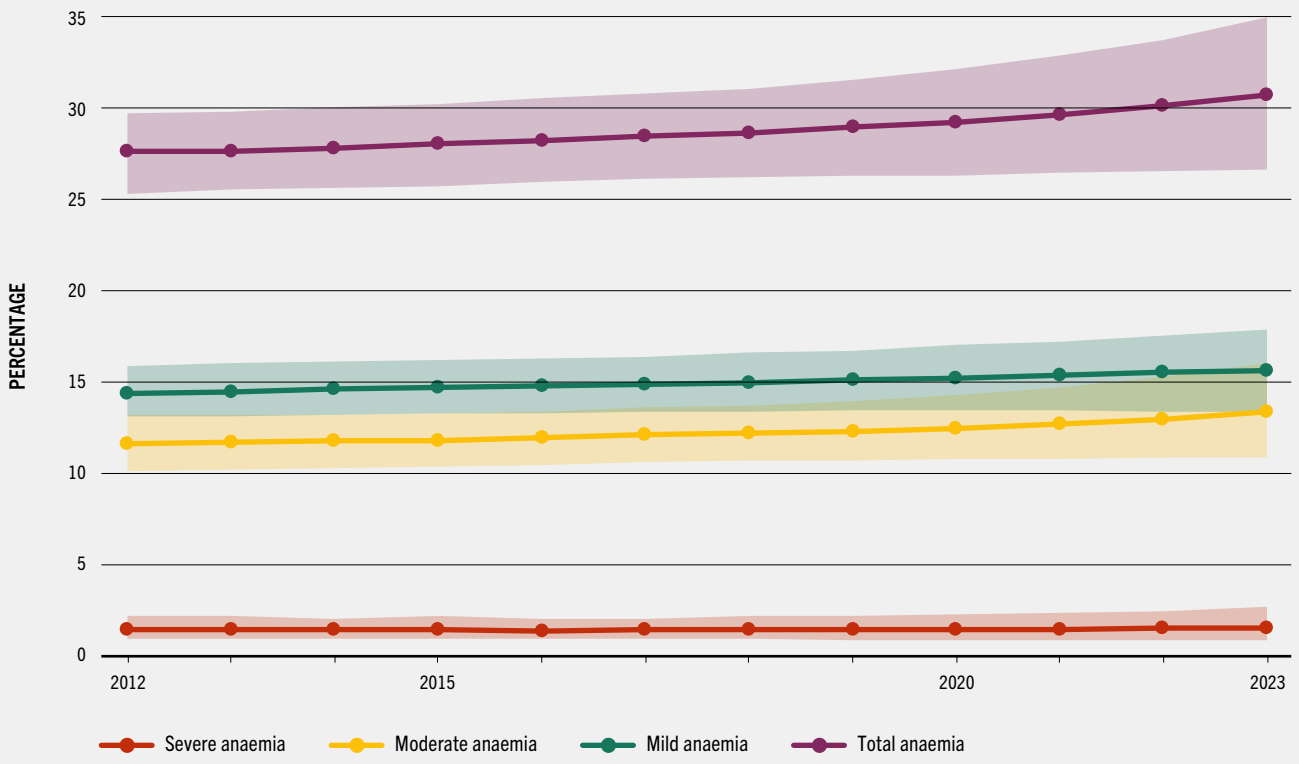
Anaemia, or low blood haemoglobin concentration,* is a critical health issue, as it can impair physical and cognitive function. Severe anaemia puts pregnant women at increased risk of post-partum haemorrhage and can result in low birthweight. Infants born to anaemic mothers are also at a higher risk of anaemia, which can hinder their cognitive development.[26, 27] Reducing anaemia in women of reproductive age is, therefore, a critical goal for their own health and for that of the next generation.

The new estimates presented in this report provide a very clear message: there has been no global progress towards reducing the prevalence of anaemia among women aged 15 to 49 years from 2012 to 2023. The data also suggests a recent rise in prevalence. This should serve as a strong call to action.

One potential explanation for the observed increase in anaemia comes from the biological point of view. Anaemia has multiple causes including inadequate nutrient intake, infection, inflammation and excessive blood loss.[28] There is growing evidence that inflammation associated with obesity and related non-communicable diseases may increase the risk of iron deficiency anaemia.[29–31] Therefore, given the sharp rise in obesity globally, it is essential to better understand how inflammation associated with obesity may be contributing to the observed increase in anaemia among women aged 15 to 49 years worldwide.

However, it is also important to interpret the reported increase in anaemia with caution, as there are some measurement issues to take into account. About half of surveys used for global reporting on

FIGURE A GLOBAL ANAEMIA PREVALENCE IN WOMEN AGED 15 TO 49 YEARS BY SEVERITY, 2012–2023



SOURCES: Data for total anaemia are based on WHO. 2025. *WHO Global Anaemia estimates, 2025 edition*. [Cited 8 May 2025]. https://www.who.int/data/gho/data/themes/topics/anaemia_in_women_and_children; data for severe, mild and moderate anaemia are not published.

https://doi.org/10.4060/cd6008en-figB2.4A

BOX 2.4 (Continued)

anaemia used capillary blood samples obtained through the field-friendly method of finger punction. There is evidence that this approach may overestimate anaemia prevalence compared to estimates from venous blood – the gold standard.[32, 33] Differences in the magnitude of such errors across surveys may distort actual trends in anaemia prevalence. Nonetheless, it is worth noting that mild anaemia – or haemoglobin concentrations close to the cut-off point for defining anaemia – is the most prone to such measurement error.[32] A closer examination of the available data reveals that, while mild anaemia is steadily increasing, the biggest increase is observed in moderate anaemia which is less prone to this error (Figure A).

It is also important to highlight that more national surveys are needed to improve the accuracy of the global anaemia estimates and the trends among women aged 15 to 49 years. Global estimates drew on 85 surveys from 2015 to 2019 but on only 41 between 2020 to 2023, which may reduce precision and increase uncertainty around the 2023 anaemia estimates compared to the 2012 baseline estimates (Figure A).

Notwithstanding the methodological issues and the insufficient data, the lack of progress and the suggested increase in anaemia are not surprising. Few countries have successfully scaled actions known to effectively prevent nutritional anaemia (e.g. micronutrient supplementation during pregnancy and lactation, food fortification, and enhancing access and consumption of healthy diets). It is necessary to generate and use better context-specific evidence on anaemia in women aged 15 to 49 years in order to design effective programmes to address the multiple and interlinked causes of anaemia, including the anaemia of inflammation. To make progress on this important Sustainable Development Goal indicator, actions should be adequately resourced, coordinated and monitored for sustained impacts.

NOTES: * Anaemia exists when haemoglobin concentration in blood is below established cut-off points, specific to age, sex and pregnancy/lactation. Many factors affect haemoglobin concentration such as altitude of residence above sea level and smoking.[34]

» the number of stunted children from 2012 to 2024 were: Southern Asia (–20.6 million), South-eastern Asia (–6.1 million) and Eastern Asia (–4.6 million).

The large decrease in the number of stunted children in Asia came from a combination of decreases in stunting prevalence and child population. This dynamic is shown in Eastern Asia, where there was a 36.8 percent reduction in prevalence from 2012 to 2024 (from 7.6 to 4.8 percent) and a larger (61.1 percent) reduction in the number of stunted children (from 7.5 to 2.9 million), surpassing both the 2025 and 2030 targets. While some regions are on track to achieve the child stunting targets, other regions – particularly those where the child population continues to increase – require large reductions in stunting prevalence to achieve the 2030 targets. In Africa, the need for accelerated prevalence reduction is illustrated by an increase in the number of stunted children from 2012 to 2024 (+3.1 million), despite a drop in stunting prevalence over the same period (from 34.0 to 30.3 percent).

2.3.2 Country progress

Figure 2.10 presents the number of countries that are on or off track for the 2030 global nutrition targets. The figure also includes the category "assessment not possible", which indicates the number of countries without sufficient estimates to track progress. Sufficient estimates on child wasting and exclusive breastfeeding are not available for many countries. For child wasting, 32 percent of countries (63 out of 195) did not have sufficient data, and for exclusive breastfeeding it was 43 percent (83 out of 195). The high percentage of missing countries must be considered when interpreting progress, especially for these two indicators.

Among the 132 countries with data to assess progress on child wasting, more than half »

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

	Prevalence of low birthweight		Prevalence of exclusive breastfeeding among infants (0–5 months)		Prevalence of stunting in children (<5 years)		Prevalence of wasting in children (<5 years)		Prevalence of overweight in children (<5 years)		Prevalence of anaemia in women (15–49 years)		Prevalence of obesity in the adult population (≥18 years)	
	2012	2020	2012	2023	2012	2024	2012	2024	2012	2024	2012	2023	2012	2022
	(%)		(%)		(%)		(%)		(%)		(%)		(%)	
WORLD	**15.0**	**14.7**	**37.0**	**47.8**	**26.4**	**23.2**	**7.4**	**6.6**	**5.3**	**5.5**	**27.6**	**30.7**	**12.1**	**15.8**
AFRICA	**14.5**	**13.9**	**35.2**	**45.2**	**34.0**	**30.3**	**6.7**	**5.4**	**4.9**	**4.5**	**34.9**	**35.9**	**12.8**	**16.2**
Northern Africa	14.0	14.1	40.9	35.7	23.1	18.1	5.4	5.2	11.3	8.5	29.5	32.0	25.9	31.7
Sub-Saharan Africa	14.5	13.9	34.2	46.3	36.0	32.2	6.9	5.5	3.7	3.9	36.3	36.8	8.5	11.4
Eastern Africa	14.7	14.0	48.5	59.2	38.7	31.2	6.1	4.8	3.9	3.9	27.3	31.4	4.9	8.1
Middle Africa	12.8	12.2	28.4	43.9	37.8	40.1	7.0	5.5	4.7	5.2	44.1	41.7	6.6	9.3
Southern Africa	16.4	16.4	n.a.	n.a.	23.2	24.1	3.8	3.0	12.3	12.1	26.0	31.0	27.3	29.7
Western Africa	14.9	14.3	21.9	35.1	33.8	29.7	8.2	6.5	2.1	2.2	45.2	41.9	8.1	11.6
ASIA	**17.2**	**17.2**	**39.1**	**51.3**	**28.4**	**23.3**	**9.7**	**9.1**	**4.7**	**5.0**	**30.6**	**33.6**	**6.5**	**10.4**
Central Asia	6.3	6.0	29.1	33.3	14.8	7.4	3.8	2.1	7.7	6.4	32.3	32.0	18.8	25.1
Eastern Asia	5.5	5.5	28.5	36.5	7.6	4.8	2.1	1.4	6.5	10.1	15.9	16.0	4.5	8.1
South-eastern Asia	12.8	12.5	33.5	46.4	30.4	22.7	8.1	7.0	5.9	4.3	26.0	24.2	6.0	10.0
Southern Asia	26.1	24.4	47.2	59.1	40.2	31.4	15.1	13.6	2.6	3.2	45.9	49.3	5.6	9.7
Western Asia	12.2	12.2	31.8	30.8	20.0	18.0	4.2	3.5	9.1	6.2	28.0	28.7	29.3	33.6
LATIN AMERICA AND THE CARIBBEAN	**9.5**	**9.6**	**34.0**	**43.4**	**12.8**	**12.4**	**1.6**	**1.3**	**7.3**	**8.8**	**17.7**	**19.9**	**22.4**	**29.9**
Caribbean	11.4	11.7	29.4	31.3	12.9	12.2	3.1	2.9	6.4	6.7	24.6	29.1	19.5	24.5
Central America	10.9	10.9	21.6	38.6	18.1	17.2	1.4	0.9	6.5	7.0	10.6	13.8	27.9	34.4
South America	8.6	8.8	42.1	49.8	10.1	9.9	1.5	1.3	7.8	9.9	20.0	21.8	20.7	28.6
OCEANIA	**11.3**	**11.8**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**12.6**	**16.8**	**25.4**	**29.5**
Australia and New Zealand	6.4	6.4	n.a.	n.a.	3.5	3.1	0.3	0.5	12.4	23.4	7.4	11.3	26.3	30.8
Oceania excluding Australia and New Zealand	17.4	17.9	56.6	58.9	40.6	41.5	7.4	8.4	10.3	16.0	25.4	28.8	21.6	24.8
Melanesia	17.6	18.0	56.8	59.2	43.0	43.6	n.a.	n.a.	10.6	16.6	25.8	29.1	18.3	21.9
Micronesia	12.4	12.3	55.7	59.6	16.3	13.6	n.a.	n.a.	4.5	5.1	21.6	24.5	43.2	47.1
Polynesia	16.3	16.8	51.1	47.9	7.1	7.0	n.a.	n.a.	8.2	8.9	18.7	21.6	52.1	57.5
NORTHERN AMERICA AND EUROPE	**7.4**	**7.4**	**n.a.**	**n.a.**	**3.9**	**3.8**	**n.a.**	**n.a.**	**8.4**	**8.6**	**13.2**	**17.3**	**24.8**	**27.9**
Northern America	8.0	8.1	25.5	25.8	2.6	4.1	0.3	0.2	8.5	9.8	10.3	14.9	35.7	40.3
Europe	7.1	7.0	n.a.	n.a.	4.7	3.6	n.a.	n.a.	8.4	7.9	14.5	18.6	19.7	21.4
Eastern Europe	7.1	7.0	n.a.	n.a.	6.8	4.6	n.a.	n.a.	10.7	9.1	19.0	23.5	22.1	25.5
Northern Europe	6.3	6.0	n.a.	n.a.	2.7	3.0	n.a.	n.a.	7.4	7.8	11.6	14.8	22.3	24.2
Southern Europe	8.0	8.2	n.a.	n.a.	4.2	3.6	n.a.	n.a.	8.6	9.0	13.3	17.2	18.2	18.9
Western Europe	7.0	6.8	n.a.	n.a.	2.6	2.5	n.a.	n.a.	5.1	5.6	9.5	14.2	16.3	15.8

NOTE: n.a. = estimates not available.

SOURCES: See sources listed under Figure 2.9.

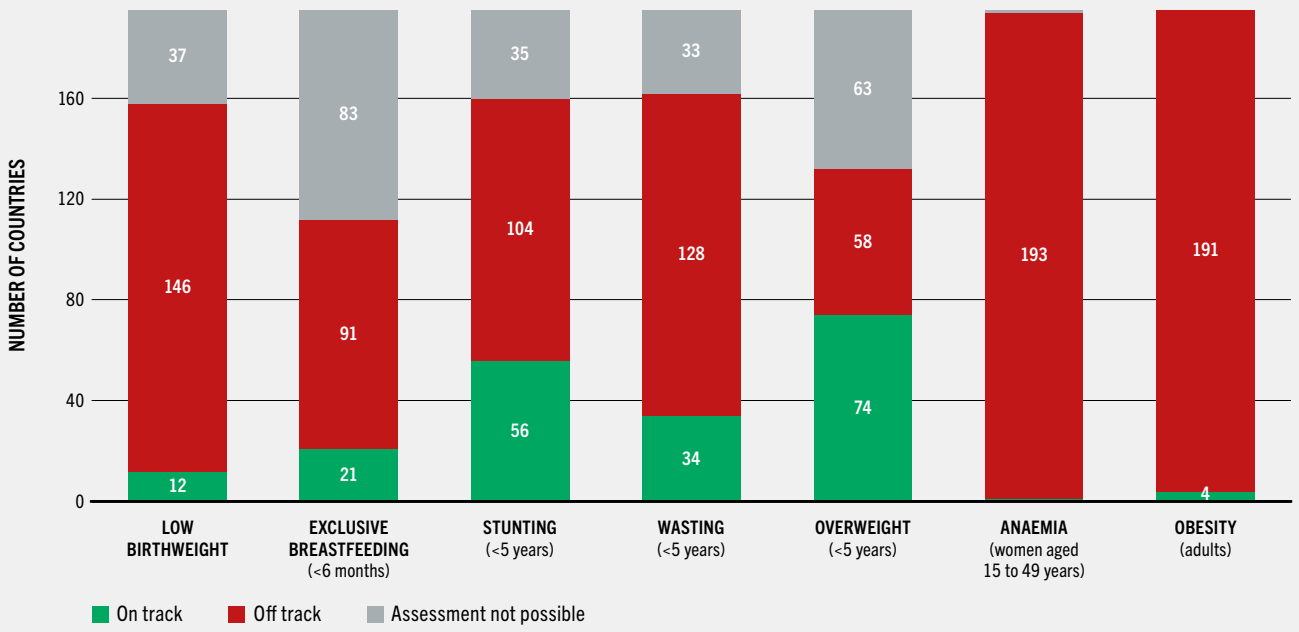
TABLE 2.8 GLOBAL AND REGIONAL TRENDS IN NUMBERS FOR SEVEN NUTRITION INDICATORS WITH GLOBAL TARGETS

	Number of babies with low birthweight		Number of infants (0–5 months) exclusively breastfed		Number of children (<5 years) who are stunted		Number of children (<5 years) affected by wasting		Number of children (<5 years) who are overweight		Number of women (15–49 years) affected by anaemia		Number of adults (≥18 years) who are obese	
	2012	2020	2012	2023	2012	2024	2012	2024	2012	2024	2012	2023	2012	2022
	(millions)		(millions)		(millions)		(millions)		(millions)		(millions)		(millions)	
WORLD	**21.6**	**19.8**	**26.1**	**30.9**	**180.4**	**150.2**	**50.9**	**42.8**	**36.3**	**35.5**	**505.7**	**604.8**	**591.4**	**880.7**
AFRICA	**5.8**	**6.2**	**6.8**	**10.0**	**61.7**	**64.8**	**12.2**	**11.7**	**8.8**	**9.7**	**94.4**	**129.9**	**74.1**	**123.9**
Northern Africa	0.8	0.8	1.2	1.0	6.3	5.2	1.5	1.5	3.1	2.5	16.7	21.5	34.3	51.2
Sub-Saharan Africa	5.0	5.4	5.6	8.9	55.4	59.6	10.7	10.2	5.7	7.2	77.7	108.5	38.2	68.8
Eastern Africa	2.0	2.1	3.1	4.5	23.9	23.3	3.8	3.6	2.4	2.9	23.4	38.0	8.7	19.8
Middle Africa	0.8	0.9	0.8	1.7	10.0	14.7	1.9	2.0	1.2	1.9	14.5	19.6	4.6	8.8
Southern Africa	0.2	0.2	n.a.	n.a.	1.5	1.7	0.3	0.2	0.8	0.8	4.5	6.2	10.7	13.4
Western Africa	2.0	2.1	1.4	2.4	19.9	19.9	4.8	4.4	1.2	1.5	35.2	44.7	13.4	25.2
ASIA	**13.7**	**11.8**	**15.2**	**16.5**	**108.8**	**76.8**	**37.1**	**30.0**	**17.9**	**16.3**	**345.9**	**394.3**	**192.9**	**353.9**
Central Asia	0.1	0.1	0.2	0.3	1.1	0.7	0.3	0.2	0.6	0.6	5.9	6.4	8.0	12.4
Eastern Asia	1.2	0.8	2.9	1.9	7.5	2.9	2.1	0.9	6.5	6.1	66.8	57.9	55.1	106.4
South-eastern Asia	1.5	1.4	2.0	2.3	17.7	11.6	4.7	3.6	3.4	2.2	43.6	43.4	25.0	48.0
Southern Asia	10.2	8.8	9.1	10.7	77.0	56.4	28.8	24.4	5.0	5.7	212.2	264.9	63.4	130.8
Western Asia	0.7	0.7	0.9	0.9	5.4	5.1	1.2	1.0	2.5	1.8	17.4	21.7	46.5	65.3
LATIN AMERICA AND THE CARIBBEAN	**1.0**	**0.9**	**1.8**	**2.0**	**6.8**	**5.8**	**0.9**	**0.6**	**3.9**	**4.1**	**28.6**	**34.6**	**91.4**	**141.4**
Caribbean	0.1	0.1	0.1	0.1	0.5	0.4	0.1	0.1	0.2	0.2	2.6	3.1	5.5	7.6
Central America	0.4	0.3	0.4	0.6	3.0	2.6	0.2	0.1	1.1	1.1	4.6	6.8	28.5	42.5
South America	0.6	0.5	1.4	1.4	3.3	2.8	0.5	0.4	2.6	2.8	21.3	24.7	57.4	91.2
OCEANIA	**0.1**	**0.1**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**1.2**	**1.8**	**6.9**	**9.6**
Australia and New Zealand	<0.1	<0.1	n.a.	n.a.	0.1	0.1	0.0	0.0	0.2	0.4	0.5	0.8	5.5	7.6
Oceania excluding Australia and New Zealand	0.1	0.1	0.1	0.1	0.6	0.7	0.1	0.1	0.2	0.3	0.7	1.0	1.3	2.0
Melanesia	0.1	0.1	0.1	0.1	0.6	0.6	n.a.	n.a.	0.1	0.2	0.6	0.9	1.0	1.6
Micronesia	<0.1	<0.1	<0.1	<0.1	0.0	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.1	0.1
Polynesia	<0.1	<0.1	<0.1	<0.1	0.0	0.0	n.a.	n.a.	0.0	0.0	0.0	0.0	0.2	0.3
NORTHERN AMERICA AND EUROPE	**0.9**	**0.8**	**n.a.**	**n.a.**	**2.5**	**2.0**	**n.a.**	**n.a.**	**5.3**	**4.7**	**34.0**	**42.9**	**215.1**	**250.5**
Northern America	0.3	0.3	0.5	0.5	0.6	0.8	0.1	0.0	1.9	2.0	8.5	12.8	96.1	119.2
Europe	0.6	0.5	n.a.	n.a.	1.9	1.2	n.a.	n.a.	3.4	2.6	25.5	30.1	118.0	129.0
Eastern Europe	0.3	0.2	n.a.	n.a.	1.1	0.6	n.a.	n.a.	1.8	1.2	14.0	15.4	52.9	59.2
Northern Europe	0.1	0.1	n.a.	n.a.	0.2	0.2	n.a.	n.a.	0.5	0.4	2.7	3.5	17.7	20.4
Southern Europe	0.1	0.1	n.a.	n.a.	0.3	0.2	n.a.	n.a.	0.7	0.5	4.7	5.3	22.8	23.6
Western Europe	0.1	0.1	n.a.	n.a.	0.2	0.2	n.a.	n.a.	0.5	0.5	4.1	5.9	25.0	25.2

NOTE: n.a. = estimates not available.

SOURCES: See sources listed under Figure 2.9.

FIGURE 2.10 MOST COUNTRIES EITHER DO NOT HAVE SUFFICIENT DATA OR ARE OFF TRACK TO ACHIEVE THE 2030 GLOBAL NUTRITION TARGETS



SOURCES: See sources listed under Figure 2.9.

https://doi.org/10.4060/cd6008en-fig2.10

» (74 out of 132) are on track to achieve the 2030 target. More countries are on track for child wasting than for other indicators of child nutritional status. Low birthweight has the lowest percentage of on-track countries of all the child nutritional status indicators, at 8 percent (12 out of 158). For child stunting, 35 percent of countries (56 out of 160) are on track; the percentage is lower for child overweight, with only 21 percent of countries with progress data (34 out of 162) achieving on-track status. Even though there are also a substantial number of countries on track, many need to accelerate progress to achieve the 2030 targets for child-focused indicators.

As mentioned above, the world is close to achieving the 2025 target for exclusive breastfeeding, but accelerated progress is needed to achieve the 2030 target. Only 19 percent of countries with progress data (21 out of 112) are on track to achieve the 2030 exclusive breastfeeding target, further illustrating the need for increased improvement in this child feeding indicator.

For indicators related to older age groups, there are very few on-track countries. Only 1 out of 194 countries (<1 percent) with progress data is on track for anaemia in women aged 15 to 49 years, and only 4 out of 195 (2 percent) are on track for adult obesity.

2.3.3 Spotlight on minimum dietary diversity in children and women: the newest SDG 2 indicator

In March 2025, the United Nations Statistical Commission officially endorsed the prevalence of minimum dietary diversity (MDD) as a new indicator for monitoring progress towards SDG Target 2.2 – to end all

forms of malnutrition by 2030.[e] This decision addresses a major gap in the SDG indicator framework, which until now contained no indicator for tracking the quality of diets. It also marks the consensus attained by Member States on a valid indicator for global monitoring of diets in varied contexts.

With 2.6 billion people around the world unable to afford a healthy diet – and the significant contribution of poor diets to the global burden of malnutrition, diet-related non-communicable diseases and mortality – monitoring what people eat is not only timely but also critical to inform the design and implementation of policies and programmes that address gaps in food and nutrient intake. The heightened global focus on sustainable food systems that deliver healthy diets has also increased the demand for valid yet feasible indicators for tracking the diets of populations.

Healthy diets can look very different depending on where they are consumed in the world. However, as mentioned in **Section 2.2**, healthy diets share four universal characteristics: they are *diverse*, containing a variety of foods that provide nutrients and bioactive compounds important for health; they are *adequate* in essential nutrients; they are *balanced* in dietary energy and its sources (proteins, carbohydrates and fats); and they are *moderate* in dietary components that are detrimental to health if consumed in excess.[10, 11]

Minimum dietary diversity captures the diversity of diets of two nutritionally vulnerable populations – children aged 6 to 23 months (MDD-C) and women aged 15 to 49 years (MDD-W) – through a simple count of the number of food groups these individuals consumed the previous day. Eight food groups are used for computing MDD-C and ten groups are used for MDD-W.[f] Individuals who consumed foods or beverages from five or more food groups are classified as meeting minimum diet diversity, indicating a greater likelihood that the diet is sufficient in the essential vitamins and minerals that these populations need. Details regarding the methodologies can be found in the UNICEF and WHO infant and young child feeding guidelines[23] and in FAO's guide to using and interpreting MDD-W.[24]

Global and regional estimates for minimum dietary diversity

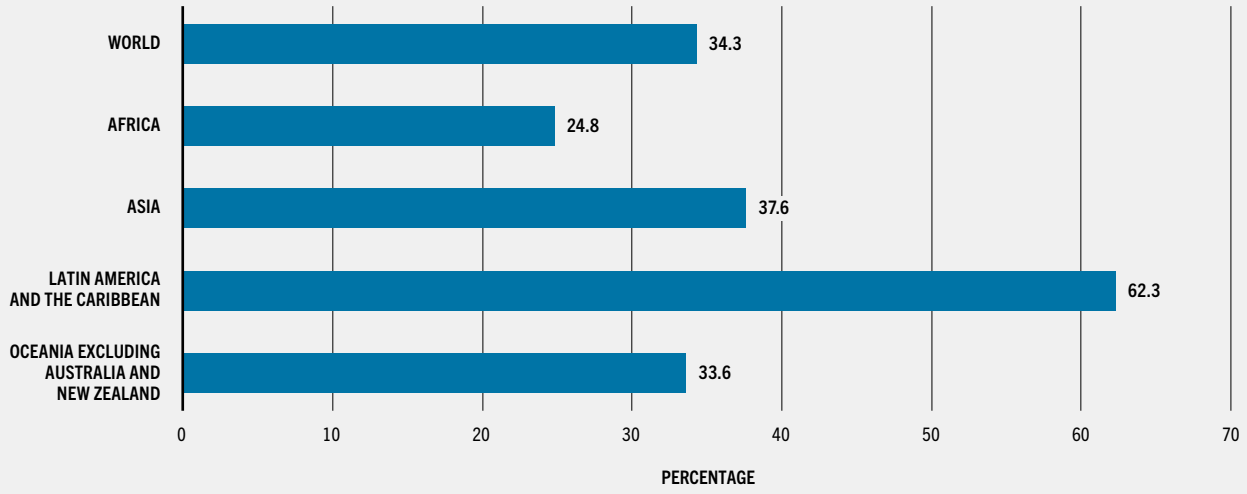
As of the first quarter of 2024, nationally representative survey data on MDD-C and MDD-W were available from 110 and 92 countries, respectively. Globally, only one-third (34 percent) of children aged 6 to 23 months achieved MDD-C, based on pooled data from 2016 to 2022 (Figure 2.11), and two-thirds (65 percent) of women aged 15 to 49 years achieved MDD-W, estimated using pooled data from 2020 to 2024 (Figure 2.12). In other words, one-third of women and – even more worryingly – about two-thirds of children aged 6 to 23 months in the world consumed diets that were not sufficiently diverse, thereby putting them at risk of inadequate intake of essential vitamins and minerals required for good nutrition and health.

Stark differences are apparent across regions, with the lowest percentage of women achieving MDD-W in Africa (48 percent) and the highest in Northern America and Europe (79 percent); Oceania is excluded from the analysis because data are available for only one country. Africa also has the lowest percentage of children aged 6 to 23 months achieving MDD-C (25 percent), followed by Oceania (34 percent), Asia (38 percent) and Latin America and the Caribbean (62 percent). Data on MDD-C are only available for five »

e The proposal to add MDD as a new indicator for SDG Target 2.2 was submitted to the Inter-Agency and Expert Group on Sustainable Development Goal Indicators in April 2024, for consideration in the 2025 Comprehensive Review process, a moment when SDG indicators are considered for addition, removal or modification.[22] This proposal was submitted by a group of United Nations Member States (Bangladesh, Brazil, Malawi and Switzerland) and supported by 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). With overwhelming public support, the proposal was accepted, and MDD was officially endorsed as an SDG 2 indicator in March 2025. UNICEF and FAO share joint custodianship of the indicator (responsible for MDD-C and MDD-W, respectively).

f The following eight food groups are used for computing MDD-C: breast milk; 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; and other fruits and vegetables. The following ten food groups are used for computing MDD-W: 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.

FIGURE 2.11 ONLY ONE-THIRD OF CHILDREN AGED 6 TO 23 MONTHS IN THE WORLD ARE ACHIEVING MINIMUM DIETARY DIVERSITY FOR CHILDREN (MDD-C)

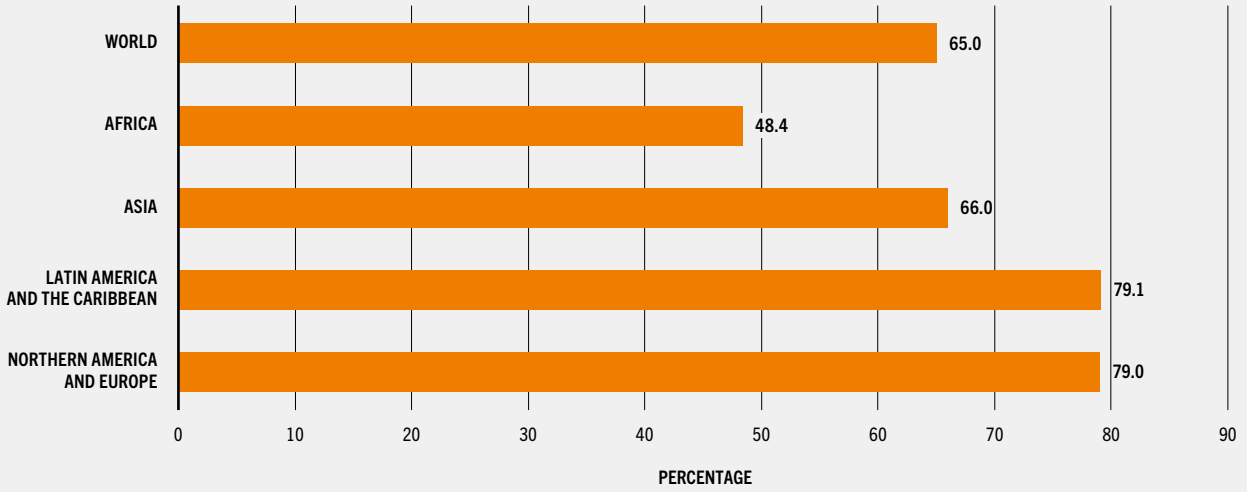


NOTES: Based on nationally representative surveys conducted between 2016 and 2022. Data were available for this period for 96 countries representing about 82 percent of the reference population worldwide, of which 37 are in Africa, 31 in Asia, 16 in Latin America and the Caribbean, 5 in Northern America and Europe, and 7 in Oceania excluding Australia and New Zealand. Prevalence estimates for the regions were weighted based on the 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 2022 revision of the *World Population Prospects*).

SOURCE: UNICEF. December 2023. Infant and young child feeding. In: *UNICEF*. [Cited 6 April 2025]. https://data.unicef.org/topic/nutrition/infant-and-young-child-feeding

https://doi.org/10.4060/cd6008en-fig2.11

FIGURE 2.12 TWO-THIRDS OF WOMEN AGED 15 TO 49 YEARS IN THE WORLD ARE ACHIEVING MINIMUM DIETARY DIVERSITY FOR WOMEN (MDD-W)



NOTES: Based on nationally representative surveys conducted between 2020 and 2024. Data were available for this period for 92 countries representing about 85 percent of the reference population worldwide, of which 39 are in Africa, 30 in Asia, 14 in Latin America and the Caribbean, 8 in Northern America and Europe, and 1 in Oceania. Information from Oceania was excluded from this analysis as data were available for only one country. Prevalence estimates for the regions were weighted based on the total population of each available country as of 1 July 2023 (based on the 2024 revision of the *World Population Prospects*).

SOURCE: FAO. 2025. FAOSTAT: SDG Indicators. [Accessed on 28 July 2025]. https://www.fao.org/faostat/en/#data/SDGB. Licence: CC-BY-4.0.

https://doi.org/10.4060/cd6008en-fig2.12

» countries in Northern America and Europe, and the estimate for Oceania does not include information for Australia and New Zealand due to lack of data. The lack of data leaves large gaps and hinders a full understanding of diets in different parts of the world.

The low percentage of women and children receiving a minimally diverse diet across the world is concerning, as lack of dietary diversity not only affects risk of micronutrient deficiencies but can also lead to other health and developmental consequences. It is also concerning that dietary diversity is not improving quickly for children; MDD-C improved only marginally – from 28 percent of children meeting MDD in 2015 to 34 percent in 2022.[25] Monitoring and ensuring healthy diets for women and children is a key global priority. However, to achieve minimum dietary diversity, governments and other national stakeholders need to ensure increased and sustained actions in policies and programmes for improving diets of women and children, and the integration of MDD indicators into data collection platforms such as population-based surveys. This calls for raising awareness and building capacity on MDD-C and MDD-W among different stakeholders, especially at national and subnational levels, and ensuring sufficient funding to facilitate countries' ability to collect, analyse, use and report progress on this indicator. ■

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CHAPTER 3
UNDERSTANDING THE 2021–2023 FOOD PRICE INFLATION SURGE: CAUSES AND CONSEQUENCES FOR FOOD SECURITY AND NUTRITION

KEY MESSAGES

➔ Global food price inflation has significantly outpaced headline inflation since 2020, reflecting the heightened volatility and persistent pressures within agricultural and food markets. In January 2023, food price inflation peaked at 13.6 percent, outpacing headline inflation by 5.1 percentage points (8.5 percent). Although both rates were beginning to show signs of a downward trend by mid-2023, they remained elevated throughout the rest of the year. By 2024, food price inflation had reached its pre-COVID levels of 2019.

➔ The effects of two major shocks, the COVID-19 pandemic and the war in Ukraine, combined with extreme weather events, led to a sharp increase in the price of global agricultural commodities, with its peak in March 2022, fuelled also by concurrent energy price shocks.

➔ The combination of these shocks with unprecedented fiscal spending and relaxed monetary policies created a perfect storm, setting the stage for high food price inflation. Unlike previous high inflation episodes, this one began with demand-driven factors and later evolved into supply-driven inflation.

➔ The rise in global agricultural and energy commodity prices and the associated effects explain 47 and 35 percent of food price inflation at its peak in the United States of America and the euro area, respectively. The remaining 53 and 65 percent are explained by other factors, including rising labour costs, exchange rate fluctuations and pricing behaviour along the supply chain.

➔ Food price inflation has been particularly acute in low-income countries, where households often depend on markets for food supplies. Global median food price inflation rose significantly from 2.3 percent in December 2020 to 13.6 percent in January 2023, while low-income countries experienced an even steeper increase, with inflation hitting 30 percent in May 2023.

➔ The global recovery in wages has been highly uneven. In some countries, wage growth has kept pace with rising food prices. However, in many others, especially those affected by conflict, real wages have continued to decline, making it increasingly challenging for households to afford essential food items.

➔ Low-income countries, which have experienced the highest rates of food price inflation, with a pronounced peak between mid-2022 and mid-2023, have faced increases in food insecurity. Rising food prices can significantly impact households' food security. A 10 percent increase in food prices is associated with a 3.5 percent rise in moderate or severe food insecurity and with a 1.8 percent increase in the proportion of individuals experiencing severe food insecurity. Structural and gender inequalities amplify the impact of food price inflation, particularly in countries with high income inequality. At its peak in January 2023, 65 percent of low-income countries and 61 percent of lower-middle-income countries (home to more than 1.5 billion people) faced rates of food price inflation above 10 percent, underscoring its potentially pervasive contribution to food insecurity.

➔ The recent episode of food price inflation is closely linked to rising rates of wasting among children under five years of age. A 10 percent increase in food prices is associated with a 2.7 to 4.3 percent rise in the prevalence of wasting and a 4.8 to 6.1 percent increase in severe wasting among children under five.

➔ Relative prices of different types of foods (by food group, level of processing and nutritional profile) appear, on average, to have been stable between 2011 and 2021 around the world. Nutrient-dense foods such as fruits and vegetables consistently have the highest prices per kilocalorie. In contrast, ultra-processed foods, in general, tend to have lower prices per kilocalorie than processed alternatives. Ultra-processed foods are increasingly displacing more nutrient-dense alternatives despite growing evidence of their adverse health impacts.

➔ Between 2019 and 2024, prices for starchy staples and oils exhibited the sharpest rise across food groups in Mexico, Nigeria and Pakistan. As starchy staples form the core of diets for the poorest households, such steep increases may undermine food security and nutrition; however, access to low-cost items in other food groups may help sustain dietary adequacy despite inflation.

Rising food prices have emerged as a global concern since 2022, capturing public attention. According to a global Ipsos[g] survey, inflation has become one of the top worries worldwide, surpassing fears related to crime, violence and poverty.[1] The surge in food prices, fuelled by a mix of pandemic-related fiscal measures, unbalanced monetary policies, supply disruptions and geopolitical conflicts, has negatively affected market-dependent households, particularly the most vulnerable ones. Although the rate of increase has slowed recently, elevated food costs remain a pressing issue, straining household budgets on a daily basis and increasing food insecurity and malnutrition. As a key component of the overall consumer price index, food price inflation has become also an important element to monitor and act upon for governments around the world.

Responding to growing global concerns, this report delves into the multifaceted impacts of rising food prices, exploring their implications for food security and nutrition. Section 3.1 introduces the concept of inflation with an emphasis on food prices, highlighting the sharp increase in food prices compared to the prices of other consumer goods and services. This disproportionate rise has placed a significant burden on poor households that spend a large portion of their income on food. **Section 3.2** explores the underlying causes of the recent spike in food prices, drawing comparisons to previous inflationary episodes. **Section 3.3** discusses the association between inflation and its impact on food security and nutrition outcomes. This is particularly relevant for low-income countries (LICs) where rising food prices make it difficult for families to afford sufficient, safe, and nutrient-dense foods all year round. Finally, **Section 3.4** examines the inflationary pressures on different food groups, focusing on how rising prices could impact the affordability and accessibility of healthy diets. ■

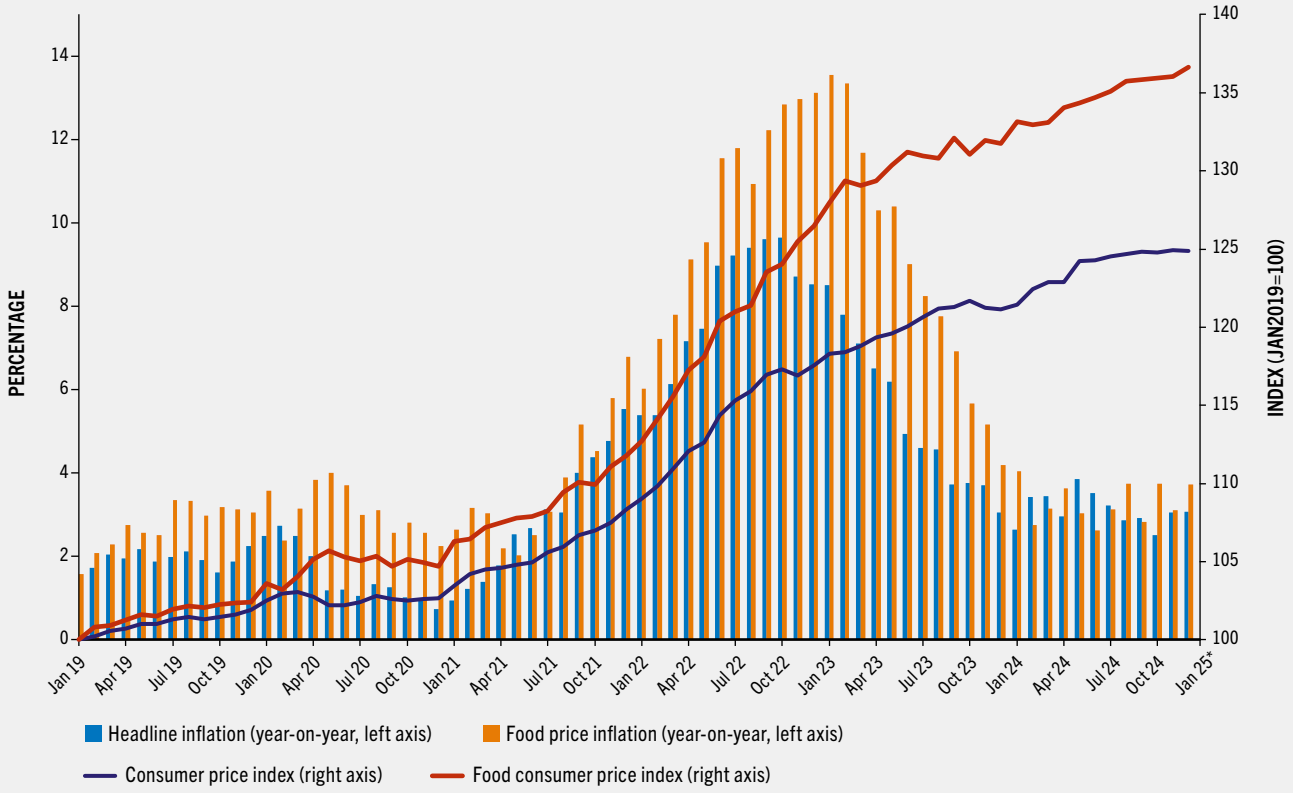
3.1 FOOD PRICE INFLATION: STYLIZED FACTS

Since late 2020, domestic food retail prices have risen significantly across most countries, posing considerable challenges for both consumers and policymakers. Year-on-year global *average food price inflation* surged from 5.8 percent in December 2020 to a staggering 23.3 percent in December 2022.[2] These figures are heavily influenced by countries that experienced hyperinflation, such as Lebanon, South Sudan, the Bolivarian Republic of Venezuela and Zimbabwe, where year-on-year inflation peaks reached levels well above 350 percent. As a result, using the median provides a more accurate reflection of global inflation levels:[h] *median food price inflation* increased sharply from 2.3 percent

g Ipsos provides global opinion polls. One of them is the "What worries the world survey", which asks a panel of about 20 000 participants in 29 countries about their perception of pressing global issues. One of the items in the survey asks participants what the top three topics that worry individuals the most in their countries are. Inflation was one of the top three concerns among 33 percent of participants in July 2024. This was individuals' most pressing issue; other topics such as crime and violence (30 percent), poverty and social inequality (29 percent), unemployment (28 percent), financial/political corruption (26 percent) and health care (23 percent) ranked consistently lower.

h The use of median price indices (instead of average indices) is consistent with FAO's reports on inflation. For example, see FAO (2024).[3]

FIGURE 3.1 FOOD PRICE INFLATION HAS RISEN SINCE LATE 2020, PEAKING IN JANUARY 2023



NOTES: The graph is based on the median consumer price index (CPI) across 203 countries or territories. Headline (food price) inflation is calculated as the percentage increase in the median headline CPI (food CPI) in each month relative to the same month in the previous year. * CPI and food CPI data are available through December 2024.

SOURCE: Authors' (FAO) own elaboration based on FAO. 2025. FAOSTAT: Consumer Price Indices. [Accessed on 18 June 2025]. https://www.fao.org/faostat/en/#data/CP. Licence: CC BY-4.0.

https://doi.org/10.4060/cd6008en-fig3.1

in December 2020 to 13.6 percent in January 2023 (see Figure 3.1, and Box 3.1 for definitions).

Global food price inflation has significantly outpaced headline inflation since 2020, reflecting the heightened volatility and persistent pressures within agricultural and food markets. General inflation (called "headline inflation", see definitions in Box 3.1) increased from 2021 to 2023. It is important to assess whether the rise in food prices was faster or slower, in order to gain a better understanding of whether food was becoming more or less affordable than other household needs. At the onset of the COVID-19 pandemic in early 2020, overall inflation remained relatively low. Though still modest, food price inflation was significantly higher than headline inflation.[i] As governments began to relax stay-at-home restrictions and the global

i As the world grappled with closures during the early stages of the pandemic, food price inflation was higher than headline inflation. The pandemic created disruptions in food supply chains,[4] which put upward pressure on grocery prices. Physical distancing policies created worker shortages in the agrifood sector (in activities such as harvesting and processing of vegetables and fruits, which require intensive in-person labour[5, 6]). Lockdown restrictions led to an increased demand for food at home[7] and even fuelled speculative hoarding purchases of non-perishable foods such as flour and rice.[8] While food prices started to rise, other goods and services were not increasing in tandem. For example, energy prices – an important component of headline inflation – deflated during the early stages of the pandemic[9, 10] due to a generalized slowdown of the global economy.

BOX 3.1 DEFINITIONS AND CONCEPTS: WHAT IS INFLATION? WHAT IS FOOD PRICE INFLATION?

General price level: The average level of all prices in an economy at a given point in time is expressed as an aggregate – or general – price level. Since an economy produces a range of different products, general price levels are usually measured through indices. The most common is the consumer price index.

Consumer price index: A consumer price index (CPI) measures changes in the prices of goods and services consumed by households. These changes affect the real purchasing power of consumers' incomes and also consumers' welfare. As the prices of different goods and services do not all change at the same rate, a CPI can only reflect their average movement. A CPI is typically assigned a value of unity (or 100) in a reference period, and the values of the index for other periods are intended to indicate the average proportionate (or percentage) change in prices from this price reference period.

Inflation: Inflation can be viewed as a process of continuously rising prices, or its equivalent, that is, a process of continuously falling value of money. There are several ways to measure prices, but the CPI is the most common approach. Thus, inflation is measured as the growth rate of the CPI over a given period. The overall inflation in an economy is measured by the headline inflation.

Headline inflation: The most reported measure of inflation, the rate of headline inflation reflects price changes across all items typically consumed by households. It measures changes in the prices of a broad basket of goods and services, and includes core inflation, food price inflation and energy inflation.

Core inflation: Core consumer inflation focuses on the underlying and persistent trends in inflation; it excludes prices set by the government and more volatile prices of products such as food and energy that are most affected by seasonal factors or temporary supply conditions.[11]

Food CPI and food price inflation: The food consumer price index (food CPI) measures 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. Food price inflation is the growth rate of the food CPI over a given period. When aggregating over several countries (to provide, for example, global or regional estimates), the food CPI and inflation can be expressed as a weighted average* across countries. However, outliers and atypical values can disproportionately affect and distort aggregate estimates. As such, the median might be a better metric. The median is the 50th percentile of a distribution. In other words, it is the middle number in a series of data points that have been sorted in ascending or descending order.

Hyperinflation: Hyperinflation refers to a situation where the prices of goods and services rise uncontrollably over a defined period. In general, hyperinflation is used when inflation increases at a rate of over 50 percent a month.[13]

NOTE: * In the case of weighted average inflation, the weights reflect the relative importance of each country in aggregate consumption. In particular, these weights are based on households' final consumption expenditure (including non-profit institutions serving households) in 2015 in US dollars at constant prices of 2015. For more information, see the United Nations Statistics Division report, *National Accounts - Analysis of Main Aggregates*.[14]

economy started the process of recovery from the pandemic, overall inflation was picking up by mid-2021. Subsequently, the eruption of the war in Ukraine in February 2022 led to increased prices of vital farm inputs (such as fertilizers), affected the global supply of agricultural commodities, and disrupted energy markets (see **Section 3.2**). This translated into higher overall prices, with major effects on food prices. At its peak in January 2023, food price inflation was 5.1 percentage points higher than headline inflation (13.6 percent vs 8.5 percent).

»

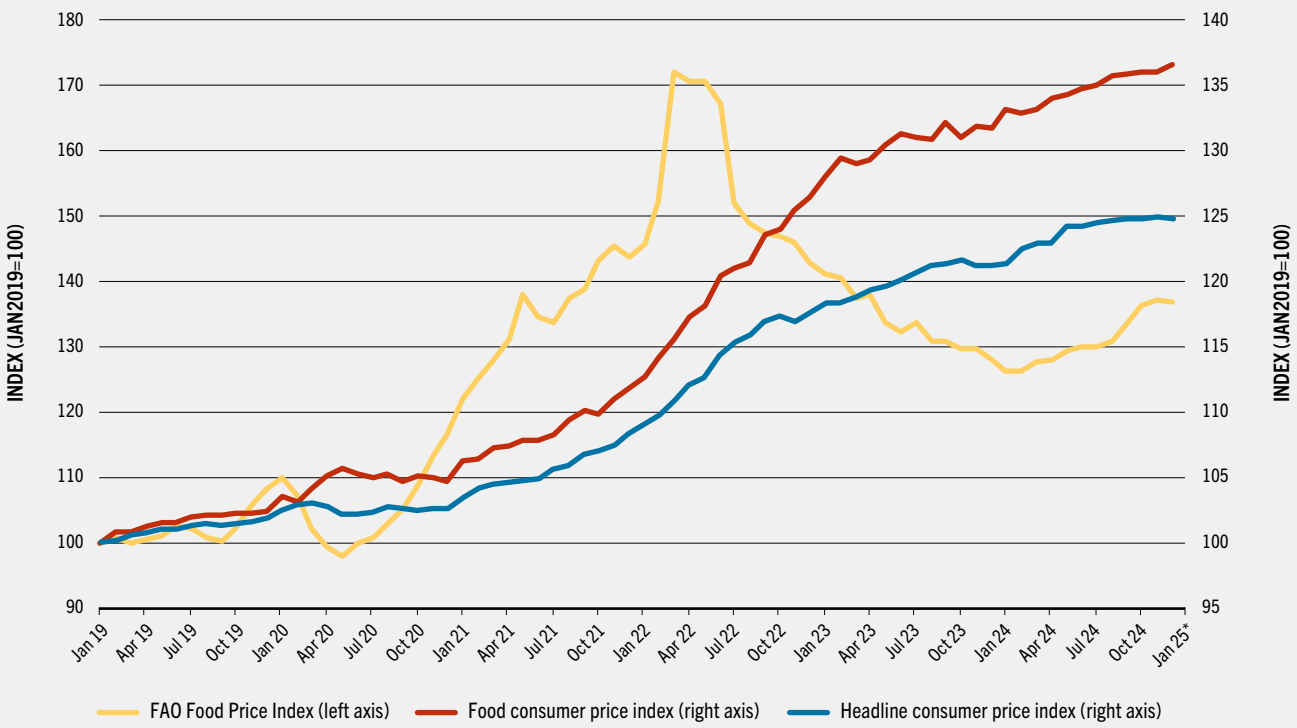
BOX 3.2 TRACKING PRICES OF FOOD AND AGRICULTURAL PRODUCTS

A key indicator to measure food prices is the FAO Food Price Index (FFPI). This index reflects monthly fluctuations in international prices for a selected basket of food commodities, measured in US dollars. The FFPI provides insights into global price trends, with monthly data available in both real and nominal terms from 1990 onwards, and annual indices dating back to 1961, enabling long-term historical comparisons.

This indicator is fundamentally different from the food consumer price index (food CPI) used to track food price inflation. The FFPI reflects the situation in global markets for agricultural commodities, while the food CPI captures the average price of food faced by consumers at the national level (Figure A). The real FFPI does not represent real prices in the traditional macroeconomic terms and is not deflated by inflation but tracks the relative prices between agricultural commodities and manufactured products. Various methodological details differentiate these two metrics, including:

- Scope of products: The FFPI focuses on key primary agricultural commodities such as cereals, vegetable oils, dairy, meat and sugars, excluding products like fish and seafood. In contrast, the food CPI covers a broader range of food items, including both primary and processed products and non-alcoholic beverages.
- Product weights in the index: The FFPI reflects the importance of selected commodities in global international markets. Each commodity group

FIGURE A TRENDS IN INTERNATIONAL AND DOMESTIC FOOD PRICES: FAO FOOD PRICE INDEX VS CONSUMER PRICE INDEX



NOTES: The graph is based on the median consumer price index (CPI) across 203 countries or territories. * Headline and food CPI data are available through December 2024.

SOURCES: Data for consumer price index are based on FAO. 2025. FAOSTAT: Consumer Price Indices. [Accessed on 18 June 2025]. https://www.fao.org/faostat/en/#data/CP. Licence: CC BY-4.0; data for FAO Food Price Index are based on FAO. 2025. World Food Situation. In: *FAO*. [Cited 6 June 2025]. https://www.fao.org/worldfoodsituation/foodpricesindex/en

https://doi.org/10.4060/cd6008en-figB3.2A

is weighted based on its average share in global exports during the 2014–2016 base period. For the food CPI, weights are based on national household expenditure shares at the consumer level. These shares are updated periodically by central banks or national statistical offices, according to country-specific needs and practices.

- Representation of relative country sizes in global and regional aggregates: The FFPI is computed only at the global level and does not apply explicit country weights. However, a country's influence is indirectly captured through its share of global exports. Instead, in *The State of Food Security and Nutrition in the World*, global and regional food CPI figures are derived using the median across countries, providing a more balanced representation that minimizes the influence of outliers.
- Location of price measurement: Prices used in the FFPI are primarily export prices, capturing values at the point of international trade. In contrast, the food CPI reflects retail prices paid by consumers within each country. As a result, the FFPI excludes much of the cost associated with transportation, handling and processing – factors that are integral to consumer-level inflation and macroeconomic trends, which are captured by the food CPI.
- Currency of measurement: The FFPI is calculated using prices and sub-indices expressed in current US dollars, as this reflects how major commodities are quoted in international markets. The food CPI, by contrast, is a domestic measure expressed in the local currency unit. Therefore, large exchange rate fluctuations, such as currency depreciation, can significantly affect the national food CPI through imported inflation, while having limited or indirect effects on the FFPI.

International agricultural prices, as measured by the FFPI, experienced a sharp increase from mid-2020 to early 2022. This surge was followed by a rise in global inflation, initially driven by external shocks and subsequently by the delayed transmission of international price changes to domestic markets. In spring 2022, global markets began to stabilize as harvest conditions improved, the initial impact of the war in Ukraine was absorbed, and trade disruptions such as export restrictions were lifted. Despite the stabilization of the commodity markets, domestic inflation continued to climb reflecting the lagged cost-transmission pattern. A broader return to stability emerged towards the end of 2024.

» Throughout 2023, both inflation rates remained at high levels but started showing a decreasing trend.

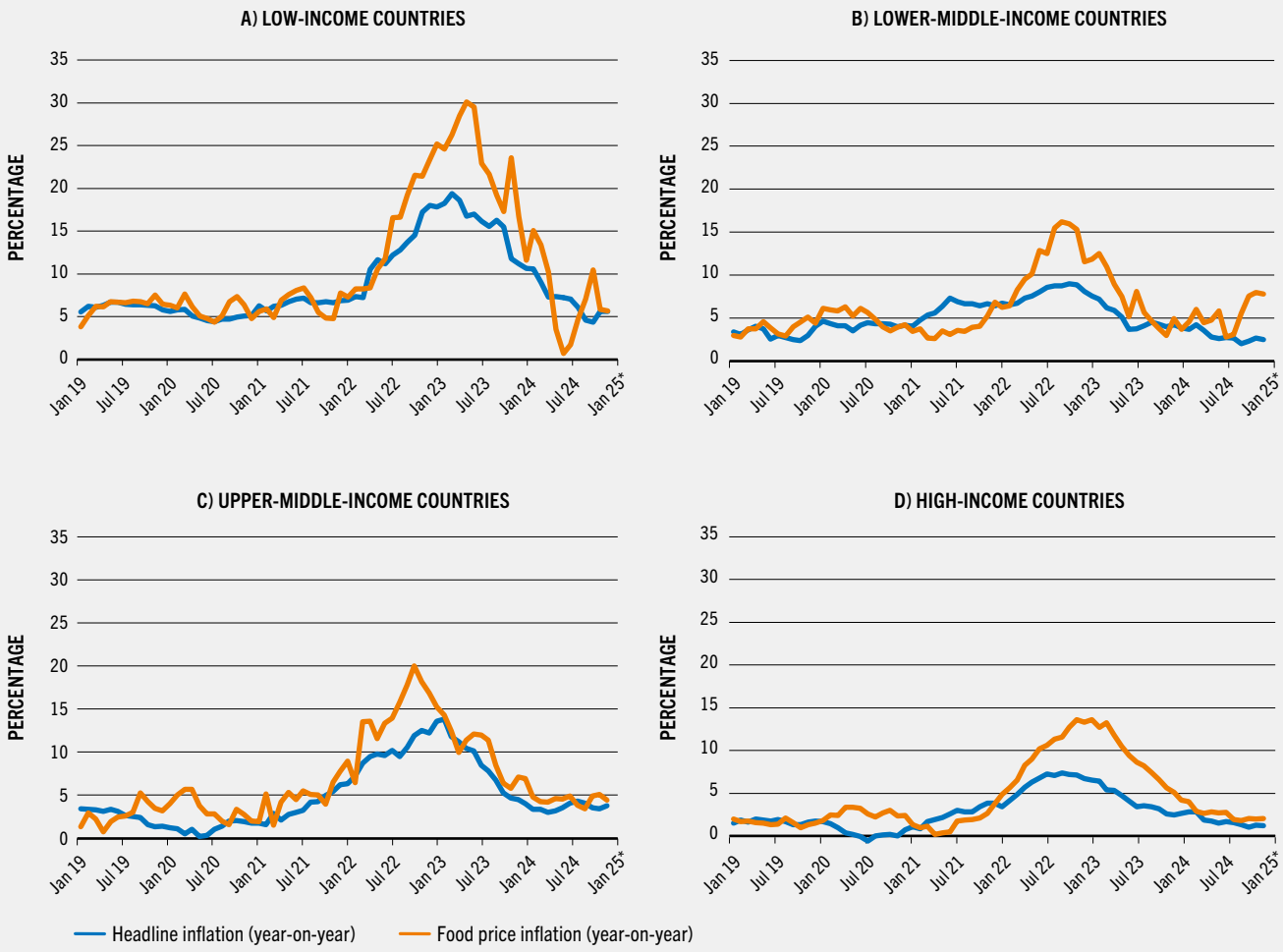
When monitoring food and agricultural prices, various metrics are available, each serving a specific purpose and capturing different aspects of the market. Box 3.2 highlights the fundamental differences between the FAO Food Price Index (FFPI) and the food CPI. The FFPI tracks international market trends for primary agricultural commodities such as cereals, dairy and oils, using export prices in US dollars and weighting commodities by their share in global trade. In contrast, the food CPI reflects consumer-level retail prices within a country, expressed in local currency and weighted by food items' share in household expenditures. These distinctions – in product scope, weighting methods, price source, and currency – underscore the FFPI's global trade focus versus the food CPI's role in measuring domestic food price inflation.

Between 2021 and 2023, food prices rose substantially faster than prices for other consumer goods and services, placing a disproportionate burden on households that spend a large share of their income on food. This underscores how food became increasingly less affordable for households relative to other goods in the economy. After a protracted and intense period of inflation, both headline and food price indices showed signs of stabilization followed by a gradual decline in 2023.

Food price inflation has been particularly acute in low-income countries (Figure 3.2). Most households, even those that depend on agriculture for their livelihoods, rely on markets for their food supplies.[j] Market-based food sourcing leaves

j Higher food prices can have ambiguous effects on welfare. While they hurt households that are net food buyers (through reductions in their purchasing power), they can benefit net food producers (whose incomes might increase with higher crop sales prices). However, previous evidence suggests that urban households rely almost entirely on food purchases, and most rural populations are overall net food buyers as well.[15–21] Food price spikes not only reduce the mean consumption of dietary energy, but also worsen the distribution of food calories, further deteriorating the nutritional status of populations.[22] Rising food prices often increase poverty in low-income countries, as was shown during the 2007 to 2008 spike.[23] Consistently, Robles and Torero (2010)[24] find that this crisis increased poverty rates in Latin America by 1.5 to 2.3 percentage points. While larger farmers may profit, small-scale farmers rarely benefit due to landlessness, high input costs, credit barriers, and wide gaps between farm gate and retail prices. Even when farmers might eventually be able to benefit from higher agricultural prices, these adjustments would only materialize in the long term. In the short term, when price increases are unrelated to changes in domestic productivity, food price spikes raise poverty.[25, 26]

FIGURE 3.2 FOOD PRICE INFLATION WAS THE HIGHEST IN LOW-INCOME COUNTRIES, 2019–2024



NOTES: The graph is based on the median consumer price index (CPI) across 203 countries or territories. Headline (food price) inflation is calculated as the percentage increase in the median headline CPI (food CPI) in each month relative to the same month in the previous year. Country income classification is based on the 2024 World Bank classification, as the 2025 classification was not yet available when this publication was prepared.
* Inflation and food price inflation data are available through December 2024.

SOURCE: Authors' (FAO) own elaboration based on FAO. 2025. FAOSTAT: Consumer Price Indices. [Accessed on 18 June 2025]. https://www.fao.org/faostat/en/#data/CP. Licence: CC-BY-4.0.

https://doi.org/10.4060/cd6008en-fig3.2

households vulnerable to sharp price increases, exacerbating food insecurity and limiting access to and consumption of healthy diets. Smallholder farmers and agricultural labourers are often net food buyers, so rising food prices typically outweigh any income gains they receive from selling their produce. As a result, rising food prices not only strain household budgets, but also challenge rural livelihoods, undermining progress towards poverty reduction and food security and nutrition.[27, 28]

Low-income countries experienced the most severe and sustained increases in food price inflation, with a pronounced peak between mid-2022 and mid-2023, when food price inflation rates were as high as 30 percent. During this period, headline inflation also spiked but remained significantly lower than food price inflation, indicating that food prices were the primary driver of cost-of-living increases. Even as inflationary pressures began to ease in 2024, this pervasive disparity emphasizes the challenges faced by

households in LICs, which continue to grapple with food affordability issues.

Lower-middle-income countries (LMICs) and upper-middle-income countries (UMICs) also saw substantial surges in food price inflation, albeit less pronounced than in LICs. In LMICs, food price inflation peaked at around 16 percent in September 2022 before gradually declining, while UMICs saw a similar pattern with peak food price inflation nearing 20 percent in October 2022. Despite reductions, food price inflation remained significantly higher than headline inflation throughout the period, reflecting structural vulnerabilities in food supply chains and market dynamics in these countries.

In contrast, high-income countries (HICs) experienced relatively low levels of food price inflation, particularly before mid-2022; however, food price inflation peaked at around 14 percent in November 2022. Although food price inflation increased during global shocks, it remained more controlled and closer to headline inflation rates in HICs compared to lower income groups. Recent average food price inflation (January 2024 to December 2024) stabilized at 2.7 percent, slightly above the January 2019 to January 2021 average rate of 2.1 percent.

The scale of local food price increases since 2020 is striking when viewed through cumulative five-year food price inflation. Out of 203 countries, 139 experienced cumulative food price inflation exceeding 25 percent. In 49 of these, inflation surpassed 50 percent, and in 25 countries, it exceeded 100 percent. Such prolonged food price pressures risk undermining household coping capacities and worsening food insecurity.[29–33] ■

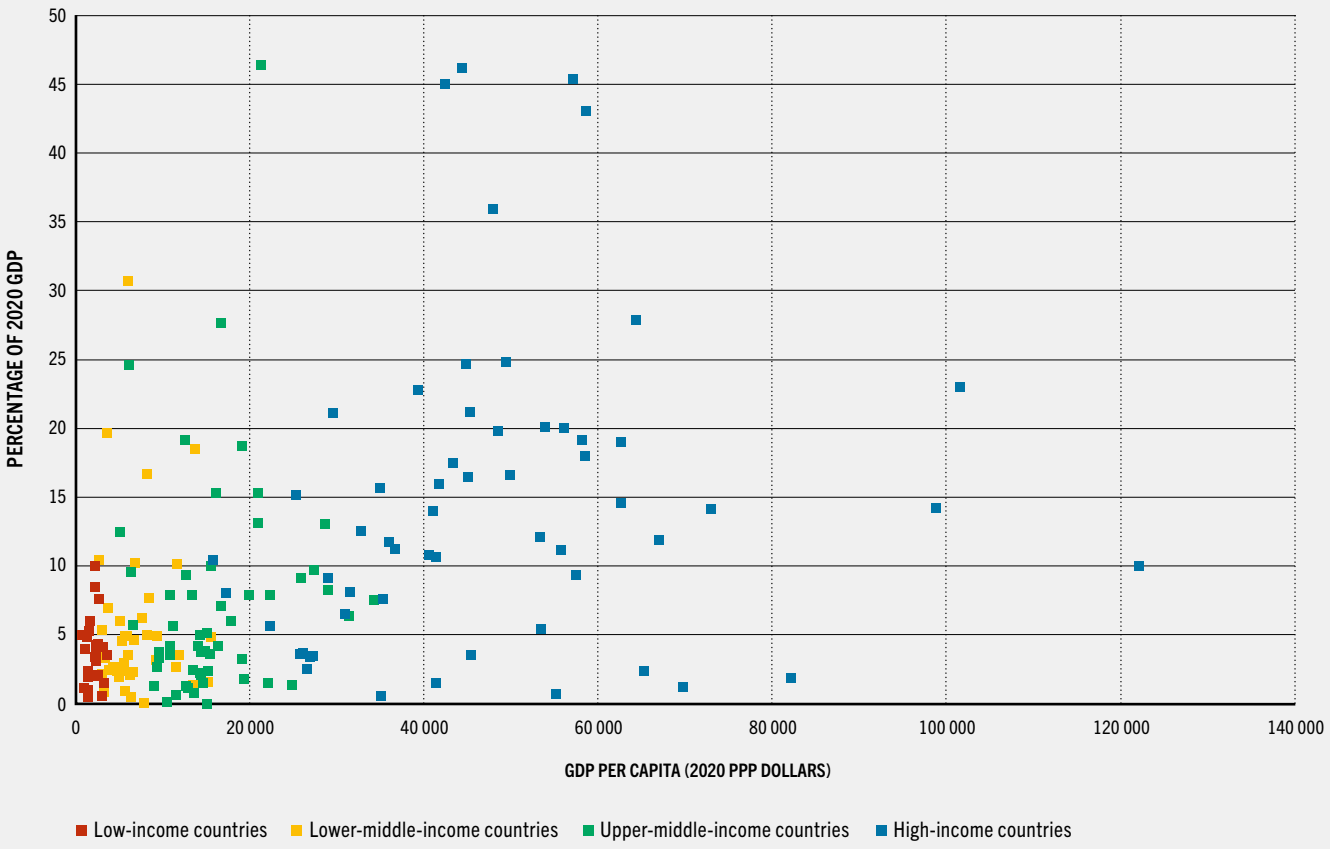
3.2 WHY HIGH FOOD PRICE INFLATION?

Over the past few years, food price inflation has been driven by a diverse set of factors, with their relative importance varying across regions and over time. As global markets emerged from the COVID-19 pandemic, the lifting of lockdowns and the reopening of businesses spurred a recovery in economic activity. A significant driver of this rebound was the implementation of large-scale fiscal support programmes across the world, which provided relief to households, while monetary policies remained rather liberal. This influx of financial assistance fuelled an unusually high demand for goods, contributing to a surge in inflation. In addition, the war in Ukraine affected agricultural and energy markets.[34–40]

The pandemic presented the world with unprecedented challenges, claiming almost 7 million lives,[41] causing economic losses of about USD 13.8 trillion[42] and pushing an additional 75 to 95 million people into extreme poverty.[43] As the recovery process unfolded and a "new normal" emerged, a series of significant shocks affected the global economy. Together, these challenges (discussed below) have shaped recent trends in food insecurity and malnutrition worldwide: a sharp increase in the prevalence of undernourishment and moderate or severe food insecurity in the wake of the pandemic.

During and after the pandemic, governments around the world implemented unprecedented fiscal support measures to mitigate the economic downturn. These measures amounted to approximately USD 17 trillion, including financial assistance to households and firms.[44] Global fiscal support in response to the pandemic provided between 2020 and 2021 was equivalent to 16 percent of the 2020 global gross domestic product (GDP) and exceeded the 2020 GDP of China or the European Union. High-income economies accounted for the majority of this spending, with the United States of America alone dedicating USD 6 trillion, leveraging its fiscal capacity to sustain economic activity and

FIGURE 3.3 FISCAL RESPONSES TO THE COVID-19 PANDEMIC



NOTES: GDP = gross domestic product; PPP = purchasing power parity. The International Monetary Fund (IMF) provides information about countries' fiscal responses to the COVID-19 pandemic. This information covers government policies between January 2020 and September 2021. Fiscal responses include "above the line" measures (with immediate effects on fiscal balance) which capture governments' additional spending (e.g. health services, unemployment benefits), capital grants and targeted transfers (e.g. wage subsidies or direct transfers), and foregone revenues (e.g. tax cuts, other relief programmes). It also captures "below the line" measures (e.g. equity injections or loans to firms) and contingent liabilities (e.g. guarantees for banks, firms or households).

SOURCES: Data for fiscal response measure are based on IMF. 2021. Database of Fiscal Policy Responses to COVID-19: Fiscal Monitor Database of Country Fiscal Measures in Response to the COVID-19 Pandemic. [Accessed on 1 March 2025]. https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19; data for GDP per capita are based on World Bank. 2025. World Development Indicators. [Accessed on 1 March 2025]. https://databank.worldbank.org/source/world-development-indicators. Licence: CC-BY 4.0.

https://doi.org/10.4060/cd6008en-fig3.3

stabilize labour markets.[44] Low-income countries and middle-income countries (MICs), while more constrained, also mobilized significant resources to support vulnerable populations and stimulate recovery (Figure 3.3). This massive injection of fiscal stimuli played a crucial role in cushioning the economic shocks of the pandemic, but it also contributed to increased demand, including in emerging and developing economies;[45] in combination with supply chain disruptions, this fuelled inflationary pressures globally.[40, 46]

During and just after the pandemic, central banks around the world implemented a range of expansive monetary measures to support economic stability. These measures included significant interest rate cuts, quantitative easing programmes and emergency liquidity provisions to ensure financial system resilience. Major central banks, such as the US Federal Reserve, the European Central Bank (ECB) and the Bank of Japan, rapidly lowered policy rates to nearly zero and purchased large volumes of government and corporate bonds

to inject liquidity into the economy.[47] For instance, the ECB launched the pandemic emergency purchase programme in March 2020, initially allocating EUR 750 billion and later expanding it to EUR 1.85 trillion, to purchase private and public sector securities flexibly.[48] Additionally, temporary regulatory adjustments were made to encourage bank lending. These supportive policies helped sustain credit flows, support business operations and mitigate the economic downturn. However, prolonged monetary expansion also set the stage for inflationary pressures as economies began to recover.[49] As inflation began to surge, central banks started raising interest rates to control steep price increases.[50] For example, the US Federal Reserve increased its interest rate by 0.25 percentage points in March 2022 and subsequently raised the rate 10 more times through July 2023.[51]

Exchange rates also played a role in determining food price inflation, especially in import-dependent economies. During the pandemic, many low- and middle-income countries experienced sharp currency depreciations due to capital outflows and increased demand for safe-haven currencies like the US dollar, Japanese yen and Swiss franc. By mid-2020, the currencies of nearly one-third of LICs and MICs had depreciated against the US dollar by more than 10 percent.[52] This depreciation amplified food price inflation through the import price pass-through effect, with the impact being particularly severe in LICs.[53] Additionally, as the United States of America tightened its monetary policy more aggressively than did many LICs and MICs in response to inflation in 2022, further currency depreciations in these latter economies intensified the inflationary pressures stemming from higher import costs.[54]

The US Federal Reserve's increases in interest rates, alongside shifts in international energy markets, caused an appreciation of the US dollar, amplifying the effects of mounting global food prices. Rising energy prices boosted US export revenues, as foreign buyers converted their currencies into US dollars to pay for energy products, contributing to the appreciation of the US dollar. According to the United Nations Trade and Development Organization,[55] during past global food crises, such as those in 2008 and 2012, the depreciation of the US dollar played a mitigating role by partially cushioning the impact of rising food prices. In contrast, the current food price inflationary episode has been characterized by a strengthening of the US dollar, creating a "double burden" for many countries (Box 3.3). This phenomenon has not only led to pure price increases but it has also imposed significant "exchange rate" effects on net food-importing countries, thereby exacerbating food prices.

In low- and middle-income economies, the depreciation of local currencies – driven by reduced inflows of foreign capital and downgrades of sovereign credit ratings – has contributed significantly to inflation, particularly with respect to imported goods. Notably, expectations of future inflation in these countries tend to be more responsive to currency fluctuations, meaning that any decline in currency value is swiftly reflected in higher prices for goods. Consequently, the interplay between currency depreciation and inflation poses severe challenges for these economies, further straining their ability to manage the costs of essential imports, including food.[55] The different inflation patterns shown in Figure 3.2 in LICs and MICs have been driven by the interplay of these factors. In sub-Saharan Africa, high global food prices and national depreciations were the main drivers of inflation patterns, while in Latin America expansive monetary policies and increased aggregate demand played a major role. In addition, several countries showed a faster pass-through of prices than in previous episodes of high food prices.[58]

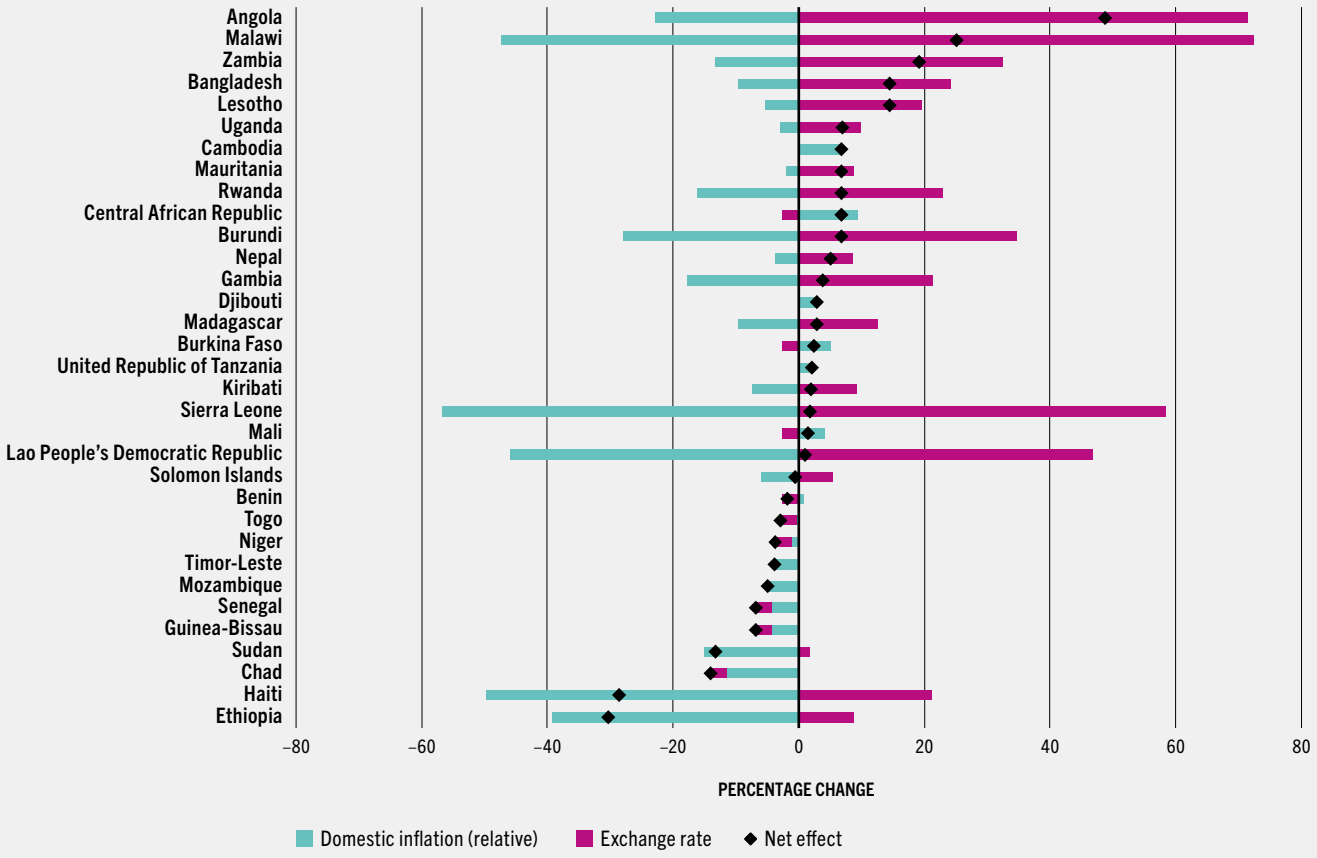
The war in Ukraine, amplified by multiple events, has unleashed a series of profound disruptions across global agricultural markets, including blockades of the main trading routes, generating uncertainty regarding harvest and trade. Both the Russian Federation and Ukraine play pivotal roles in global agricultural markets, particularly of wheat, maize, and sunflower oil, and they together supplied approximately 12 percent of the calories traded globally in 2021.[59] Hostilities in the Black Sea region[60] and disruption of Red Sea trade have unsettled the flow of agricultural exports from these and other countries, disproportionally affecting LICs and MICs that rely on cereal imports from global markets.[61, 62]

»

BOX 3.3 THE INTERPLAY BETWEEN EXCHANGE RATE AND LOCAL INFLATION

The dynamics of transmission of global food prices to domestic markets can take several forms and depend on several factors. A critical one is the misalignment between changes in exchange rates vis-à-vis domestic inflation, which can alter, exacerbate or prevent the transmission of global prices to domestic markets in real terms. In seamless and perfect markets, movements of the nominal exchange rate with respect to the US dollar should follow the relative inflation between the two countries. When local currencies weaken against the US dollar, consumers may not fully benefit from lower global food prices, as they need more local currency to buy the same amount of food from the international market. Conversely, high domestic inflation can make international prices seem lower in real terms, as the change in international food prices is smaller than the change in the overall domestic price level. However, high domestic inflation also erodes households' purchasing power. In 2022, prices of most traded staple foods peaked in March before steadily declining until February 2024, according to FAO's Food Price Index.[56] Over the same period, the US dollar sharply appreciated with respect to many least developed country (LDC) currencies. And despite the reductions in global

FIGURE A THE NET EFFECT OF EXCHANGE RATE MOVEMENT AND DOMESTIC INFLATION ON MAIZE PRICES ACROSS LEAST DEVELOPED COUNTRIES



NOTES: The purple bar reports the percentage change in the bilateral nominal exchange rate of a country with respect to the US dollar between February 2024 and April 2022. Positive (negative) values correspond to a devaluation (appreciation). The turquoise bar reports the difference between US inflation and the country's headline inflation over the selected period. The black diamond indicates the net effect between the two bars.

SOURCES: Authors' (FAO) own elaboration based on data for CPI from World Bank. 2025. A Global Database of Inflation. In: *World Bank*. [Cited 8 May 2025]. https://www.worldbank.org/en/research/brief/inflation-database; data for exchange rate from IMF. 2025. IMF DATA: Exchange Rates (ER). [Accessed on 8 May 2025]. https://data.imf.org/en/datasets/IMF.STA:ER

https://doi.org/10.4060/cd6008en-figB3.3A

BOX 3.3 (Continued)

commodity prices, domestic food prices in several countries have remained high or even increased, revealing clear misalignments between international and local markets. To better understand the contribution of the exchange rate and domestic inflation to these misalignments, an analysis was conducted to convert global maize prices into real local currency terms for LDCs. The findings highlight how currency depreciation and domestic inflation altered the real price transmission across different economies (Figure A).*

In some countries (for example, Angola, Bangladesh, Lesotho, Malawi, Zambia), currency depreciation prevented consumers from fully benefiting from lower maize prices. In some cases, the impact exceeded 10 percent.

Other countries only had mild currency depreciations, and some did not experience any or had only slight appreciations against the US dollar, but did face increases in overall domestic inflation. This led to a decrease in the real price of maize, i.e. the ratio between its nominal value expressed in local currency and the domestic consumer price index. While this implies that food may have become more affordable than other products in the economy, consumers may have faced higher costs for other essential goods (such as housing, clothing and transportation) hindering their overall welfare.

Managing exchange rates and inflation effectively is crucial to ensuring that global food price changes are fully and fairly transmitted to local markets.

The world maize price is used as a case study. Relying on the purchasing power parity (PPP) theory, the conversion of the world maize price into real local currency terms follows:[57]

$$WP_{LC}^{R} = WP_{USD}^{N} * NER * \frac{CPI_{US}}{CPI_{LC}}$$

where *WP* refers to the world price of the selected commodity and *LC* to the local currency, *R* stands for real (inflation adjusted), *N* stands for nominal, *NER* represents the bilateral nominal exchange rate of a country with respect to the US dollar, while CPI_{US}/CPI_{LC} represents the ratio between the US CPI and a country CPI. Then, the formula is expressed in relative terms as follows:

$$\Delta wp_{LC}^{R} = \Delta wp_{USD}^{N} + \Delta ner + \pi^{US} - \pi^{LC}$$

where Δ denotes the difference operator and all the variables are expressed in logarithmic form.

NOTES: * The United Nations list of least developed countries comprises 44 countries. Figure A reports the results for only 33 countries because of data availability. In the 11 remaining countries, data on the exchange rates from the International Financial Statistics of the International Monetary Fund and/or the domestic consumer price index from FAOSTAT are either missing or not available over the sampled period (April 2022 to June 2024).

» Although temporary measures, such as the Black Sea Grain Initiative[k] or the establishment of new Ukrainian trade routes, have mitigated some of the disruptions,[65] the global food supply has become uncertain.

In addition to the disruption to agricultural commodity markets, there has been a major impact on fertilizer availability. Belarus and the Russian Federation – two important exporters of fertilizers – saw their exports significantly constrained due to economic sanctions imposed by the European Union, Canada and the United States of America, in addition to many other countries.[l, 68, 69] In 2020, the Russian Federation accounted for 14 percent of globally traded urea and 11 percent of both monoammonium

k The Black Sea Grain Initiative was an agreement between the United Nations, the Russian Federation, Türkiye and Ukraine on 22 July 2022. It allowed for safe exports of grains and other foodstuffs from some Ukrainian ports through the Black Sea.[63] The initiative ended on 17 July 2023, when the Russian Federation officially terminated its participation in the agreement.[64]

l These sanctions included restrictions on banking, trade, technology transfers, and specific individuals. While it is true that, in most cases, these sanctions did not include Russian exports of foods and fertilizers, they led to increases in the cost of "doing business" (restrictions for wires and bank payments, increases in insurance premiums for transportation vessels, perceived risks, and so on) and affected fertilizer markets.[66] For example, the Russian Federation's exclusion from the Society for Worldwide Interbank Financial Telecommunication (SWIFT) system, the most important network connecting financial institutions around the world and facilitating transactions, limited importing countries' ability to purchase foods and fertilizers from the Russian Federation.[67]

phosphate and diammonium phosphate – critical nitrogen- and phosphorus-based fertilizers – while Belarus and the Russian Federation jointly accounted for 41 percent of all globally traded muriate of potash. The disruptions led to soaring fertilizer prices, peaking in the spring of 2022 (see **Section 4.1.3**).

The war in Ukraine has also destabilized global energy markets, as at its outbreak the Russian Federation was the third and second largest global producer of oil and natural gas, respectively. The resulting turbulence in oil and gas markets has led to significant price increases and heightened volatility.[70–72] While medium- and long-term strategies are expected to mitigate some of these effects,[73] in the short term elevated energy prices have translated into increased production costs across many economic sectors, affecting also food production and transportation.

While global factors – such as high agricultural and energy prices, and monetary policy shifts – have been major drivers of recent food price inflation, localized shocks can also influence food prices at both national and global levels. Weather variability, climate extremes and natural disasters often disrupt agricultural production and agrifood systems, but their impact on food prices is mediated by a range of context-specific factors. For instance, weather shocks such as droughts can directly reduce food supply, whereas floods can suppress household incomes and reduce demand, partially or even fully offsetting the supply-side effects.[m, n] The impact of such shocks on food prices varies depending on the type of event (e.g. storms or droughts), the macroeconomic conditions at the time (e.g. recession or expansion), and the country's fiscal capacity to cushion the shock.[77]

Recent examples underscore the diverse effects of weather shocks depending on the geographic scope and global significance of the affected region. For instance, in the period from 2018 to 2019, intense wet weather and cyclones across Eastern Africa and the Arabian Peninsula led to one of the worst locust outbreaks in decades. Though the damage to agriculture and food security was severe within the region,[78] the impact on global food prices remained limited due to the region's relatively small role in global food production. In contrast, La Niña-induced droughts between 2020 and 2023 in Argentina, a major wheat exporter, resulted in a 35 percent drop in wheat output and a dramatic fall in exports.[79] This supply shortfall contributed to international wheat price spikes, compounding the inflationary pressures already caused by the war in Ukraine. This contrast illustrates that localized weather events may remain regionally contained or can trigger global price rises depending on the weight of the affected country in international food markets.

In addition to climate-related disruptions, biological shocks such as plant pests and animal diseases have emerged as potent inflationary forces in global food markets. The outbreak of African swine fever (ASF) in China in 2018 led to the slaughter of millions of pigs, decimating the domestic pork supply in the world's largest pork-producing country. As pork prices in China surged by 97 percent in December 2019, they accounted for more than half of the 4.3 percent increase in the national consumer price index.[80] The cost of the ASF outbreak is estimated at 0.78 percent of the country's GDP in 2019.[o, 81] To meet domestic demand, China dramatically increased pork imports, absorbing 45 percent of the global pork trade by 2020.[82] This exerted upward pressure on international pork markets, which caused a 9 percent increase in global pork prices.[83] This episode illustrates how localized disease outbreaks in key producing countries can amplify food price spikes well beyond national borders, reinforcing the importance of considering local

m This is consistent with Gbadegesin, Andrée and Braimoh (2024),[74] who quantify the impact of drought and floods in Afghanistan. The authors find that both shocks lead to increases in food prices and in agricultural wages. However, price changes are greater than wage increases, leading to a loss in households' purchasing power and a deterioration of food security levels.

n Additionally, weather shocks can also affect infrastructure and raise food transportation costs, limiting food accessibility. For example, severe droughts in Central America affected water levels in the Panama Canal restricting vessel circulation in one of the most important trade routes in the world.[75] Droughts can also increase the likelihood of local conflicts,[76] which can further deteriorate food security and nutrition outcomes.

o This represents about USD 111.2 billion. This estimate considers the total economic cost of ASF in China, which consists of direct economic losses to the swine industry, indirect economic losses to all sectors of the economy, decrease in consumer surplus, and government losses.[81]

shocks within the broader context of global price dynamics.[p]

3.2.1 What happened to consumer food prices?

Considering the drivers of aggregate inflation outlined above, the impact on food prices can be understood as a reflection of shifts in global agricultural commodity markets, energy shocks and broader macroeconomic factors. While many of the macroeconomic factors are discussed in **Section 3.2**, this section first explores the key drivers of agricultural and energy commodity price increases before moving on to a broader discussion of how these and other factors influenced food price inflation during 2021 to 2023.

What caused global agricultural commodity prices to increase?

Global agricultural and energy commodity prices have experienced significant volatility since 2020, driven by a complex interplay of demand- and supply-side shocks. Initially, the pandemic triggered a series of demand-side pressures, as expansive monetary policies and macroeconomic imbalances led to a surge in liquidity and speculation in commodity markets.[87] However, as the world began to recover, supply-side disruptions – including geopolitical tensions and structural constraints – began to dominate, shifting the source of commodity price shocks and their transmission into consumer food price inflation.[q]

Agricultural commodity price dynamics between 2020 and 2022 were largely shaped by two waves of exogenous shocks. The first wave emerged early in the pandemic, as a result of fears about farm labour shortages and food supply disruptions, combined with precautionary trade restrictions and increased stockpiling. However, these pressures were initially tempered by reduced aggregate demand due to the collapse of economic activity. As recovery efforts took hold, food prices continued to rise, this time driven more by endogenous macroeconomic responses, including strengthened demand and improved financial conditions facilitated by loose monetary policy.

At the onset of the pandemic, there were concerns about farmers' ability to harvest their crops, leading to fears of potential disruptions in agrifood systems. This placed upward pressure on global food prices of about 15 percentage points during the early months of 2020 (Figure 3.4A).[89]

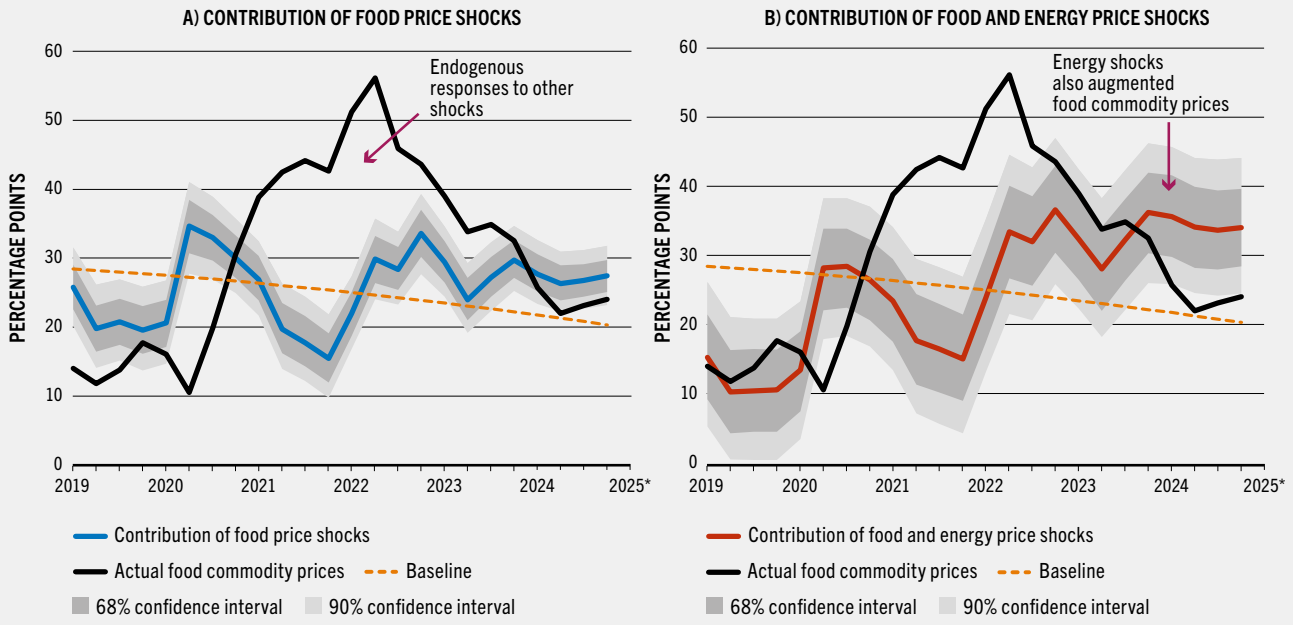
The second wave of supply-side shocks stemmed from the outbreak of the war in Ukraine in early 2022, which had implications for global agrifood systems. The Russian Federation and Ukraine were major exporters of grains such as wheat and maize, and the conflict disrupted critical trade corridors in the Black Sea and Red Sea regions. These disruptions, coupled with substantial declines in fertilizer exports from the Russian Federation, exerted significant upward pressure on food input costs. These exogenous shocks added another 18 percentage points to global food commodity prices in 2022 (Figure 3.4A), marking a clear departure from purely macroeconomic-driven price fluctuations and reinforcing the structural vulnerability of food markets to geopolitical disruptions.[89]

Energy price shocks also reinforced food price inflation, particularly as global energy markets were destabilized by the outbreak of the war in Ukraine. While energy prices fell during the initial pandemic recession, they rebounded sharply in 2021 and 2022 due mainly to shocks specific to energy markets, rather than to macroeconomic recovery. Sanctions against the Russian Federation, realignment of European energy imports, and broader supply chain disruptions contributed to prolonged upward pressure on oil and gas prices. Since energy is a key input in agricultural production – from fertilizer manufacturing through to transportation – these developments spilled over into agricultural commodity markets.

p Another example of recent zoonotic diseases was the avian influenza outbreak in the United States of America. Avian influenza was first detected in commercial farms in the United States in February 2022, and resulted in the culling of more than 148 million birds.[84] This led to considerable increases in domestic egg prices, which were 49.3 percent higher in April 2025 than in April 2024.[85] As the United States is a large egg producer and consumer, this has produced a surge in global egg prices.[86]

q Similarly, demand-driven shocks were initially more important in explaining recent food price inflation in the United States of America; however, supply-related shocks started picking up around 2022.[88] This is further discussed in **Section 3.2.2**.

FIGURE 3.4 THE COVID-19 PANDEMIC AND THE WAR IN UKRAINE CONTRIBUTED TO COMMODITY PRICE FLUCTUATIONS



NOTES: Food price shocks refer to exogenous shocks to agricultural commodity prices (e.g. unanticipated surprises in aggregate global harvest volumes); food and energy price shocks refer to exogenous shocks to both agricultural and energy commodity prices (e.g. harvest and oil supply shocks).
* Data are available through December 2024.

SOURCE: Peersman, G. (forthcoming). *Understanding the post-COVID-19 pandemic surge in food price inflation – Background paper for The State of Food Security and Nutrition in the World 2025*. FAO Agricultural Development Economics Working Paper 25-06. Rome, FAO.

https://doi.org/10.4060/cd6008en-fig3.4

By 2024 the energy price shocks had placed additional pressure on global food commodity prices (Figure 3.4B).

What caused food prices to increase?

Shocks in agricultural and energy commodity markets played an important role in the post-pandemic surge in global food prices. The timing and intensity of the shocks to commodities and energy prices varied across regions, but the combined effect was a sustained increase in consumer food prices. Despite food commodity prices beginning to decline in late 2022, the food CPI has remained elevated. This persistence is explained by delayed pass-through effects, sticky prices and the cumulative impact of multiple supply chain disruptions. In the euro area,[r] additional factors such as labour cost pressures and exchange rate depreciation have further amplified food price inflation, in contrast to the United States of America, where the impact has been more contained.[89]

Commodity prices – of both food and energy – have been key contributors to recent food price inflation, with exogenous supply-side shocks playing an increasingly prominent role in the post-pandemic era. The rapid increase in food and energy commodity prices after 2020 directly

r European Union Member States that have adopted the euro as their currency.[90]

contributed to higher food price inflation. As a result, food prices in 2022 and 2023 rose well above their historical trend, with input cost shocks alone explaining a large share of the increase. At the inflation peak, the difference between the observed and the baseline inflation was 6.9 and 11.8 percentage points in the United States of America and the euro area, respectively. The pure effect of exogenous food shocks on food price inflation was small; its contribution explains 3 percent and 8 percent of the increase in food price inflation in the United States and the euro area, respectively. However, including the exogenous effects of energy shocks, those contributions increase to 14 percent and 18 percent, respectively (Figure 3.5 – green line).

Broader macroeconomic conditions amplified the impact of commodity market developments on food price inflation. When additional pressures from broader macroeconomic developments were taken into account, such as commodity input costs for food producers and retailers, the estimated contribution of commodity price dynamics rises to 47 percent in the United States of America and 35 percent in the euro area at the inflation peak (in the United States the inflation peak was in the third quarter of 2022 and in the euro area it was in the first quarter of 2023) (Figure 3.5 – purple line). This represents the contributions of exogenous commodity market shocks and the indirect effects of other macroeconomic shocks through commodity markets, that is, insofar as these other shocks affected the commodity input costs of food producers and retailers. These figures underscore the significant pass-through of agricultural and energy commodity price increases to retail food prices during this period.

However, commodity-driven inflation does not fully explain the extent of the price pressures observed. Actual peaks in food price inflation reached 10.6 percent in the United States of America and 15.7 percent in the euro area, pointing to other contributing factors such as rising labour costs, exchange rate fluctuations and increases in profit margins along the supply chain.[34, 37] In the United States, 53 percent of the increase was driven by markets unrelated to agricultural and energy commodities, compared to 65 percent in the euro area. While earlier inflation dynamics were shaped by pandemic-related demand shifts and policy responses, the more recent acceleration has been fuelled by geopolitical tensions and supply-side disruptions – most notably the war in Ukraine.

Rising concerns about market concentration and the exercise of market power have emerged as food prices remain elevated despite easing input costs. Policymakers increasingly point to dominant companies in the food supply chain as contributing to price stickiness and inflation persistence. The European Commission has criticized large food companies for using their bargaining power to suppress payments to farmers while raising consumer prices.[91] In the United States of America, "greedflation", implying that food suppliers and retailers exploit inflationary conditions to amplify profits, has been a subject of debate.[92] The Australian Council of Trade Unions argues that high market concentration in the grocery retail sector enables a "rocket and feathers" pricing strategy, where prices rise quickly when costs increase but fall slowly when costs decline, reflecting limited competitive pressures.[93]

Market concentration is a systemic issue that undermines efficiency and affordability across the entire agrifood value chain, from inputs to processing and retail, affecting both developed and developing countries. In Mexico, the Federal Economic Competition Commission (COFECE) found that one dominant firm in the maize flour sector, critical for producing tortillas – a daily staple for nearly 70 percent of the population – exercised significant market power to raise prices, leading to preliminary sanctions. Similar dynamics are evident in agricultural input markets.[94] A Common Market for Eastern and Southern Africa (COMESA) analysis of fertilizer imports in Southern and Eastern Africa revealed oligopolistic market structures, with only two to five firms dominating international sourcing.[95] This lack of competition resulted in mark-ups exceeding 40 percent in 2023 and impeded the transmission of falling global prices to local markets.

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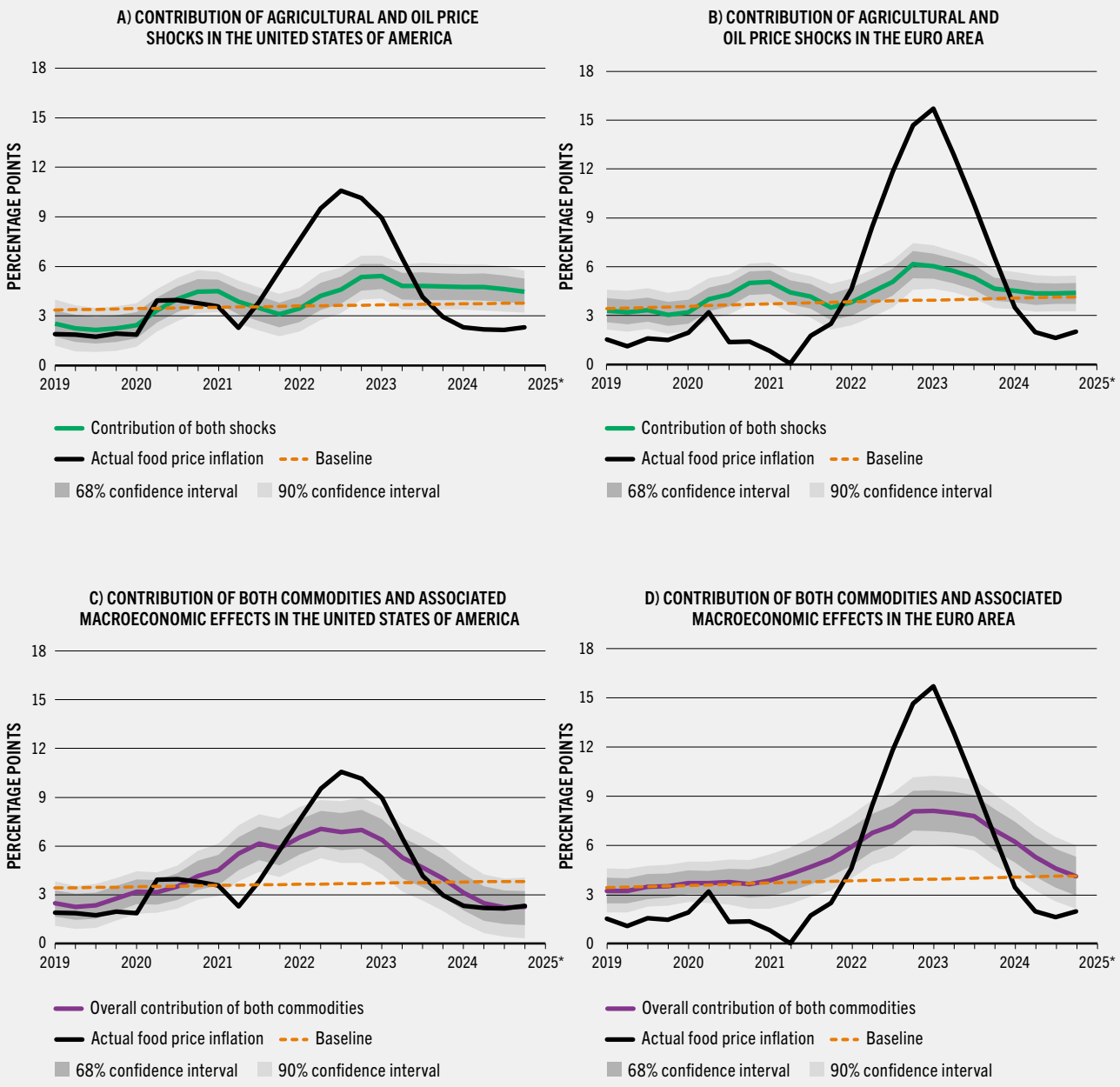
FIGURE 3.5 EFFECTS OF COMMODITY SHOCKS ON FOOD PRICE INFLATION WERE HIGHER IN THE UNITED STATES OF AMERICA THAN IN THE EURO AREA



NOTES: Percentage points cumulative contribution of the shocks relative to the baseline evolution are implied in the Vector Autoregressive (VAR) model, together with actual food price inflation (black line). The contribution of both shocks quantifies the sum of the effects of exogenous food and energy price shocks. The overall contribution of both commodities also accounts for the consequences of endogenous fluctuations in both commodity prices. Confidence intervals were constructed using a moving block bootstrap. * Data are available through December 2024.

SOURCE: Peersman, G. (forthcoming). *Understanding the post-COVID-19 pandemic surge in food price inflation – Background paper for The State of Food Security and Nutrition in the World 2025*. FAO Agricultural Development Economics Working Paper 25-06. Rome, FAO.

https://doi.org/10.4060/cd6008en-fig3.5

» **Market power may distort the transmission of international price signals to domestic food markets, contributing to inflation persistence and asymmetries in price adjustment.** Economic theory suggests that in oligopolistic markets, firms are reluctant to lower prices for fear of triggering price wars, leading to downward price rigidities.[96] This behaviour can result in asymmetric price transmission: domestic food prices rise quickly in response to global commodity shocks but adjust slowly, or not at all, when international prices decline. Such patterns have been observed since 2022, when successive global shocks caused food price spikes, yet recent declines in commodity markets have not been fully reflected in consumer prices. Empirical studies from food-importing countries have linked these asymmetries to market concentration.[97–99] However, the evidence remains mixed. For instance, Hernández *et al.* (p. 52)[100] document that "the relationship between concentration and market power exertion is multifaceted, and the evidence supporting market power abuse or anticompetitive behaviour is not generally obvious and may be context-specific."

3.2.2 Is the 2021–2023 food price inflation like past food price inflation episodes?

Food prices are inherently volatile, often driven by a combination of demand-side and supply-side shocks that shape historic inflation patterns. Understanding the difference between these two forces is crucial for grasping how food price inflation unfolds and how it affects economies. Demand-side shocks occur when there is a sudden and unexpected increase in consumer demand for food products. Supply-side shocks arise in response to disruptions in the production or distribution of food commodities.[88, 101]

Food price inflation can arise from both demand-side and supply-side shocks, but their origins and impacts on the economy are markedly different. Demand-side shocks result from factors such as economic expansion, income growth, or shifts in consumption patterns – like the surge in food-at-home demand during the pandemic.[36, 102] These shocks typically lead to rapid price increases as more consumers compete for limited supplies. While demand-driven inflation can be significant, it often moderates as consumption patterns normalize or as supply catches up. In contrast, supply-side shocks are frequently caused by adverse weather events, geopolitical conflicts, or sharp increases in the cost of inputs such as energy and fertilizers. A prominent example is the war in Ukraine, which has significantly disrupted global supplies of grains and fertilizers, leading to a steep and prolonged rise in food prices.[103, 104] Unlike demand-side shocks, which may have a more immediate but short-lived impact, supply-side shocks tend to create persistent inflationary pressures, as rebuilding production capacity and restoring supply chains can take considerable time.

Recognizing the difference between these types of shocks is essential for designing effective policy responses. Tackling demand-side shocks often involves measures like targeted social assistance to support vulnerable populations or temporary tax exemptions and price policies to curb excessive inflation. Addressing supply-side shocks, on the other hand, may require increasing domestic production, releasing strategic reserves or enhancing trade flexibility to compensate for supply disruptions. Policymakers must accurately diagnose the underlying causes of food price inflation to implement targeted and efficient responses, thereby mitigating the adverse impacts on food security and economic stability.

Historically, food price inflation has been predominantly driven by supply-side shocks, as evidenced in two recent major inflationary episodes. The surge in food prices in previous periods, such as the 2007 to 2008 and 2011 to 2012 crises, was largely attributed to unexpected disruptions in agricultural production, often triggered by adverse weather events, supply chain interruptions or global market shocks.[105] This pattern reflects the inherent volatility of agricultural supply, which is highly susceptible to unexpected shortages or surpluses due to weather and trade policies, among other factors.

However, the most recent surge in food price inflation, beginning with the onset of the pandemic in early 2020, marked a departure from the typical pattern by being initially demand-driven. The pandemic-induced recession and subsequent economic recovery led to a sharp increase in consumer demand, particularly for local food, as mobility restrictions and health concerns shifted consumption patterns.[106] This shift resulted in large year-on-year increases in food prices not seen since the 1970s, with demand-side shocks contributing over 5 percentage points of the inflation at its peak in the United States of America.[105]

As supply chain disruptions and geopolitical tensions, especially the war in Ukraine, unfolded, supply-side factors began to assert a more significant influence, prolonging inflationary pressures. Consequently, while demand-side shocks played a prominent initial role, the subsequent supply constraints compounded the situation, reflecting a complex interplay of demand- and supply-side dynamics in the most recent episode of food price inflation. The impact of supply-side shocks varies and tends to be greater in the euro area than in the United States of America.[89, 106] ■

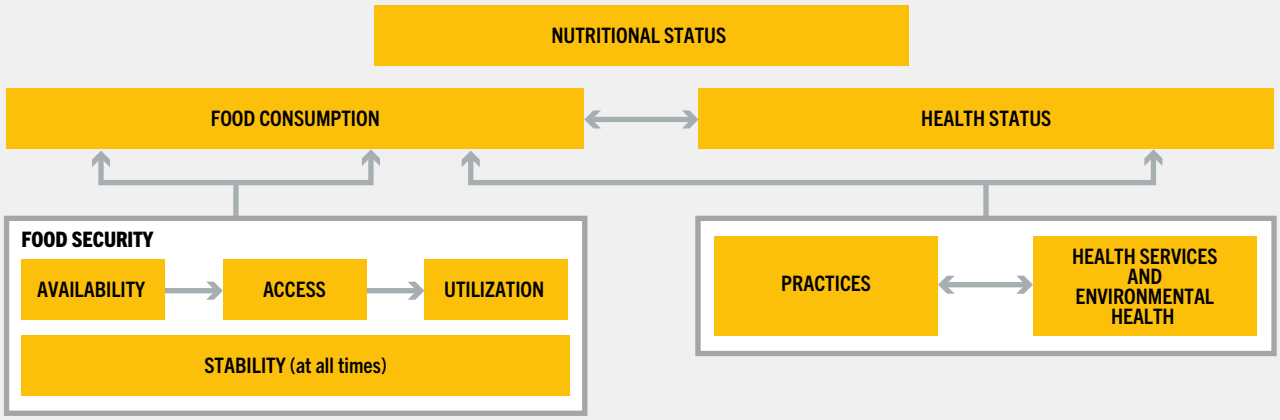
3.3 FOOD PRICE INFLATION PUTS PRESSURE ON FOOD SECURITY AND NUTRITION OUTCOMES

Understanding the implications of food price inflation requires a comprehensive view of how rising prices affect different aspects of food security and nutrition. Building on the analytical framework used in previous editions of *The State of Food Security and Nutrition in the World*, four key dimensions are considered:

- availability (the physical presence of safe and nutrient-dense food);
- access (people's physical and economic capacity to obtain it);
- utilization (individuals' ability to absorb and benefit from the nutrients consumed); and
- stability (the consistency of these conditions over time, especially in the face of shocks or cyclical pressures).

Recent global shocks (discussed in Section 3.2) have significantly disrupted global food availability, access, utilization and stability. These events have constrained exports from major food-producing countries, disrupted access to essential inputs like fertilizers and energy, and impaired critical trade routes. This in turn has compromised the availability of food, especially in net food-importing developing countries. Beyond supply constraints, rising food prices have eroded households' economic access to food. Reduced purchasing power could originate from loss of income, occurring frequently in time of economic crisis or slowdown, or due to sharp increases in consumer prices: both will reduce real income with similar effects on consumers, but with significantly different causes, and therefore solutions. While, in theory, rising wages could offset the effects of food price inflation, evidence presented in **Section 3.3.1** suggests that incomes have not kept pace with food price increases in the short term, reducing households' capacity to access food. Furthermore, as food prices increase,

FIGURE 3.6 FOOD SECURITY AND NUTRITION DIMENSIONS AND DETERMINANTS



SOURCE: FAO, IFAD, UNICEF, WFP & WHO. 2024. *The State of Food Security and Nutrition in the World 2024 — Financing to end hunger, food insecurity and malnutrition in all its forms*. Rome. https://doi.org/10.4060/cd1254en

households may reduce their diet diversity (usually relying on cheaper foods) and change their intrahousehold allocation patterns to the detriment of women (see **Section 3.3.2**). Thus, food price inflation may have negative effects on households' capacity to maintain adequate food utilization. Thus, high levels of food price inflation can affect food consumption and food security through two mechanisms. The first is an *income effect*, where higher prices erode households' real incomes restricting their overall food consumption. The second is a *substitution effect*, where households might readjust their consumption patterns towards relatively cheaper food items (potentially less nutrient-dense and of lower quality). The extent and duration of this income price misalignment varies across countries, but it has weakened the overall stability of food security for many vulnerable populations.

Food price inflation is associated with higher food insecurity and worse nutritional outcomes. Section 3.3.2 examines the relationship between rising food prices and food insecurity, using estimates based on the Food Insecurity Experience Scale (FIES) and finds a clear association between higher inflation and increased food insecurity. **Section 3.3.3** explores whether food price inflation is also linked to a deterioration in nutritional outcomes, particularly among children under five, by analysing key nutrition indicators while controlling for confounding factors such as access to clean water, sanitation and public health services. As illustrated in the conceptual framework (Figure 3.6), nutritional status depends not only on food consumption but also on broader health and environmental factors, including feeding practices, food preparation, immunization and healthcare access. Despite the complexity of this relationship, the analysis finds that higher food price inflation is associated with a greater prevalence of acute malnutrition in children.

3.3.1 Inflation deteriorates real income

Inflation erodes household purchasing power, making it harder for families to afford essential goods and services. While real incomes are ultimately tied to workers' productivity, wages and prices often adjust at different speeds in the short term, particularly as economies absorb external shocks and disruptions. This temporary misalignment can create significant hardships for households, even when long-term economic fundamentals remain stable. A growing body of evidence shows that even short-lived economic

shocks, such as macroeconomic crises, food scarcity or extreme weather events, can have long-lasting effects when they occur during critical periods of human development, including *in utero* and in early childhood.[107–110] These adverse effects on long-term health outcomes underscore the importance of timely and targeted policy responses to mitigate the consequences of inflation, especially for vulnerable population groups.

The recent surge in global inflation (2021 to 2023) has had substantial adverse effects on living conditions. Global real wages[s] decreased by 0.9 percent in 2022 as inflationary pressures intensified[104, 111] – consistent with evidence that large-scale economic shocks can lead to surges in inflation and a consequent decline in real wages. Countries such as Myanmar and Sri Lanka have recently experienced severe socioeconomic crises. In Sri Lanka, during the major macroeconomic crisis of 2022, poverty rates doubled from 13 percent (2021) to 26 percent (2022). Similarly, in Myanmar, the economic contraction following the 2021 military coup resulted in increases in poverty rates of 19 percent and 32 percent in urban and rural areas, respectively.[112]

Previous inflationary episodes offer important lessons on recovery patterns. During the food crises of 2007 to 2008 and 2011 to 2012, in Ethiopia, real food wages – i.e. wages adjusted for food price inflation – fell by 22 percent, worsening food insecurity and economic vulnerability. As the economy stabilized, however, wage growth outpaced inflation, leading to a 60 percent increase in real food wages between 2013 and 2018.[112] A similar pattern is emerging today, with real wages beginning to recover after a sharp decline in 2022. Global real wages rose by 1.8 percent in 2023 and 2.7 percent in 2024.[111]

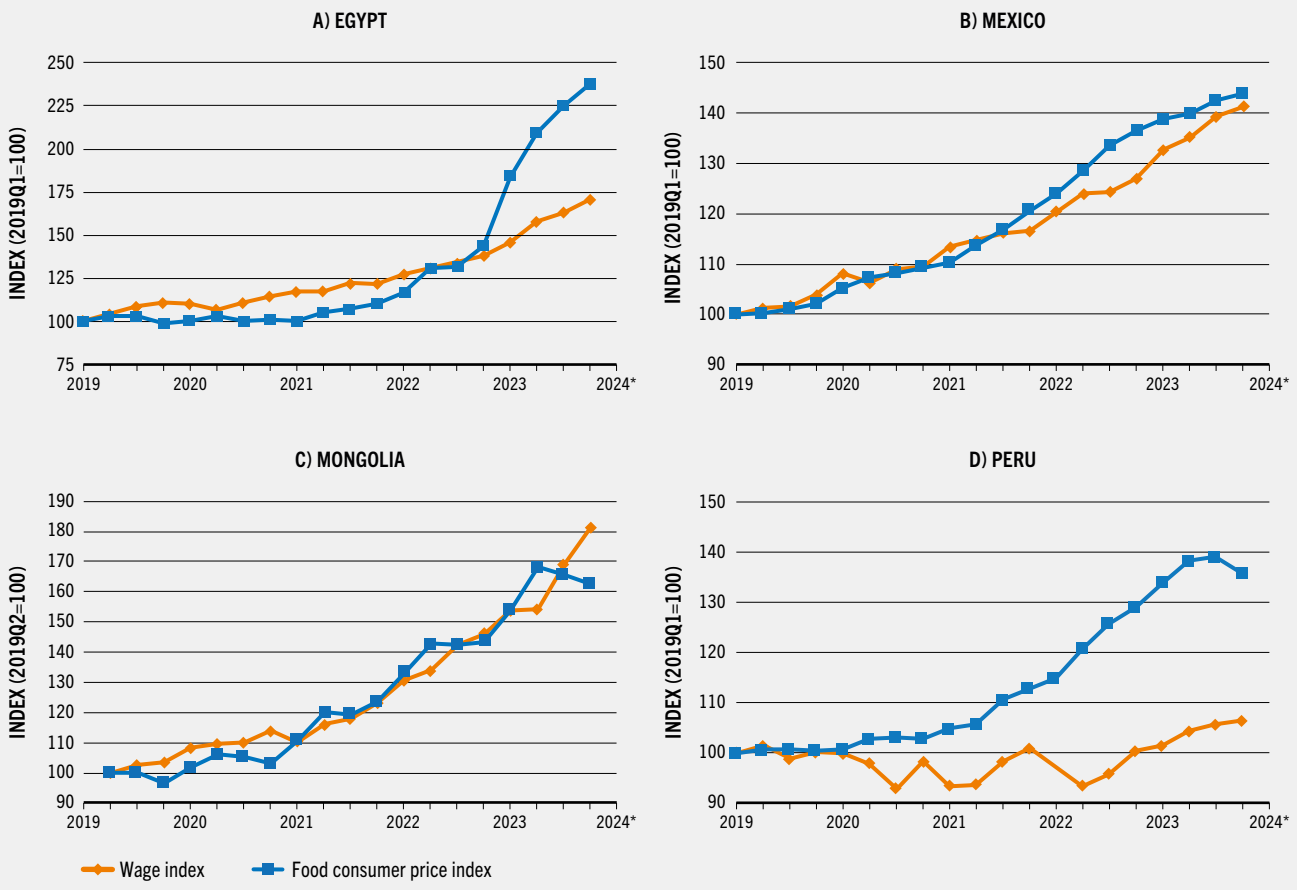
The global wage fallout and recovery process has been highly uneven, with some countries experiencing parallel movements in earnings and food prices, which have helped maintain relatively stable earnings in real terms. Figure 3.7 illustrates trends in monthly employee earnings, based on ILO data, alongside food price inflation across selected countries. In Mongolia (Figure 3.7C), earnings and food prices have largely moved in tandem, helping stabilize food-adjusted wages despite short-term fluctuations.[113] A similar pattern is observed in Mexico (Figure 3.7B), where earnings and food price trends have generally aligned.

Many countries, however, are experiencing sustained declines in real earnings, making it more challenging for households to meet basic food needs. In Egypt (Figure 3.7A), the heavy reliance on wheat imports from the Russian Federation and Ukraine, compounded by a severe shortage of foreign currency, has caused food prices to increase significantly faster than earnings since mid-2022.[114, 115] In Peru, food prices surged markedly from early 2020 to late 2023. By late 2023, workers' earnings had increased by only 6.6 percent, while food prices had risen by 34.5 percent relative to their pre-COVID-19 pandemic (2020Q1) levels (Figure 3.7D).[116] Overall, the evidence underscores the fact that the recent inflationary period has placed households' food budgets under heavy strain in some countries.

Conflict-affected countries have faced particularly acute challenges, as sustained declines in real wages have made it increasingly difficult for households to meet basic food needs. While ILO's dataset provides valuable insights into employees' monthly earnings, its scope is limited, often excluding self-employed workers, those in smaller firms, the informal economy and rural areas. To address this gap, Box 3.4 draws on complementary data from the World Food Programme (WFP), tracking unskilled labour wages and staple food prices in local markets across Iraq, the Syrian Arab Republic and Yemen between 2020 and 2024. These data offer a more nuanced view of vulnerable workers in conflict-affected countries. All three countries experienced significant declines in real food wages (i.e. wages adjusted by food price inflation) over this period, with recovery trajectories proving uneven. In large part due to persistent conflict and instability, unskilled wages have yet to return to early 2020 levels.

s Unfortunately, there are no comprehensive and comparable data available for global incomes (or labour incomes). However, there are consistent time series for earnings (of employees) from the International Labour Organization (ILO) for selected countries. While these data exclude earnings from self-employed individuals (including farmers), earnings data are used as a proxy for labour incomes throughout this section.

FIGURE 3.7 THE GLOBAL FALLOUT AND RECOVERY PROCESS OF AVERAGE EMPLOYEE MONTHLY EARNINGS HAS BEEN HIGHLY UNEVEN, AS SHOWN IN THE CASES OF EGYPT, MEXICO, MONGOLIA AND PERU



NOTES: The indices are based on 2019Q1=100 (except for Mongolia, where 2019Q2=100). Quarterly consumer price indices (CPIs) are estimated as geometric means of the monthly data. These data only include information about wage earners. Thus, they do not reflect the situation of farmers in rural areas. Data are missing for the first quarter of 2021 in Peru due to a break in the series. * Wage index and food CPI data are available through the fourth quarter of 2023.

SOURCES: Data for nominal monthly earnings of employees are based on ILO. 2025. ILOSTAT: Statistics on wages. [Accessed on 10 March 2025]. https://ilostat.ilo.org/topics/wages. Licence: CC-BY-4.0; data for the food consumer price index are based on FAO. 2025. FAOSTAT: Consumer Price Indices. [Accessed on 18 June 2025]. https://www.fao.org/faostat/en/#data/CP. Licence: CC-BY-4.0.

https://doi.org/10.4060/cd6008en-fig3.7

As households experience temporary or more prolonged declines in their real incomes, they employ various strategies to cope with shocks. These include distress sales of assets, including productive capital; increased reliance on remittances from migrants; diversification of income sources; and reductions in spending on other important items, such as preventive health care or children's education.[117, 118] Notably, households may also adjust their food consumption. This can involve shifting to cheaper, less nutrient-dense food items,[119] reducing the diversity and frequency of meals,[120] or prioritizing food for certain members – often reducing the quantity of food women and children consume – to ensure that other household members have sufficient food intake.[121, 122]

Evidence highlights the widespread nature of these strategies also across previous inflationary periods. In Kenya and Uganda, a rapid assessment during the pandemic found that at least 40 percent of respondents altered their diets by consuming a narrower variety of foods, skipping meals, or reducing portion sizes.[123] In Nairobi's slums, 69 percent of households reported eating fewer meals per day.[124] In rural North Central Nigeria, 95.8 percent of households reported relying on fewer preferred foods, while 83.5 percent reduced meal portions.[125] Similarly, in northern Ghana, 69 to 97 percent of households reduced meal quantity or frequency during hunger periods.[126] In Palestine, a WFP assessment found that amid sharp food price increases – 15 percent in the food CPI and 70 percent for wheat flour – half of »

BOX 3.4 REAL FOOD WAGE ANALYSIS IN SELECTED CONFLICT-AFFECTED COUNTRIES

In conflict-affected countries, real food wage dynamics present a critical picture of food affordability and purchasing power amid high inflation and disrupted economies. Prolonged conflict, economic instability and global crises, such as the COVID-19 pandemic and the war in Ukraine, have severely affected food prices and nominal wages, widening the gap between income and essential expenditures. As wages often fail to keep pace with rapidly increasing food prices, households experience diminished purchasing power, aggravating poverty and food insecurity.

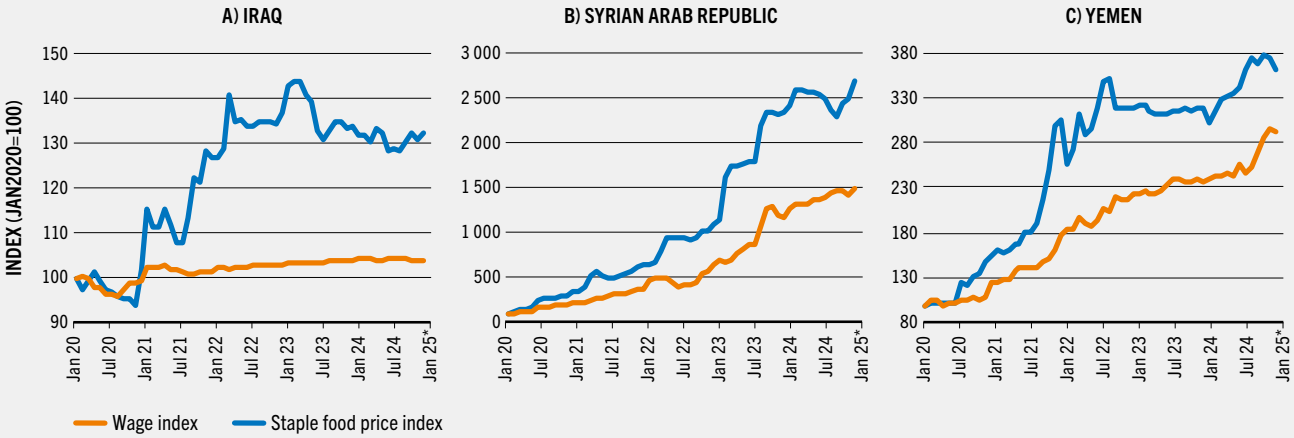
The real food wage analysis uses nominal wages as a proxy for income, adjusted for food price inflation using a staple food price index. The index tracks the price of the primary staple food (wheat flour) in each country, normalized to the first observation in the time series. Real food wages are calculated by deflating nominal wages with this index, converted into 2021 purchasing power parity (PPP) dollars for cross-country comparability. The analysis covers data from January 2020 to December 2024. Data were sourced from market-level observations in conflict-affected countries, aggregated to national averages.

In **Iraq** (Figure A, Panel A), real food wages have been slow to recover from the shock induced by the pandemic and subsequent economic turmoil. The implementation of a currency devaluation at the end of 2020 led to a sharp increase in food prices, while global spikes in food and energy prices following the outbreak of the war in Ukraine further exacerbated the situation. Though nominal wages saw slight, steady increases, they remained insufficient to counterbalance the escalating cost of staples. By the end of 2024, real food wages in Iraq were still significantly lower than their pre-pandemic levels, reflecting the ongoing struggle of households to maintain purchasing power in the face of persistent challenges.

In the **Syrian Arab Republic** (Figure A, Panel B), prolonged conflict and economic distress have been compounded by global crises, leading to significant surges in food prices while wages have lagged behind. Between 2020 and 2024, the Syrian economy suffered from food and fuel shortages, economic sanctions, and currency depreciation. These factors, combined with the ripple effects of the war in Ukraine, resulted in steep increases in staple food prices, especially in 2021 and 2022. Although wages began to adjust upwards starting in 2023, real food wages remained substantially below the January 2020 baseline. With the collapse of the Baathist-led government at the end of 2024, the outlook for economic stabilization and recovery remains uncertain.

In **Yemen** (Figure A, Panel C), enduring conflict has left the economy fragile, with food prices persistently high throughout the analysis period. The dual shocks of the pandemic and the war in Ukraine further aggravated food price inflation in the country. A six-month truce in 2023 brought a brief period of price stability. It also brought a moderate increase in nominal wages, but the rate of increase was notably slower than the escalation in food prices observed in 2021 and 2022. By the end of 2024, despite some recovery in purchasing power, real food wages were still significantly lower than in January 2020, highlighting the prolonged impact of economic disruptions and conflict on household purchasing power.

FIGURE A IN CONFLICT-AFFECTED COUNTRIES THE GAP BETWEEN FOOD PRICES AND WAGES WAS NOT CLOSED BY 2024



NOTES: Data for Panel C refer to the southern part of Yemen administered by the Internationally Recognized Government of Yemen. The staple food price index tracks the price of the primary staple food (wheat flour) in each country, normalized to the first observation in the time series. Real food wages are calculated by deflating nominal wages with this index, converted into 2021 purchasing power parity (PPP) dollars for cross-country comparability.
* Wage and staple food price data are available through December 2024.

SOURCE: Authors' (WFP) own elaboration based on unpublished WFP data.

https://doi.org/10.4060/cd6008en-figB3.4A

» all households reduced their food consumption, primarily by cutting down on meat and dairy consumption (89 percent), but also by reducing overall quantity (76 percent).[120]

3.3.2 Inflation deteriorates food security

Food price increases can potentially affect households' food security.[t] Between 2014 and 2024, countries at different income levels experienced varying degrees of food insecurity, with notable increases coinciding with periods of food price spikes.[u] This section explores how trends in annual food prices from 2014 to 2024 relate to average food insecurity levels across countries grouped by income (Figure 3.8).

Low-income countries experiencing the highest rates of food price inflation (Figure 3.8A) also face large increases in the prevalence of food insecurity. This relationship has been particularly pronounced since the beginning of the current period of inflation, as food prices have risen sharply since 2020, coinciding with an accelerated increase in the prevalence of food insecurity. Between 2019 and 2024, the prevalence of moderate or severe food insecurity increased by 6.7 percentage points, and the prevalence of severe food insecurity by 3.5 percentage points. From a policy perspective, this trend is especially concerning as the majority of households in LICs are those most vulnerable to shocks including sharp spikes in food prices.

Lower-middle-income countries (Figure 3.8B) **also experienced substantial increases in food insecurity.** Although food price inflation in this group averaged 7 percent annually from 2019 to 2024 – less than the 11 percent seen in LICs – the prevalence of moderate or severe food insecurity rose by 5.6 percentage points, and of severe food insecurity by 1.6 percentage points. This sharp rise likely reflects the impact of conflict in several countries in this group[v] (such as Lebanon and Myanmar), alongside broader economic pressures. Large populations in other countries affected by conflict (such as Nigeria and Pakistan) also contribute to the group's overall rates, highlighting the complex and interlinked drivers of food insecurity across contexts.

In contrast, food insecurity remained relatively unchanged in UMICs and HICs (Figure 3.8C and Figure 3.8D). The prevalence of moderate or severe food insecurity rose by 0.9 percentage points in HICs and declined by 1.2 percentage points in UMICs. This could be related to several factors. For example, these countries (especially HICs) have experienced lower inflation rates (Figure 3.2), and household's purchase capacity to afford their dietary needs has thus not been as eroded as in other regions. Additionally, higher-income countries tend to have lower levels of inequality.[130] The analysis below suggests that food insecurity in less unequal countries is not as responsive to increased food price inflation when compared to countries with high levels of inequality. Furthermore, wealthier countries tend to have stronger social protection networks and greater resources to aid their populations in times of distress. In particular, elevated levels of aid – such as the relief programmes implemented during the pandemic – likely helped cushion the impact of inflation on food security.[w] For instance, several HICs expanded their social protection programmes and implemented additional subsidies for food and energy to curb the impacts of food price inflation on their population's living conditions (see **Section 4.1**). »

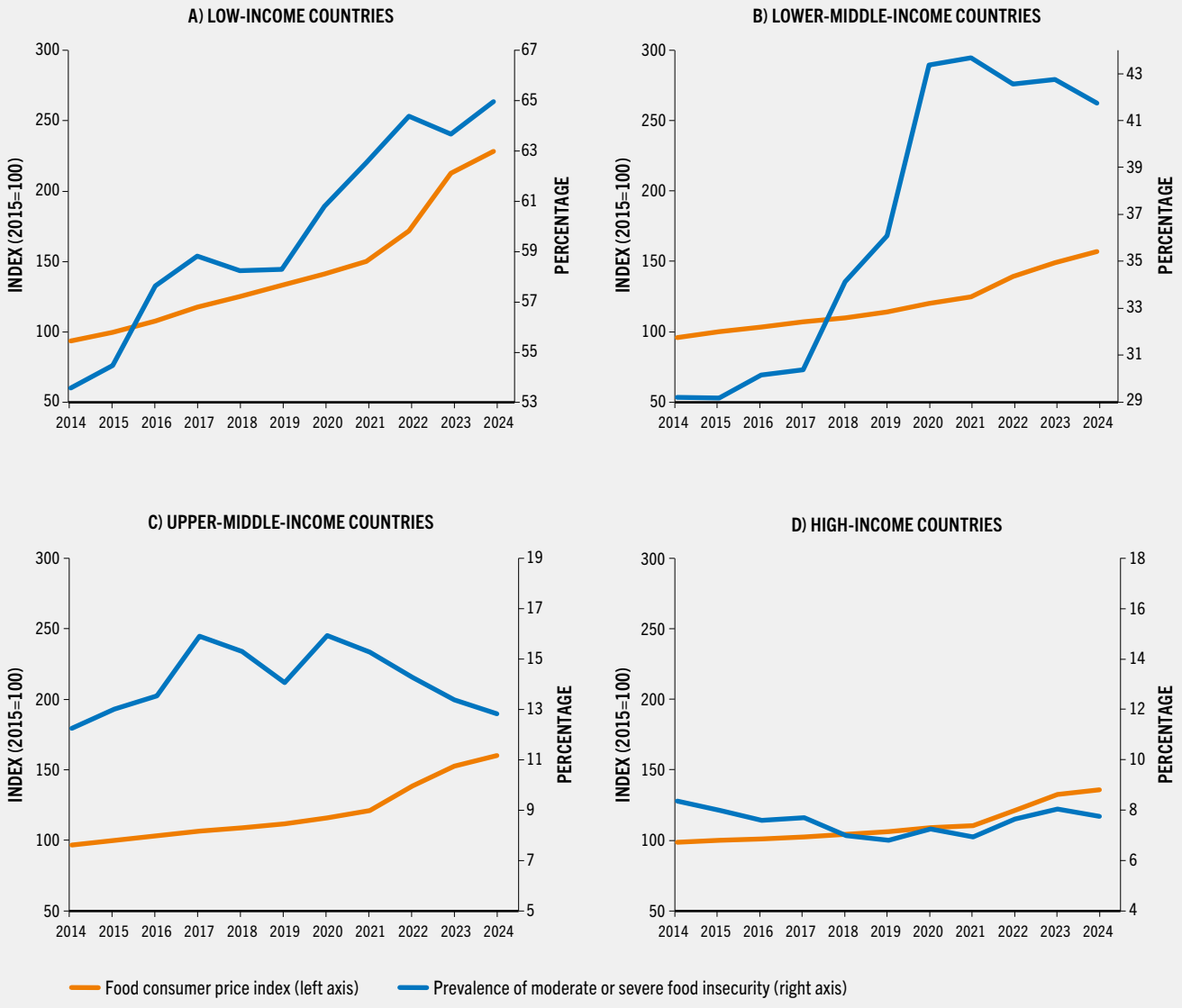
t For example, an FAO study in nine countries finds that price increases in key internationally traded staple foods reduce households' welfare in the short run. These impacts are more detrimental among vulnerable population groups, such as landless and female-headed households.[127]

u This analysis is based on data from the Food Insecurity Experience Scale, which captures individuals' inability to access sufficient food due to financial or resource constraints.[128] The FIES methodology identifies population groups experiencing moderate or severe food insecurity, defined as the inability to access food due to lack of money or other resources. Moderately food-insecure people are those who have been forced to decrease the quality and quantity of the food they consume, whereas severely food-insecure people are those who have likely run out of food, experienced hunger and, at the most extreme, gone for days without eating.

v For the full list of countries affected by conflict, see the Supplementary material to the 2024 edition of this report.[129]

w For example, the US Government implemented several federal assistance programmes such as the Coronavirus Aid Relief and Economic Security Act; there were temporary increases in benefits from the Supplemental Nutrition Assistance Program, the COVID-19 Relief Bill of December 2020, and the American Rescue Plan Act. Through the provision of economic impact payments, expanded tax child credit, enhanced unemployment benefits, and food assistance, these programmes limited hunger and material hardship.[131–134] Canada also implemented several assistance programmes to mitigate the impacts of the pandemic, such as the Canada Emergency Response Benefit, the Canada Recovery Benefit, the Canada Recovery and Caregiving Benefit, the Canada Recovery Sickness Benefit, and the Canada Emergency Student Benefit. The most important one – the Canada Emergency Response Benefit – provided benefits to 25.1 percent of all Canadian adults, with a median of CAD 8 000 per recipient.[135]

FIGURE 3.8 LOW- AND LOWER-MIDDLE-INCOME COUNTRIES EXPERIENCED HIGH LEVELS OF MODERATE OR SEVERE FOOD INSECURITY AND FOOD PRICE INFLATION

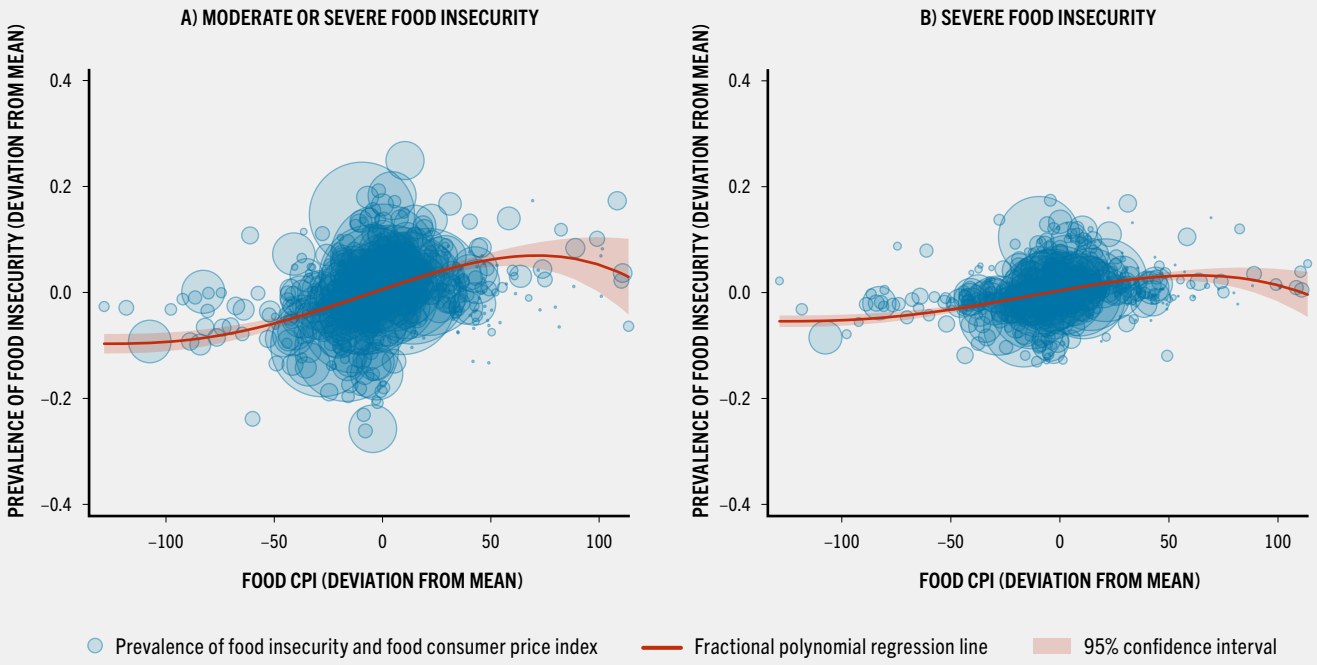


NOTES: FAO's Food Insecurity Experience Scale (FIES) survey data are from 2014 to 2024. Food consumer price index (food CPI) data are estimated as the geometric mean of monthly food CPIs in each year. In each panel, the left axis shows the variation in the food CPI (normalized to 2015=100). The right axis shows the yearly evolution of the prevalence of moderate or severe food insecurity. Due to pronounced differences in the rates of food insecurity across income groups, the right axis has different ranges for each group. However, all axes have been scaled to reflect a 14-percentage point range. An alternative presentation of the evaluation of the prevalence of food insecurity could include an index of the number of people experiencing food insecurity (normalized to 2015=100). This analysis yields qualitatively similar results.

SOURCE: Nakasone, E. & Ignaciuk, A. (forthcoming). *A global assessment of food price dynamics and food insecurity – Background paper for The State of Food Security and Nutrition in the World 2025*. FAO Agricultural Development Economics Working Paper 25-09. Rome, FAO.

https://doi.org/10.4060/cd6008en-fig3.8

FIGURE 3.9 RELATIONSHIP BETWEEN FOOD INSECURITY AND FOOD PRICES, 2014–2024



NOTES: This analysis uses survey data from a representative random sample of approximately 1 000 individuals across 143 countries, collected annually between 2014 and 2024, to estimate global food insecurity through FAO's Food Insecurity Experience Scale (FIES). On average, each country contributes seven rounds of FIES surveys. The FIES questionnaire gathers self-reported data on individuals' experiences with limited access to food due to financial constraints in the 12 months prior to the survey. Probabilities of moderate or severe food insecurity are estimated based on these responses. The FIES data are then matched with the average food consumer price index (CPI) for each reference period (i.e. the 12 months preceding the survey). Based on these surveys, the prevalence of food insecurity (moderate or severe in Panel A and severe in Panel B) in each country–year is estimated. These graphs present the relationship between ($FIES_{it} - \overline{FIES_i}$) on the vertical axis and ($FoodCPI_{it} - \overline{FoodCPI_i}$) on the horizontal axis. $FIES_{it}$ and $FoodCPI_{it}$ are the prevalence of food insecurity and food CPI during year *t* in country *i*, respectively. $\overline{FIES_i}$ and $\overline{FoodCPI_i}$ are the average prevalence of food insecurity and average food CPI in country *i* over the sample period, respectively. The figure measures how countries' deviations in their food prices (relative to their average food prices) are associated with changes in food insecurity (relative to their average levels of food insecurity). The line represents the linear relationship between both variables, weighted by each country's population. The size of each dot in the graph represents each country's population. The red line is the regression line based on a flexible fractional polynomial estimation (with regression error terms clustered at the country level). The red shaded area around the regression line is the 95 percent confidence interval of the estimate.

SOURCE: Nakasone, E. & Ignaciuk, A. (forthcoming). *A global assessment of food price dynamics and food insecurity – Background paper for The State of Food Security and Nutrition in the World 2025*. FAO Agricultural Development Economics Working Paper 25-09. Rome, FAO.

» **An increase in food prices is associated with a rise in food insecurity.** Figure 3.9 illustrates the relationship between food insecurity and food prices[x] between 2014 and 2024 with a scatterplot of the prevalence of food insecurity for each country–year combination in the FIES dataset alongside the average food CPI[y] individuals faced. It shows a positive but non-linear association between food insecurity and food prices. For most observations in the data, higher food prices are correlated with larger rates of food insecurity. However, it appears that when countries are already burdened by high food prices, additional

x This analysis is consistent with an investigation on the impact of inflation on food security during the 2007 to 2008 food crisis. To gauge the severity of food insecurity, the study relies on households' responses to the following question: "Have there been times during the past 12 months when you did not have enough money to buy the food that you and your family needed?" The study finds that while food insecurity did not increase across the board during the inflationary period associated with the food crisis, it did worsen in Africa, Latin America and the Near East.[140]

y For example, suppose that a survey was collected between April 2018 and July 2018. The reference period for this survey would then be April 2017 (April 2018 minus 12 months) to July 2018 (the last month relevant for those interviewed late in July). This information is matched with monthly food CPI data from FAO.[2] To estimate the average food CPI during the reference period, the geometric mean of the food CPIs between April 2017 and July 2018 is calculated.

price increases are not associated with higher food insecurity.

Several factors can influence the relationship between food prices and food insecurity, including country-specific characteristics and shocks. These differences can affect a country's or household's exposure, sensitivity and adaptive capacity to economic or environmental hazards. High food prices act as shocks, and households in more vulnerable countries are typically more prone to reduced food access.[137] Countries with stronger institutions and governance structures are generally better positioned to mitigate the impact of sharp food price increases on food security. Additionally, external shocks, such as economic downturns or climate extremes, can further exacerbate the link between food prices and food insecurity.[136, 138, 139] For instance, GDP contractions from macroeconomic shocks can create inflationary pressures while simultaneously limiting household access to food.[z, 136]

Food price inflation is associated with higher food insecurity. A 10 percent increase in food prices is associated with a 3.5 percent rise in moderate or severe food insecurity and a 1.8 percent increase in severe food insecurity (Figure 3.10), holding all other factors constant. In 2020, at the onset of the COVID-19 crisis, the global per capita GDP dropped by 3.8 percent,[142] reflecting the dramatic impact of the pandemic. This large economic contraction was associated with a considerable surge in food insecurity. The share of the global population that experienced moderate or severe food insecurity jumped from 25 to 28.8 percent between 2019 and 2020, with the share of those experiencing severe food insecurity increasing from 9.1 to 10.5 percent (see **Chapter 2**). As the global economy experienced a significant rebound (GDP per capita increased by 5.6 percent in 2021) and some milder growth in subsequent years (GDP per capita grew by 2.5 and 2.3 percent in 2022 and 2023, respectively), food insecurity was expected to return to pre-pandemic levels. However, this recovery has been modest and sluggish: by 2024, the prevalence of moderate or severe food insecurity was 28 percent (3 percentage points above the 2019 level). While the world has experienced several important shocks – such as the war in Ukraine, natural disasters, and livestock diseases, as discussed in **Section 3.2** – the results in this section suggest that food price inflation may have slowed down the recovery process.

The impact of inflation varies across different countries and groups. In particular, food price inflation is more strongly associated with food insecurity in countries with higher levels of income inequality compared to those with lower inequality[aa] (Figure 3.10). In more unequal countries, where vulnerable populations are larger and social protection mechanisms are weaker, even modest food price increases can have disproportionately harmful effects on food security. These findings underscore the importance of addressing inequality as a critical factor influencing global food security trends.[136, 144]

Food insecurity of women is disproportionately affected by food price inflation, reflecting persistent gender disparities (Figure 3.10). Women's traditional caregiving roles, limited access to productive resources, lower-paying jobs and reduced opportunities to utilize public services constrain their ability to cope with rising food prices.[145] This finding aligns with broader evidence showing that women frequently act as "shock absorbers" in times of crisis, often reducing their own food intake to prioritize that of other household members.[121, 146] For instance, during the pandemic, rapid assessments found that women were more likely to skip meals or reduce meal sizes compared to males,[147] underscoring their heightened vulnerability to food price inflation. A comparison of food insecurity among men and women based on the FIES – presented in **Section 2.1** – shows »

z For example, in an analysis of the impact of food price inflation on food security, the prevalence of undernourishment (i.e. an estimate of the proportion of the population that lacks enough dietary energy for a healthy, active life) is used as the primary measure of food insecurity. The results suggest that, while food price inflation has detrimental effects, GDP appears to be a much stronger factor in determining food insecurity.[141]

aa The classification of countries with higher or lower levels of inequality is based on the World Income Inequality Database of the United Nations University World Institute for Development Economics Research.[143] In particular, average Gini coefficients (a widely used measure of inequality) between 2000 and 2013 (the period before the analysis in this section) are calculated. Countries whose average Gini coefficients are above the median are considered to be those with "higher levels of inequality", while others are categorized as having "lower levels of inequality".

FIGURE 3.10 HIGHLY UNEQUAL COUNTRIES, WOMEN AND RURAL POPULATIONS ARE MORE VULNERABLE TO INCREASES IN MODERATE OR SEVERE FOOD INSECURITY ASSOCIATED WITH FOOD PRICE INFLATION

A) CHANGE IN MODERATE OR SEVERE FOOD INSECURITY ASSOCIATED WITH A 10 PERCENT INCREASE IN FOOD CONSUMER PRICE INDEX

B) CHANGE IN SEVERE FOOD INSECURITY ASSOCIATED WITH A 10 PERCENT INCREASE IN FOOD CONSUMER PRICE INDEX

NOTES: The figure shows the percentage change in food insecurity associated with a 10 percent increase in the food consumer price index. A more formal econometric model is estimated using the Food Insecurity Experience Scale (FIES) microdata to capture the relationship between food price inflation and food insecurity. Given the apparent non-linear relationship observed in Figure 3.9, a quadratic approach is employed to account for the positive yet diminishing effects of food price inflation on food insecurity. The model controls for several potentially confounding factors. First, country-fixed effects are included to account for time-invariant country characteristics, such as whether a country is landlocked, its natural resource endowments and the long-term strength of its institutions. This statistical model assesses whether changes in food price inflation are associated with changes in food insecurity within countries over time. Second, time-fixed effects are incorporated to control for global shocks in any given year, along with region-specific linear trends to adjust for pre-existing regional patterns in food price inflation and food security. Third, individual-level controls, including respondents' socioeconomic characteristics from the FIES surveys (e.g. age, sex, education level, household size, rural/urban location and national income quintile) are included. Lastly, the model incorporates country-wide variables to account for shocks that may simultaneously affect food prices and food security, such as per capita GDP and the occurrence of natural disasters (e.g. floods, droughts, pest infestations, earthquakes, tornadoes). FAO's Food Insecurity Experience Scale (FIES) survey data are from 2014 to 2024. For food consumer price index (CPI) data, the basic econometric model is the following: $Y_{icrt} = \beta_1 FCPI_{crt} + \beta_2 FCPI^2_{crt} + \delta X_{icrt} + \theta W_{crt} + (\gamma_r \times Time\ Trend) + \alpha_c + \lambda_t + \varepsilon_{icrt}$, where Y_{icrt} is the probability of food insecurity of individual *i* of country *c* in region *r* during year *t* and $FCPI_{crt}$ is the food consumer price index. The regression controls for the respondent's characteristics X_{icrt} (age, age squared, sex, indicator variables for level of education, number of adults in the respondent's household, number of children in the respondent's household, rural/urban location and the national income quintile to which the individual belongs), macroeconomic variables W_{crt} (GDP per capita and natural disasters), region-specific time trends γ_r, country-fixed effects α_c and year-fixed effects λ_t. The error term ε_{icrt} is clustered at the country level. In this setting, the percentage change in food insecurity associated with a 10 percent increase in food CPI is estimated as: $\Delta\% = 0.1/\overline{FIES}\ (\beta_1 + 2\beta_2\overline{FCPI}) \times \overline{FCPI}$. The Δ% is bootstrapped with 500 replications to estimate standard errors and 95 percent confidence intervals for this estimate.

SOURCE: Nakasone, E. & Ignaciuk, A. (forthcoming). *A global assessment of food price dynamics and food insecurity – Background paper for The State of Food Security and Nutrition in the World 2025*. FAO Agricultural Development Economics Working Paper 25-09. Rome, FAO.

https://doi.org/10.4060/cd6008en-fig3.10

» a considerable widening of the gender gap during the period from 2020 to 2021, in the wake of the pandemic.

Rural populations face heightened vulnerability to food price inflation due to structural and economic constraints. Figure 3.10 shows a stronger association between food prices and food insecurity in rural areas compared to urban ones. While in theory, higher food prices could benefit rural households if they are net sellers, empirical evidence shows that most rural households are net food buyers.[15–21] This limits their ability to gain from rising prices.[ab] Moreover, rural households typically devote a larger share of their income to food, leaving them with limited flexibility to adjust non-food expenditures.[ac] Therefore, they have fewer opportunities to cut down non-food non-essential expenses, making them more vulnerable to food price increases.

3.3.3 Inflation can affect nutritional outcomes

Rising food prices can restrict access to diverse diets for vulnerable groups, particularly children. For infants and young children during the complementary feeding period, animal source foods, legumes, nuts and seeds, and fruits and vegetables are crucial for optimal growth and development. Yet, these foods are frequently missing from young children's diets.[153] Complementary feeding practices for children aged 6 to 23 months increasingly emphasize the inclusion of nutrient-dense foods, while discouraging heavy reliance on starchy staples that provide energy but few essential micronutrients.[154] Food price inflation plays a significant role in shaping the diets of children, particularly in terms of achieving minimum dietary diversity (see **Section 2.3**). When vegetables and other nutrient-rich options are more expensive, families, especially those with limited resources, may opt for cheaper, ultra-processed alternatives that mostly lack essential vitamins and minerals to prepare meals for their young children. This cost barrier can lead to diets that fall short in quality and to malnutrition including stunting and wasting.[155]

Wasting, a key indicator of acute malnutrition, reflects the proportion of children under five years of age with low weight relative to their height.[ad] It is partly driven by short-term nutritional deficiencies, making it a useful measure for tracking the immediate impact of shocks on child nutrition. Among chronic indicators, stunting captures the long-term effects of inadequate nutrition, while wasting[ae] responds more quickly to economic or environmental crises. For instance, the prevalence of wasting tends to rise during negative income shocks,[157] such as those seen during the pandemic. The 2021 edition of this report[139] estimated that, under a moderate scenario, an additional 11.2 million children under five in low- and middle-income countries would be affected by wasting between 2020 and 2022 – including 6.9 million in 2020 alone. Under a pessimistic scenario, this figure could have risen to 16.3 million.

Wasted children are significantly more vulnerable to other health shocks and are at increased risk of mortality. Severe wasting, often triggered by inadequate access to nutrient-dense foods, weakens the digestive system's ability to absorb nutrients and impairs the immune system's capacity to combat even common illnesses. A severely wasted child is up to 11 times more

ab This is consistent with findings in previous research. For example, Pinstrup-Andersen and Alderman (p. 30)[148] argue that "the effect of food price increases on those poor who derive their incomes from food production would be expected to be positive provided that the retail price increase is reflected in higher farmgate prices. Findings from recent research indicate that food price increases may be much less favourable for the rural poor than might be expected. In some countries, many of the rural poor do not derive a large share of their incomes from either cultivation or wage labour in food production. Furthermore, a large proportion of cultivators are net purchasers of food."

ac Theoretically, this relationship is based on Engel's law, expressed by Chai and Moneta (p. 225)[149] as "the poorer a family is, the larger the budget share it spends on nourishment". This implies that rural households – who have lower levels of income – allocate a larger proportion of their budget to food consumption. Empirically, this relationship has been found to hold across several contexts, for example: Peru, Uganda and Viet Nam;[150] Cameroon;[151] and Rwanda.[152]

ad Technically, the prevalence of wasting is the proportion of children under five years of age whose weight-for-height Z-scores are –2 standard deviations below WHO's Child Growth Standards median. Among those, children with Z-scores –3 standard deviations below are considered to be severely wasted.

ae Wasting is caused by inadequate quality or quantity of food intake and/or frequent or prolonged illness.[156]

TABLE 3.1 ASSOCIATION BETWEEN FOOD PRICES AND WASTING, 1985–2023

	Wasting			Severe wasting		
	(1)	(2)	(3)	(4)	(5)	(6)
Δ% associated with a 10% ↑ in food CPI	0.02727** (0.01331)	0.03242** (0.01450)	0.04323* (0.02211)	0.04828* (0.02565)	0.05250* (0.02735)	0.06137 (0.03739)
Observations	1045	969	748	906	871	716
Number of countries	153	150	147	150	148	146
Controls (macro)	No	Yes	Yes	No	Yes	Yes
Controls (health services)	No	No	Yes	No	No	Yes
Mean prevalence of wasting	0.0900	0.0885	0.0800	0.0262	0.0262	0.0251
Mean food CPI	66.5511	70.4642	86.3872	73.0470	73.9288	86.1079

NOTES: Food consumer price index (CPI) is calculated based on FAOSTAT data from 2000 onwards, where average food CPIs in each country and year are calculated. Prior to 2000, food CPI is based on yearly food price inflation from the World Bank. The data for the prevalence of wasting comes from WHO's Child Malnutrition Database. This dataset compiles wasting indicators collected across several survey rounds in each country. The regressions include all survey-based observations in WHO's Child Malnutrition Database between 1983 and 2023. The fieldwork months of each survey are identified, and the average food CPI in each period is calculated. The basic econometric model is the following: $Y_{crt} = \beta FCPI_{crt} + \theta AvgLagCPI_{crt} + \delta X_{crt} + (\gamma_r \times \text{Time Trend}) + \alpha_c + \lambda_t + \varepsilon_{crt}$, where Y_{crt} is the prevalence of wasting (or severe wasting) in country c of region r during period t, and $FCPI_{crt}$ is the food consumer price index over this period. $AvgLagCPI_{crt}$ is the geometric average of food CPI in the three years prior to period t, γ_r are region-specific time trends, and α_c and λ_t are country- and year-fixed effects, respectively. All regressions control for lagged food CPI, region-specific trends, and country- and year-fixed effects. Columns 2, 3, 5 and 6 additionally include a vector of time-varying controls X_{crt}. In columns 2 and 5, X_{crt} includes "macro" controls for per capita GDP and an indicator variable for severe disasters in the country. Columns 3 and 6 additionally control for proxies of health services (the percentage of the population with access to basic water, the percentage of the population with access to basic sanitation and per capita public expenditure in health). All regressions have been weighted by the number of children under five years of age in each country and year. The percentage change in the prevalence of wasting (or severe wasting) associated with a 10 percent increase in food CPI is estimated as: $\Delta\% = (\beta \times 0.1 \times \overline{FCPI})/\overline{Y}$. This estimate is bootstrapped with 500 replications to calculate standard errors, which are clustered at the country level. Asterisks indicate statistical significance levels: * p-value<0.1, ** p-value<0.05, *** p-value<0.01.

SOURCE: Nakasone, E. & Ignaciuk, A. (forthcoming). *A global assessment of food price dynamics and food insecurity – Background paper for The State of Food Security and Nutrition in the World 2025*. FAO Agricultural Development Economics Working Paper 25-09. Rome, FAO.

likely to die from a common illness, such as pneumonia, compared to a well-nourished child.[158] Moreover, experiencing wasting during the first years of life not only heightens the risk of mortality but also increases the likelihood of stunting and long-term health challenges.[af, 167]

Previous spikes in global food prices have had detrimental effects on child nutrition, particularly by increasing rates of wasting among vulnerable populations. For instance, during the 2007 to 2008 global food crisis, there was an increase in the prevalence of wasting among Mozambican children.[168] Consistently, a rise in the proportion of wasted children was observed in India, with the impacts being particularly severe among low- and middle-income families.[169]

af There is considerable evidence about the persistent adverse effects of economic and nutrition shocks *in utero* and during early childhood on education,[159–161] adult health,[162] and labour market outcomes,[163, 164] in addition to overall reviews of the topic.[165, 166]

Food price inflation episodes are linked to rising wasting. Analysis data from 44 LICs and MICs finds that a 5 percent increase in real food prices raises the likelihood of wasting by 9 percent and severe wasting by 14 percent among children under five years of age.[155] These findings highlight the heightened vulnerability of young children to food price shocks, especially in contexts where food insecurity is already prevalent.

Recent food price inflation may have increased the risk of child wasting. Based on data from about 150 countries worldwide between 1983 and 2023, the analysis in this section suggests that a 10 percent rise in food prices is associated with a 2.7 to 4.3 percent increase in wasting prevalence and a 4.8 to 6.1 percent increase in severe wasting among children under five years of age (Table 3.1). As noted in **Section 3.3**, nutritional outcomes are shaped not only by food access but also by access to health services. To account for this, additional regressions in Table 3.1 control for basic

health indicators – such as access to water and sanitation, and per capita public health spending. The results remain robust with these additional controls. Full regression results are shown in Table 3.1, and further details of the econometric model are provided in Nakasone and Ignaciuk (forthcoming).[144]

These findings underscore a pressing policy concern: the recent surge in global inflation may have worsened acute malnutrition, placing millions of children at heightened risk of severe health outcomes. At its peak, year-on-year global food prices rose by 13.6 percent between January 2022 and January 2023 (Figure 3.1). During this period, food price inflation reached 25.2 percent and 11.8 percent in low- and lower-middle-income countries, respectively (Figure 3.2), with 65 percent of LICs and 61 percent of LMICs, home to more than 1.5 billion people, facing food price inflation rates of 10 percent or more. These regions also report higher levels of child wasting. By 2024, the prevalence of wasting was 6.4 and 9.5 percent in LICs and LMICs, respectively (see **Annex 1A**). The results presented here highlight the widespread and serious risks food price inflation poses to these particularly vulnerable populations. ■

3.4 PRICE INFLATION OF NUTRIENT-DENSE FOODS RELATIVE TO OTHER FOODS: ARE THERE DIFFERENCES?

3.4.1 Has inflation affected different foods in different ways globally?

In 2020, FAO, in collaboration with the World Bank, began global monitoring of the cost of a healthy diet, and its affordability relative to income available for food.[170, 171] A healthy diet includes a *diverse* mix of foods, including starchy staples, vegetables, fruits, animal source foods, fats and oils, legumes, nuts and seeds;[ag] this helps achieve *adequate* nutrient intake. A healthy diet is *balanced* in energy and its primary sources (carbohydrates, fats, protein), and *moderate* in the consumption of products that increase the risk of diet-related non-communicable diseases (NCDs), such as unhealthy fats and added sugars.[172] Food cost can be an impediment to access to and consumption of a healthy diet. Starchy staple foods, oils and sugars are cheaper per calorie, while nutrient-rich foods like fruits, vegetables, legumes and animal source foods are, in general, more expensive.[ah, 175–177]

About one-third (32 percent) of the global population were unable to afford a healthy diet in 2024 (see Section 2.2), and inflation might have contributed to persistently high levels of unaffordability. Inflation reduces purchasing power for those whose incomes do not match rising prices, and its effects on welfare and health vary depending on how price increases are distributed across

ag Food groups are identified using the Healthy Diet Basket approach adopted by FAO and the World Bank to obtain the cost of a healthy diet indicator globally. It includes benchmarks for six food groups (starchy staples, animal source foods, oils and fats, fruits, vegetables, and legumes, seeds and nuts). The analysis in this section includes an additional category for confectioneries, which, while not part of a healthy diet, remain relevant for monitoring food consumption patterns.

ah These patterns are consistent in studies of national food price monitoring. In studies from both Mexico and the United States of America, fruits, vegetables and meat are significantly more expensive per kilocalorie than staple grains and sweet and salty grain products.[173, 174]

food groups. When inflation disproportionately affects the affordability of nutrient-dense foods or indirectly reduces household capacity to purchase such foods, it can undermine the consumption of healthy diets. This, in turn, poses serious risks to food security and nutrition outcomes, especially for vulnerable populations.

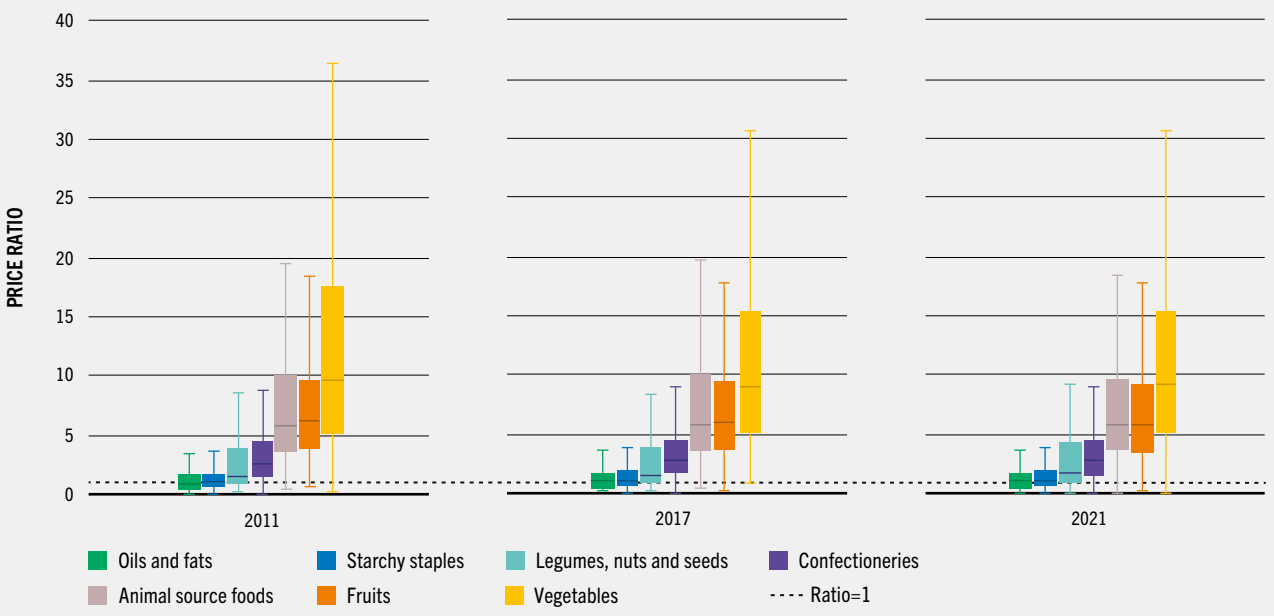
Global price data reveal a persistent disparity between the price per kilocalorie of basic starchy staples and that of more nutrient-dense food groups, with significant implications for diet quality and affordability. This subsection analyses the trends in the average prices of different food groups based on data from the International Comparison Program (ICP). In particular, the ratios of prices from different food groups relative to basic starchy staple foods are calculated. Basic starchy staples (e.g. grains, flour, rice, roots and tubers) are unprocessed or minimally processed (i.e. belonging to NOVA category 1) staple foods and tend to be the most important source of calories for low-income consumers. The ratio of the average price of a food category of interest to the price of basic starchy staples indicates to what degree purchasing different foods imposes a price penalty relative to the primary source of low-cost dietary energy. The analysis focuses on the three available rounds of ICP data from 2011, 2017 and 2021. Though the available data are sparse, they allow for the characterization of longer trends. This analysis is complemented with a more granular analysis based on case studies from three countries in **Section 3.4.2**. As illustrated in Figure 3.11, basic starchy staples remain the least expensive source of dietary energy across all countries and throughout the ten-year period captured by the ICP.[ai] In contrast, more nutrient-dense food groups – such as vegetables, animal source foods, and fruits – consistently rank as the most expensive. In 2021, the average global price of vegetables was 11.9 times higher than that of basic starchy staples, while animal source foods and fruits were 9.1 and 7.2 times more expensive, respectively. Even legumes, nuts and seeds (3.1 times) and less nutrient-rich categories such as confectioneries (3.7 times) exhibited notable price premiums relative to basic starchy staples. These enduring price differentials underscore the economic barriers many households face in accessing a healthy diet. Furthermore, more expensive nutrient-dense foods – such as animal source foods, fruits and vegetables, and legumes – are critical to meeting the nutritional needs of infants and young children.[154]

Consumption of ultra-processed foods is increasing despite growing evidence of their adverse health impacts. These products – characterized by ingredients rarely used in culinary preparation and additives with cosmetic functions (e.g. flavourings, colourings, sweeteners) – are produced using mechanical and other industrial processes such as extrusion, moulding and pre-frying; frequently contain significant amounts of sugars, fats and salt; and are generally devoid of many beneficial nutrients such as naturally occurring dietary fibre, phytochemicals and other bioactive compounds.[176] Frequent consumption of ultra-processed foods has been linked to a wide range of NCDs and health risks, including obesity, diabetes, metabolic syndrome, cardiovascular diseases, certain cancers, and mental health disorders,[178–187] posing a significant challenge for public health and food policy. Despite the negative health consequences, consumption of ultra-processed foods has expanded globally.[188–190] Different factors, such as their palatability, convenience, widespread availability, extended shelf-life, and appeal (the result of extensive marketing campaigns), have contributed to this expansion.[191–194] Lower prices of ultra-processed foods might also have contributed to this trend. Though there is variation within food groups,[aj] ultra-processed foods were, on average, 47 percent

ai The global analysis is based on the latest rounds of price data collected by the World Bank's International Comparison Program for 2011, 2017 and 2021 (released in 2024 and available at https://www.worldbank.org/en/programs/icp). ICP data are reported to the World Bank by national statistical offices for a standardized list of foods that are commonly available in all countries. Food prices are reported in local currencies per reference quantity, as sold at retail. Based on food item descriptions and food composition tables, prices per reference unit as sold (e.g. piece or package) are converted to price per kilogram of edible matter (to account for variations in water content across food groups), and then to price per kilocalorie.

aj Food processing affects price in different ways for different food groups. The least expensive options are often unprocessed, especially for legumes, nuts and seeds, or minimally processed, especially for vegetables. Ultra-processed options are more expensive for animal source foods, and less expensive for starchy staples, than for unprocessed or minimally processed options in those food groups. However, on average, ultra-processed foods appear to be less expensive. For more details, see Costlow *et al.* (forthcoming).[205]

FIGURE 3.11 THE COST OF BASIC STARCHY STAPLES IS CONSISTENTLY LOWER THAN THAT OF MORE NUTRIENT-DENSE FOOD GROUPS



NOTES: Data shown are price ratios (price per kilocalorie of edible matter for each food item in each country-year divided by the average price per kilocalorie of basic starchy staples in that country-year). Basic starchy staples are defined as starchy staples classified as NOVA 1 (unprocessed or minimally processed foods). Prices are national average retail food prices from the World Bank's International Comparison Program in 2011, 2017 and 2021. 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. The dashed line shows where the price ratio is equal to 1.

SOURCE: Costlow, L., Martínez, E., Gilbert, R., Nakasone, E. & Masters, W.A. (forthcoming). *Price dynamics for foods of varied nutritional characteristics – Background paper for The State of Food Security and Nutrition in the World 2025*. FAO Agricultural Development Economics Working Paper 25-07. Rome, FAO.

https://doi.org/10.4060/cd6008en-fig3.11

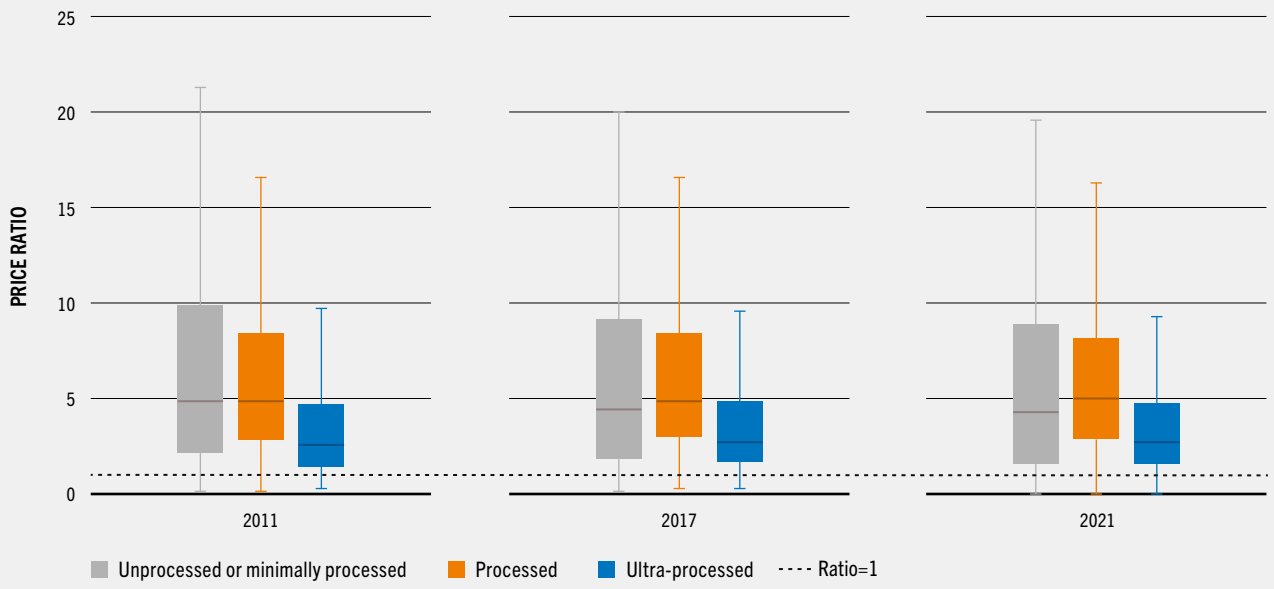
less expensive than unprocessed or minimally processed foods and 50 percent less expensive than processed foods in 2021[ak] (Figure 3.12).

The affordability and widespread availability of ultra-processed foods are rooted in broader transformations in global agrifood systems and consumption patterns. Their lower production costs are enabled by the use of inexpensive industrial ingredients (e.g. hydrogenated oils, protein isolates, and added sugars and salt), as well as preservatives and stabilizers that reduce spoilage and storage costs, making these products more accessible than perishable, nutrient-dense foods. These supply-side dynamics[al] have coincided with rapid urbanization, rising incomes, and shifts in labour force participation – particularly among women – which have increased demand for convenient,

ak The processing levels are based on the NOVA Classification System that distinguishes unprocessed or minimally processed, processed and ultra-processed foods. The NOVA Classification System includes a fourth category: processed culinary ingredients. However, this category is excluded from the analysis in this section. The categories in the analysis include unprocessed or minimally processed (NOVA 1), processed (NOVA 3) and ultra-processed (NOVA 4) foods.

al Over the past 30 years, the global ultra-processed food industry has experienced significant growth, consistently outpacing the broader food production and processing sector in revenue, total assets, and market share. This expansion has been driven largely by strategic corporate practices, including aggressive and innovative marketing campaigns to boost consumer demand, extensive foreign direct investment to facilitate global expansion and consolidation, and the development and control of advanced manufacturing and supply chain networks.[195, 196]

FIGURE 3.12 ULTRA-PROCESSED FOODS ARE MORE AFFORDABLE THAN LESS PROCESSED ALTERNATIVES



NOTES: Data shown are price ratios (price per kilocalorie of edible matter for each food item in each country-year divided by the average price per kilocalorie of basic starchy staples in that country-year). Basic starchy staples are defined as starchy staples classified as NOVA 1 (unprocessed or minimally processed foods). Prices are national average retail food prices from the World Bank's International Comparison Program in 2011, 2017 and 2021. NOVA categories are shown on the X axis: Unprocessed (including minimally processed foods – NOVA 1), Processed (NOVA 3) and Ultra-processed (NOVA 4) foods. 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. The dashed line shows where the price ratio is equal to 1.

SOURCE: Costlow, L., Martínez, E., Gilbert, R., Nakasone, E. & Masters, W.A. (forthcoming). *Price dynamics for foods of varied nutritional characteristics – Background paper for The State of Food Security and Nutrition in the World 2025*. FAO Agricultural Development Economics Working Paper 25-07. Rome, FAO.

https://doi.org/10.4060/cd6008en-fig3.12

shelf-stable and appealing food options in both urban and rural areas around the world.[197–201] However, while ultra-processed foods offer affordability and convenience, their proliferation has come at a cost to population health. The global surge in their consumption is closely linked to the escalating prevalence of diet-related NCDs[187] and environmental health,[202] placing a growing strain on health systems and exacerbating inequalities in nutrition and well-being.

Despite broad global stability in relative food prices over the past decade, important nuances may be hidden beneath aggregate trends. The global relative food prices – whether assessed by food group or level of processing – remained broadly stable between 2011 and 2021. This points to a lack of structural shifts in the medium-term price relationships among different types of foods. However, it is important to note that this global perspective, which relies on aggregated data across a decade, may obscure important short-term or country-specific dynamics – particularly those emerging during recent inflationary periods. To better understand these variations, the following section examines price and nutritional trends in greater detail across three country case studies.

3.4.2 Inflation and food prices: variations across food groups and processing levels – three country case studies

Food price inflation between 2021 and 2023 (and in some countries up to 2024) varied markedly across food groups, with starchy staples and oils experiencing disproportionate price increases[am] that posed risks to food security and nutrition outcomes. Prices for basic starchy staple foods such as wheat and starchy tubers rose faster than overall food price inflation, while oils and fats also saw steep increases. This section examines recent food price inflation trends by food group, drawing on disaggregated consumer price data from Mexico (population 130 million), Nigeria (227 million) and Pakistan (240 million) – three large countries representing Latin America, Africa and Asia, respectively. While not exhaustive, the analysis provides insight into emerging regional patterns. As shown in Figure 3.13A, food price inflation in all three countries substantially outpaced general inflation, with notable spikes in prices for starchy staples (both basic starchy staples and overall starchy staples[an]) and edible oils. These price surges became especially pronounced in early to mid-2022, aligning with the global cereal market disruptions driven by the war in Ukraine – a major exporter of wheat and oilseeds. The findings underscore the vulnerability of staple-dependent diets in some countries to international commodity shocks and the need for strengthened food price monitoring systems.

Price premiums for nutrient-dense foods, particularly vegetables, fruits and animal source foods, remain substantial and volatile, reinforcing economic barriers to the consumption of healthy diets. As illustrated in Figure 3.13B, these food groups consistently command higher prices relative to basic starchy staples, which continue to account for the largest share of food expenditures in many developing countries. Vegetables exhibit the highest premiums, followed by fruits and animal source foods. The volatility of these prices is amplified by factors such as perishability, seasonal supply fluctuations, and frequent disruptions along supply chains.[203, 204] While the recent inflationary spike in basic starchy staples (Figure 3.13A) has somewhat narrowed these relative differences, the absolute premiums remain stark. On a per-calorie basis, vegetables are still 7 to 24 times more expensive than basic starchy staples, while animal source foods and fruits are 5 to 10 and 4 to 15 times more costly, respectively. These persistent price gaps highlight structural challenges to improving dietary quality in low-income settings and the importance of policy interventions to support access to diverse, nutrient-dense foods.

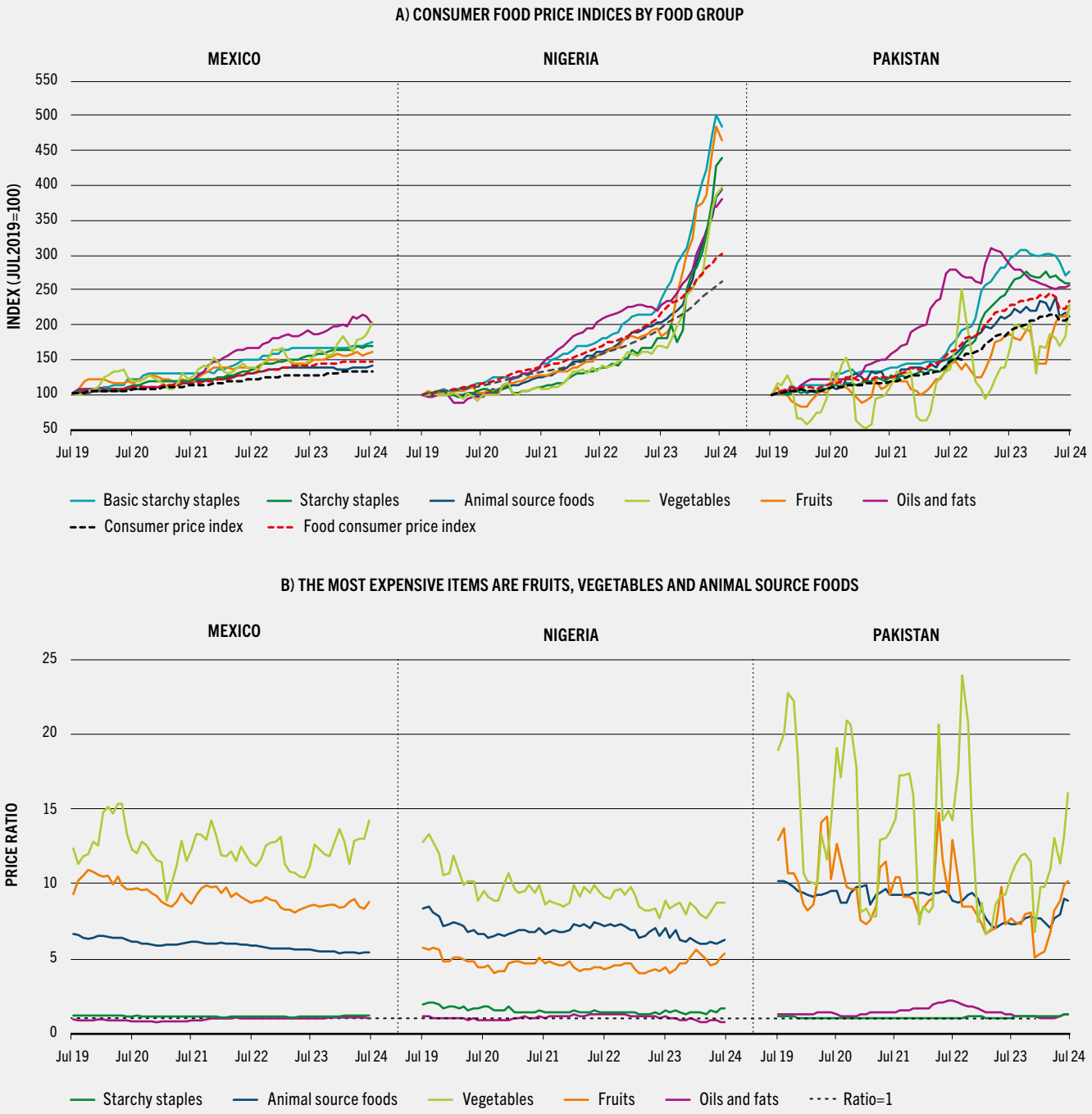
While basic starchy staples such as rice, wheat and tubers continue to represent the most affordable food sources, shifts in relative food prices have significant implications for the affordability of healthy diets, particularly among low-income households.[ao] Sharp price increases for basic starchy staples can have serious implications for low-income consumers, many of whom rely on these products to meet daily energy needs. The 2023 edition of this report showed that, in a sample of 11 African countries, households allocated 38 percent of their food expenditures to starchy staple foods, highlighting the importance of this food group. Due to the significant inflation in starchy staples, the relative cost of nutrient-rich foods, including fruits, vegetables and animal source products, declined in the countries in this analysis. However, this does not necessarily translate into improved diet quality. When the prices of basic staples rise, already constrained »

am The analysis examines price trends across food groups using case studies from Mexico, Nigeria and Pakistan, with data collected by the national statistical agencies of these countries between July 2019 and July 2024. To mitigate measurement errors, five-month rolling averages were calculated for each food item's price. Prices were standardized to per kilogram of edible matter to account for variations in water content across food groups, utilizing food descriptions and composition tables. Additionally, prices were estimated per kilocalorie, allowing for the calculation of average costs for six food groups (starchy staples, vegetables, fruits, animal source foods, legumes, nuts and seeds, and oils and fats), plus an extra category for confectioneries, which, while not part of a healthy diet, remain relevant for monitoring food consumption patterns. By highlighting these trends, the study sheds light on the potential effects of inflation on household consumption patterns, even though its influence on nutritional outcomes cannot be conclusively determined.

an Overall starchy staples include "basic starchy staples" (unprocessed or minimally processed, NOVA 1) as well as other starchy staples in the NOVA 3 (processed) and NOVA 4 (ultra-processed) categories.

ao The analysis in Costlow *et al.* (forthcoming)[205] suggests that starchy staples are the least costly food source in Mexico, Nigeria and Pakistan (not reported). The price premium above basic starchy staples is consistently higher for vegetables than for all other food groups, closely followed by fruits and animal source foods. This is consistent with the global estimates based on ICP data in Figure 3.11.

FIGURE 3.13 THE PRICE OF STARCHY STAPLES AND OILS FACED THE HIGHEST INCREASE IN MEXICO, NIGERIA AND PAKISTAN

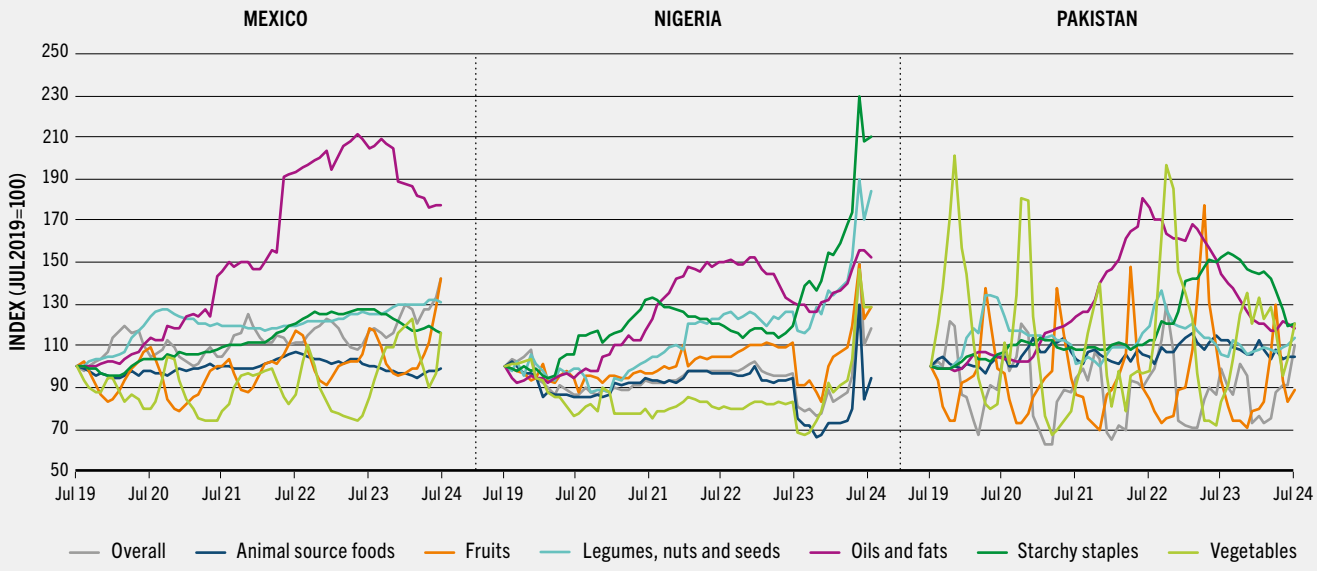


NOTES: Panel A – Data shown are national consumer price index (CPI), food CPI and average prices for selected food groups. Basic starchy staples include unprocessed or minimally processed starchy staples (NOVA 1) in each country. Starchy staples include all starchy staples in the NOVA 1, NOVA 3 and NOVA 4 categories. Prices are expressed in nominal local currency units per kilocalorie of edible matter. All series are indexed to the initial period (July 2019 = 100). For Mexico and Nigeria, the CPI is shown at the national level as reported; for Pakistan, the CPI is the average of reported urban and rural CPI. Panel B – Data shown are average food prices for each food group divided by the average food prices across all unprocessed or minimally processed starchy staples (NOVA 1) in each country. Prices are expressed in inflation-adjusted July 2019 local currency units per kilocalorie of edible matter and converted to five-month rolling means before food group averages are calculated. Dashed lines indicate where the price ratio is equal to 1.

SOURCE: Costlow, L., Martínez, E., Gilbert, R., Nakasone, E. & Masters, W.A. (forthcoming). *Price dynamics for foods of varied nutritional characteristics – Background paper for The State of Food Security and Nutrition in the World 2025*. FAO Agricultural Development Economics Working Paper 25-07. Rome, FAO.

https://doi.org/10.4060/cd6008en-fig3.13

FIGURE 3.14 PRICE INDICES OF ITEMS SELECTED FOR LEAST-COST HEALTHY DIETS



NOTES: Data shown are average food prices for each food weighted by the frequency of selection across the full analytical period. Item inclusion reflects only foods recommended as part of a healthy diet and excludes items such as cured meats and foods with added sugar. Prices are expressed in inflation-adjusted July 2019 local currency units per kilocalorie of edible matter and converted to five-month rolling means before food group averages are calculated. Food group trends are weighted by selection at the food group level, and overall trends are weighted by selection across all food groups.

SOURCE: Costlow, L., Martínez, E., Gilbert, R., Nakasone, E. & Masters, W.A. (forthcoming). *Price dynamics for foods of varied nutritional characteristics – Background paper for The State of Food Security and Nutrition in the World 2025*. FAO Agricultural Development Economics Working Paper 25-07. Rome, FAO.

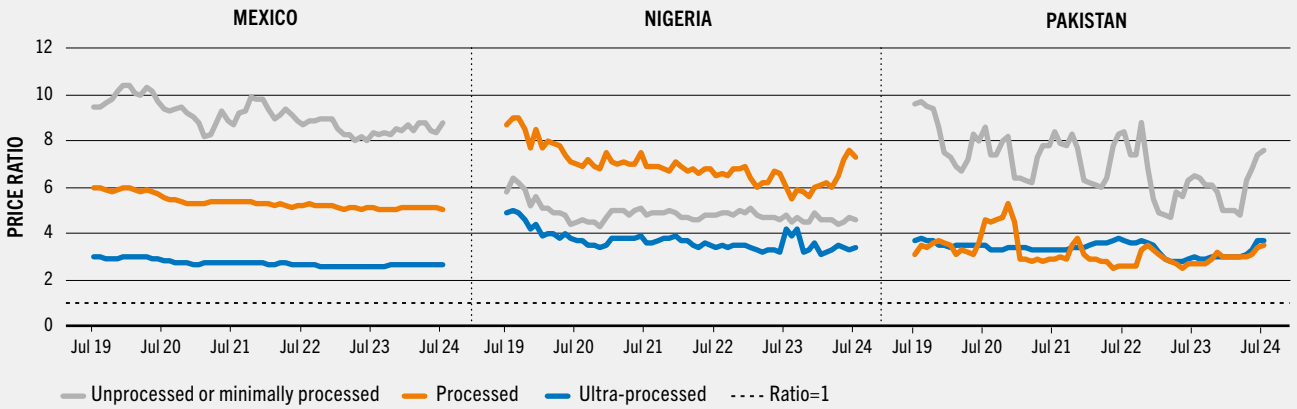
https://doi.org/10.4060/cd6008en-fig3.14

» household budgets are further compressed and might reduce the capacity of families to allocate spending towards more diverse and nutrient-dense food groups.[21, 175]

Understanding the impact of relative food price changes on household dietary adequacy requires careful examination beyond average price trends. While evidence shows shifts in relative average prices across food groups, this alone does not confirm that households have been priced out of maintaining a healthy diet. Households may still access relatively low-cost items within more expensive food groups, increasing their chances of meeting a healthy diet despite overall inflation. However, if inflation disproportionately affected these lowest-cost items, households' ability to meet a healthy diet could be compromised. Therefore, a more targeted analysis is required to assess whether rising food prices between 2019 and 2024 constrained access to healthy diets.

To assess this, the analysis adopts a modified cost-of-a-healthy-diet framework tailored to monthly price data from Mexico, Nigeria and Pakistan. In line with established methodology (**Section 2.2**), the approach identifies between one and three of the least-cost items per food group, including starchy staples, vegetables, fruits, animal source foods, legumes, nuts and seeds, and oils and fats, in each country and year. Given the seasonality inherent in monthly price data, particularly for perishable goods like vegetables, the analysis tracks the frequency with which each item appears as the lowest-cost option throughout the study period. These frequencies serve as weights to construct a representative "overall" healthy basket. The resulting monetary value of this basket serves as a proxy for the least-cost healthy diet, providing a more direct measure of household access to nutritious food under changing price conditions (Figure 3.14).

FIGURE 3.15 PRICE TRENDS BY NOVA PROCESSING CATEGORY RELATIVE TO BASIC STARCHY STAPLES IN MEXICO, NIGERIA AND PAKISTAN



NOTES: Data shown are median food prices for NOVA processing category within each food group, divided by the median food price across all unprocessed or minimally processed starchy staples (NOVA 1). Prices are expressed in inflation-adjusted July 2019 local currency units per kilocalorie of edible matter and converted to five-month rolling means before food group medians are calculated. Dashed lines indicate where the price ratio is equal to 1.

SOURCE: Costlow, L., Martínez, E., Gilbert, R. (forthcoming). *Price dynamics for foods of varied nutritional characteristics – Background paper for The State of Food Security and Nutrition in the World 2025*. FAO Agricultural Development Economics Working Paper 25-07. Rome, FAO.

https://doi.org/10.4060/cd6008en-fig3.15

Focusing on the least expensive options in each food group needed for a healthy diet, there are heterogeneous effects of inflation on the cost of these options. The least-cost healthy diet decreased in Nigeria through mid-2023, though it had increased by the end of the analysis period. In Pakistan, it exhibited an oscillating trend, likely reflecting seasonal fluctuations. In contrast, in Mexico, the least-cost healthy diet became more expensive. This reveals how the real cost of food and a least-cost healthy diet can vary widely across countries even during periods of high inflation.

Food price inflation may have affected processed and unprocessed foods differently in different countries between 2019 and 2024. Urbanization, extensive marketing campaigns by food manufacturers, rising incomes and increased workforce participation drive demand for convenient, appealing and ultra-processed foods, often high in unhealthy fats, sugars and/or salt.[21] Food processing enhances appeal by improving taste, extending shelf-life and reducing preparation time.[206] Food manufacturing involves additional labour and inputs in the production process, which can drive up costs. For instance, recent food price inflation in the United States of America has been largely influenced by price hikes in processed foods. In a tight labour market and high-inflation environment, rising wages have increased labour, production and distribution costs.[207] These added costs have been passed on to consumers, resulting in higher prices for processed than for unprocessed foods. However, there are limited data to determine if this pattern holds true in other regions, particularly in low- and middle-income countries.

In Nigeria, recent inflation has similarly affected the prices of processed and unprocessed[ap] foods, while in Pakistan and Mexico unprocessed or minimally processed foods were consistently more

ap The NOVA food classification system[208] was used to categorize foods by their level of processing, distinguishing between unprocessed or minimally processed foods, processed foods, and ultra-processed foods. Ultra-processed foods are generally cheaper than processed and minimally processed foods (Figure 3.12).

expensive. In Nigeria, inflation appears to have similarly affected ultra-processed, processed and unprocessed foods, suggesting that the inflationary crisis has not made ultra-processed foods more affordable than unprocessed options. Price premiums for ultra-processed foods are generally lower than for unprocessed foods when comparing items across all food groups, but unprocessed or minimally processed foods are not necessarily the most expensive (Figure 3.15). Meanwhile, in countries such as Mexico and Pakistan, unprocessed or minimally processed foods were consistently the most expensive options between 2019 and 2024. ■

COUNTRY NOT SPECIFIED
Tractor loaded with crates of red tomatoes ready for transport to market.
@ iStock.com/BrilliantEye

CHAPTER 4
HOW COUNTRIES NAVIGATED THE PERFECT STORM: FISCAL, MONETARY AND TRADE POLICIES AND THEIR IMPLICATIONS FOR FOOD SECURITY AND NUTRITION

KEY MESSAGES

➔ Countries follow distinct trajectories in how food price inflation affects their food security outcomes. Despite facing comparable global food price pressures between 2015 and 2023, countries demonstrated remarkable variation in domestic food price inflation rates and food security.

➔ National policy responses varied across different food security trajectories. Countries with deteriorating or fluctuating food security situations relied more heavily on price control measures and agricultural production subsidies than countries with more stable food security trajectories. Low food-insecure countries with stable or improving food security tended to adopt a mix of trade policy instruments, in contrast to high food-insecure countries where the use of such instruments was more limited.

➔ Drawing on the experiences of countries during recent periods of food price inflation, several **policy lessons** emerge. These highlight practical measures that can help governments respond more effectively to future shocks, balancing immediate relief with long-term market resilience:

Design effective responses to high food price inflation

➔ Policymakers can use targeted fiscal measures to support vulnerable populations' economic access to food during economic shocks such as high food price inflation. However, these measures should be aligned with the broader policy landscape within a country. They should also be time-bound with clear exit strategies to prevent them from becoming permanent, making it difficult to redirect resources when no longer needed.

➔ While reducing taxes on essential goods – including food – can ease inflationary pressures on households' budgets, governments should balance this with revenue sustainability, especially in fiscally constrained settings.

➔ Governments should closely monitor whether tax cuts and exemptions are passed on to consumers to ensure effectiveness.

➔ Social protection programmes, including cash or in-kind transfers, are vital for protecting food security and nutrition of vulnerable households during food price crises. Cash transfers should be carefully designed to address the potential erosion of transfer value in high-inflation environments.

Improve monetary–fiscal policy coordination

➔ Sound fiscal policies that complement credible monetary policies are crucial for stabilizing domestic markets, including agrifood markets.

➔ Effective public debt management and well-targeted government spending on nutritious food for all can bolster economic resilience while maintaining long-term fiscal sustainability.

➔ Central banks should uphold a credible, independent and transparent monetary policy stance to anchor inflation expectations and prevent major currency devaluations. A clear commitment to price stability strengthens investor confidence and mitigates financial volatility, also in agricultural markets.

Enhance structural and trade-related measures to address food price inflation

➔ While price policies can address high food prices in the short term, their effects are temporary; moreover, they often distort markets and are an inefficient solution to food price inflation.

➔ While export taxes can offer short-term relief by lowering domestic prices, they often come at a high cost – distorting global markets, straining importing countries, and ultimately hurting domestic producers through reduced competitiveness and investment.

➔ Governments should opt for a stable, coordinated and transparent approach against long-term food price increases. This approach should consider policy measures to reduce the likelihood of prolonged high food price episodes while supporting both producers and consumers by, for example: i) managing food reserve systems adequately; ii) enhancing market transparency; iii) improving food price monitoring systems and data collection; iv) investing in trade-related infrastructure; and v) reducing non-tariff barriers to trade.

Build resilience through data, information and investments

➔ Transparent and functioning agricultural market information systems (MIS) may help ensure price stability. Given the increasing complexity of global agrifood systems, investing in data collection and strengthening MIS is essential to mitigate food supply chain disruptions, prevent speculation-driven price hikes and support smallholder farmers in accessing fair and competitive markets.

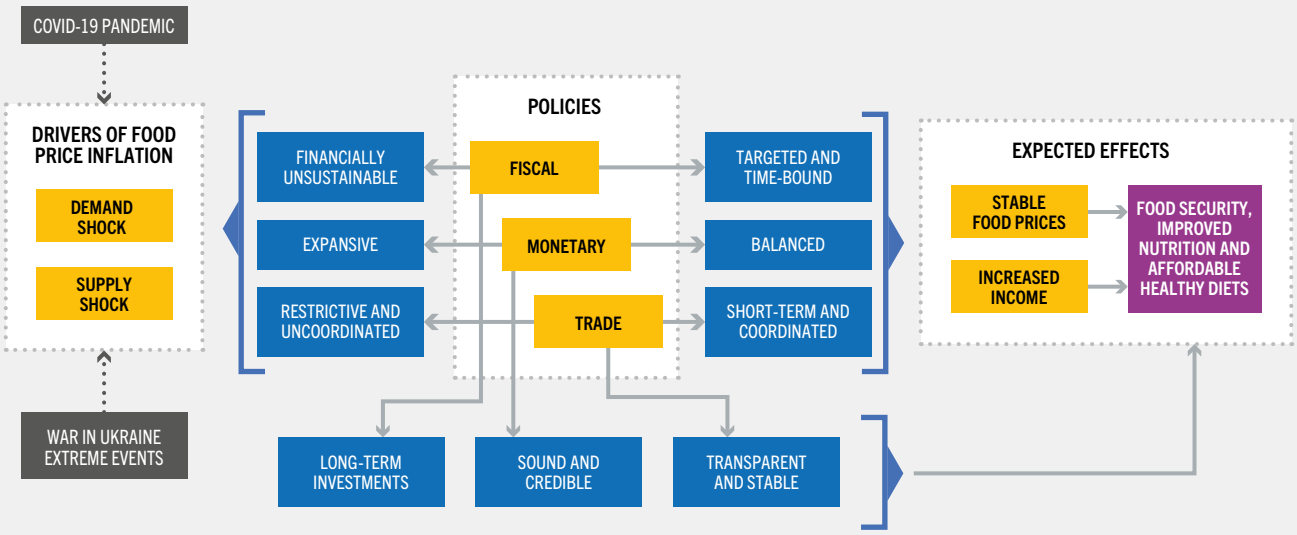
➔ Reducing the probability of future food price inflation events requires sustained investment in improved infrastructure of agriculture, including research and development, trade routes, and storage to improve market access and resilience against shocks and disruptions, enhance productivity sustainably, and strengthen food supply chains.

During the COVID-19 pandemic, governments worldwide implemented extraordinary fiscal measures to mitigate the social and economic fallout. These measures included price policies, tax exemptions, and cash and in-kind transfers to support households and businesses. Many countries also increased public health spending to strengthen healthcare systems and guarantee access to vaccines and medical supplies, as well as ensure food security and nutrition.[1] In some cases, fiscal interventions amounted to unprecedented levels of public expenditure, significantly expanding budget deficits (see **Chapter 3**). Many high-income countries (HICs), in particular, were able to mobilize substantial fiscal resources through borrowing at low interest rates, while most low- and middle-income countries (LICs and MICs) faced more constrained fiscal space.[2]

Numerous governments introduced targeted fiscal support for specific sectors most affected by the crisis, such as agriculture. Subsidies were offered to maintain food production and protect smallholder farmers from income loss, while public investment programmes were launched to stimulate economic recovery. To cushion the impact on vulnerable populations, social protection programmes were expanded, including in-kind and cash transfers, as well as utility payment waivers.[3, 4] While these measures helped stabilize economies and safeguard livelihoods, they also significantly increased public debt levels, raising concerns about long-term fiscal sustainability and the capacity to respond to future economic shocks.[5]

These extensive fiscal measures were complemented by highly accommodative monetary policies, as central banks around the world implemented monetary easing to support economic activity, driving inflation. Interest rates were rapidly lowered to near-zero levels in many advanced economies, while quantitative easing programmes injected liquidity into financial markets. Emerging and developing economies also adopted monetary easing measures, although often to a more limited extent due to inflationary concerns and exchange rate pressures.
As inflationary pressures began to mount in the aftermath of the pandemic, central banks initially maintained a cautious stance, perceiving inflation

FIGURE 4.1 POLICIES CAN BOTH CONTRIBUTE TO FOOD PRICE INFLATION AND SERVE AS A PART OF THE SOLUTION



SOURCE: Authors' (FAO) own elaboration.

as transitory. Consequently, monetary tightening was initiated relatively late, leaving economies exposed to rising inflation and increasing the challenge of balancing fiscal and monetary policy objectives.

As inflation was already gaining momentum, the outbreak of the war in Ukraine further exacerbated global economic pressures. The war, coupled with other political tensions and extreme weather events, intensified geopolitical fragmentation, prompting the reorganization of supply chains and increasing trade costs. Geopolitical risks intensified market uncertainty, increased price volatility and disrupted trade routes, while retaliatory tariffs and sanctions further strained the economy. The involvement of major trading countries amplified the adverse effects on international trade, compounding the challenges faced by economies already grappling with inflationary pressures.

Policies can both contribute to food price inflation and serve as part of the solution. Figure 4.1 illustrates the complex interplay between global shocks, policy responses, and their implications for food security and nutrition. Triggered by the pandemic, the war in Ukraine and other extreme events, both demand and supply shocks have emerged as key drivers of global food price inflation. In response, fiscal, monetary and trade policies have been deployed, though with varying approaches. On the one hand, excessive fiscal spending and expansionary monetary policies intensified inflationary pressures. On the other, the same policies, when well-designed – for example, targeted, time-bound, balanced and coordinated – can keep inflation at a desirable level. Policies are the key levers for influencing outcomes. Policymakers should, therefore, monitor their effects closely, consider and address trade-offs, and adapt them as conditions evolve to ensure they effectively support food security and nutrition objectives.

This chapter examines how countries addressed episodes of high food price inflation and the effects of these policy measures on food prices and food security and nutrition, and it provides policy suggestions. The first part analyses

different types of fiscal, monetary and trade policies commonly put in place in the most recent episodes of food price inflation. It also provides insights into how these policies may have contributed to food price inflation trends, as well as how they aimed to mitigate the impacts of food price inflation on food security and nutrition. The second part identifies patterns in the trends of food price inflation and food insecurity among different country groups for the period 2015 to 2023. Evidence from policy measures implemented in this period provides insights into how these policies could be associated with different food price inflation and food insecurity outcomes. ■

4.1 FROM RELIEF TO REFLECTIONS

4.1.1 Fiscal responses to high food price episodes

Support measures to the agricultural sector

Fiscal policy is often the first line of defence when governments respond to episodes of high food prices, using taxation and spending measures to mitigate the impact on livelihoods. During the COVID-19 pandemic, governments worldwide allocated approximately USD 17 trillion to various fiscal measures,[1] including efforts to ensure an adequate food supply for their populations. However, while such measures can provide critical relief, they may also contribute to higher food demand. If supply fails to keep pace, food price inflation can escalate.[6] Moreover, efforts to curb food price inflation through subsidies can sometimes backfire, inadvertently driving global prices higher.[7] For instance, fiscal and trade policies implemented to address the 2010 to 2011 food price surge could have been responsible for 40 percent of the global wheat price increase and 25 percent of the rise in maize prices.[8] Therefore, while fiscal measures are essential for addressing short-term food security and nutrition challenges, they must be carefully designed to avoid exacerbating inflationary pressures.

The scale of financial support directed towards the agricultural sector during the pandemic underscores the significant efforts made by governments to mitigate the crisis. For instance, in 2020 alone, at least USD 157 billion was targeted to the agricultural sector in 54 HICs and MICs. Of that expenditure, 37 percent was directed to support agrifood producers.[9] Many LICs, including Ghana, Kenya, Nigeria, Senegal, the United Republic of Tanzania and Zimbabwe, renewed efforts to assist farmers through subsidies aimed at reducing reliance on imported staple foods.[10] Support included subsidies for fertilizers and seeds (e.g. in India and Malawi) and loans for agricultural firms (e.g. in the Dominican Republic and Germany) to sustain food supply.[11]

In 2022, global support for agriculture dropped significantly, reverting to slightly above pre-pandemic levels as governments scaled back pandemic-era assistance. This decline in support to agricultural producers was observed across all income groups. In HICs, agricultural support remained higher than in other country groups, with a large share directed towards aiding producers through subsidies and support programmes. Conversely, lower-middle-income countries (LMICs) and LICs exhibited lower overall levels of agricultural support. In response to rising food prices, countries increasingly prioritized boosting domestic food production, despite the overall reduction in agricultural policy support compared to pandemic levels.[12] For instance, in the European Union, several countries, including Austria, Czechia, Italy and Poland, postponed or scaled back certain sustainability measures – such as restrictions on pesticide use and set-aside land requirements – to boost domestic food production.[13]

After the pandemic, many countries tightened fiscal expenditures, but inflationary pressures led to continued support for key sectors, including agriculture. Despite fiscal tightening, the return to pre-pandemic expenditure levels stalled in 2023 and 2024.[14, 15] In response to high food prices, countries like Chile, India, Mexico and the Philippines introduced subsidies for agricultural inputs, particularly fertilizers, starting in 2022.[13] The inflationary period after the pandemic made it difficult for countries to remove some support

measures, as livelihoods were at risk due to food price increases. A flexible use of fiscal policy, considering well-targeted support for some segments of the population combined with fiscal restraints for other sectors, could reduce inflation while maintaining adequate levels of protection for the most vulnerable.[14]

Price policies: cutting the edge of soaring food costs

Price policies are among the most common policy responses implemented during food price inflation episodes. These policies are oriented to keep the price levels of specific food items below (or above) a certain threshold. They include initiatives such as price controls, which can provide immediate relief, or stimulate production and deliver a mid-term response – for example, by using minimum support prices (MSPs) to boost production of some commodities. Price policies are fiscally costly and distortive for food markets. The economic principle that "the cure for high prices is high prices" relies on the assumption that an increase in prices will moderate demand and trigger a supply response, either locally or externally, combining domestic production and imports to stabilize and reduce prices. Direct price controls may help mitigate the effects of food price inflation on households, but they also hurt farmer incomes, undermining long-term investments. When fiscal instruments like subsidies are used to reduce consumer prices while maintaining high producer prices, they require substantial government spending, can be regressive (particularly for non-targeted programmes) and difficult to remove in later stages,[16–18] and may also fuel inflation.[19, 20] The effectiveness of these policies depends on the sensitivity of supply and demand behaviour to prices – that is, their level of elasticity – and the nature of the initial shocks. Elastic systems characterized by strong market mechanisms benefit from allowing prices to adjust; meanwhile, it is important to prioritize other instruments such as social protection programmes.

While price policies were widely implemented in low- and middle-income countries during the most recent episode of high food prices, high-income countries implemented them to a lesser extent. In LICs and MICs, price controls and food subsidies were particularly common. For example, in Africa, countries such as Burkina Faso and Senegal introduced policies to stabilize food prices, with Burkina Faso implementing price ceilings on staple foods like maize and Senegal providing subsidies for rice. In Asia, Indonesia, the Philippines and Sri Lanka also focused on food price interventions, with Sri Lanka, for example, instituting price controls on rice and cooking oil. In contrast, HICs implemented fewer price policies. Many European countries, including Hungary, Portugal and Romania, primarily directed their price controls towards energy sectors to shield consumers from rising fuel costs, rather than focusing on food.[16] This was driven by two key factors: first, in LICs and LMICs, food accounts for a much larger share of household income – up to 40 percent compared to around 10 percent in HICs – and second, as analysed in **Chapter 3**, a sharp rise in energy costs was one of the main drivers of food price inflation in the United States of America and in the euro area between 2022 and 2024.[21]

Effectiveness of price policies remains limited in the long term and can lead to an inequitable distribution of costs and benefits. Price caps at the retail level for some products resulted in the expected short-term effect of reducing prices and protecting consumers. For instance, in Pakistan low prices of wheat flour benefited consumers; however, this was at the expense of wheat producers.[22] In the past, India's rice procurement system was limited in reach, often excluding small and marginal farmers. As a result, larger producers and private actors disproportionately benefit, while many smaller farmers sell below the MSP.[23] Minimum support price interventions can also distort price signals across crops, potentially leading to inefficient resource allocation and unintended production shifts, as observed across six Indian states.[24] Stronger MSP support for rice and wheat, especially before 2014, has further driven land-use shifts away from oilseeds, reducing crop diversification, which in turn may negatively affect food security and nutrition.[25–27] Price policies can also undermine the efforts to promote healthy diets if not adequately targeted. Recent evidence from ten South-eastern Asia and Western Pacific countries shows that many of them have established price policies on foods high in sodium and/or sugars that are not recommended in food-based dietary guidelines, as well as on breastmilk substitutes.

Yet, many of these countries have other policies in place to promote the consumption of healthy diets, highlighting the need for increased policy coherence.[28]

During the most recent episode of price inflation, governments reduced or removed taxes on food and other items to mitigate prices. Low- and middle-income countries primarily focused their tax exemptions on food, aiming to alleviate the burden of rising food prices. For example, Fiji, Paraguay and Uzbekistan reduced value added tax (VAT) on selected food items to support household food security during the inflationary period.[16] By May 2023, nearly 99 countries had implemented tax-related measures, with almost three-quarters of these involving reductions in or exemptions from indirect taxes like VAT on food.[29] On the other hand, high-income countries largely targeted energy through tax exemptions to reduce the impact of rising fuel costs on consumers. Countries such as Belgium, Slovenia, Spain and Sweden introduced tax exemptions on electricity, fuel and gas. While these countries focused more on energy, others also took measures for food, with Poland cutting VAT on several food items and France applying a reduced VAT rate of 5.5 percent on certain food products to ease consumer spending.[30, 31]

Tax exemptions or cuts do not always translate into lower food prices for consumers, as the pass-through of these measures can vary significantly. Evidence on the pass-through of VAT reductions is mixed, with outcomes depending on other factors, for instance, market competitiveness.[18] For example, during the pandemic, Germany implemented a temporary VAT reduction on food to stimulate the economy. On average, supermarket prices decreased by approximately 1.3 percent, indicating that about 70 percent of the VAT reduction was passed on to consumers.[32] Poland implemented a temporary VAT cut on basic food items as part of an anti-inflation policy package. However, initially, this reduction had limited impact on consumer prices; almost a full pass-through was achieved after five months.[31] In Argentina, high-income households benefited more from VAT policies, because price reductions were less likely to be passed on to consumers in independent grocery stores, where low-income individuals typically shop.[33]

In addition, removal of or reduction in taxes could lead to reduced fiscal revenues, which can be particularly important in countries with an already tight fiscal space. During the 2007 to 2008 food price crisis, the reduction in taxes led to a drop equivalent to 7 percent of the total tax revenue in Guinea-Bissau,[34] while in the Niger a tax exemption for rice and sugar led to a drop of around CFA 12 billion (EUR 18.2 million)[aq] in tax revenues in 2008.[36] The Swedish National Audit Office found that reducing food VAT cost SEK 30 billion (EUR 2.8 billion)[ar] in 2018, while alternative targeted measures such as increased pensions could have achieved the same benefits at half the cost.[37] Conversely, these tax exemptions could be implemented alongside broader structural tax reforms designed to improve the relative prices of nutritious foods. For instance, imposing taxes on sugar-sweetened beverages could generate additional tax revenues.[38] Currently, 115 countries have imposed taxes on sugar-sweetened beverages;[39, 40] these increased revenues can then be directed towards funding policies that support nutritional objectives for the most vulnerable populations.

Social protection programmes: supporting the poorest consumers

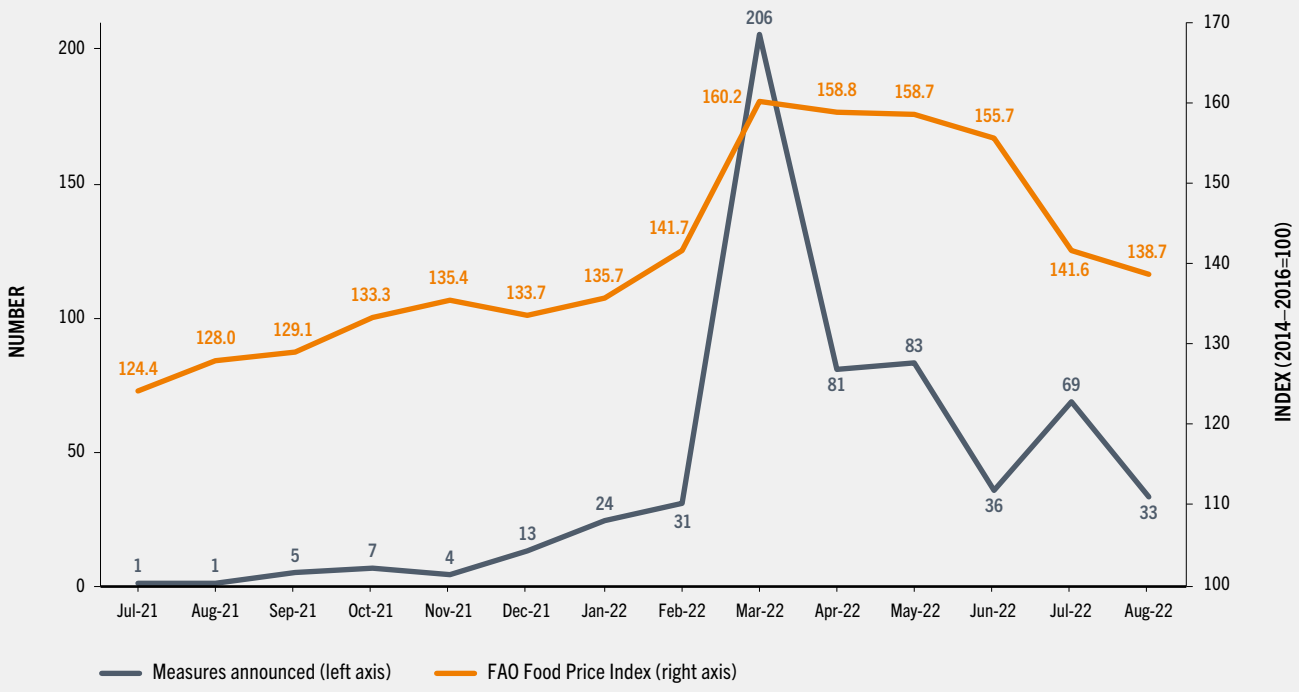
Consumer-directed fiscal measures, such as direct food and cash transfers, are commonly used by governments to support households during periods of high food prices. During times of shocks such as the COVID-19 pandemic, climate extremes, conflict or high food prices, governments can implement social protection programmes like food vouchers and cash transfers to help households to cope with these shocks. In high-income countries, they can also expand targeted subsidies and increase funding for food banks to support those experiencing food insecurity.[41]

Social protection programmes were scaled up as part of the fiscal responses to the pandemic and were a key element of government support to households. On average, countries spent an equivalent of 2 percent of GDP on social protection in 2020 and 2021. The spending was higher in HICs and UMICs (above 2 percent) than

aq CFA 1 = EUR 655.957 in 2008.[35]

ar SEK 1 = EUR 10.26547 in 2018.[35]

FIGURE 4.2 SURGE IN SOCIAL PROTECTION MEASURES SINCE 2022



SOURCES: Authors' (FAO) own elaboration based on Gentilini, U. 2022. Links Sept 23 – *special edition* on responses to inflation! In: *Weekly Social Protection Links*. [Cited 8 April 2025]. https://www.ugogentilini.net/links-sept-23-special-edition-on-responses-to-inflation; and FAO. 2025. FAO Food Price Index. In: *World Food Situation*. [Cited 17 March 2025]. https://www.fao.org/worldfoodsituation/foodpricesindex/en

https://doi.org/10.4060/cd6008en-fig4.2

in LICs and LMICs (below 2 percent). Most of these measures, even in high-income countries, were non-contributory social protection initiatives (i.e. social assistance).[3]

Such programmes were also implemented to address the effects of the more recent episode of food price inflation. Announcements of social protection programmes had increased since the 2021 to 2022 period, but their coverage was still lower than for the initiatives implemented during the pandemic. For example, by May 2023, 790 million people were covered by cash transfer programmes, compared to 1.36 billion covered during the pandemic (2020 to 2021).[as, 29] The large increase in announced and implemented social protection measures began in 2022, with 563 initiatives recorded across 158 economies – a 62 percent rise since July 2021 (Figure 4.2). Social assistance accounts for nearly a quarter of these responses, with 76 percent provided as cash transfers, including widespread unconditional transfers in countries like the Islamic Republic of Iran (90 percent coverage) and Poland (52 percent).[42] The cumulative expenditure of the announced social assistance measures between July 2021 and April 2023 amounted to USD 256.3 billion.[29]

The recent inflation surge highlighted the need to scale up nutrition-sensitive social protection programmes to address possible impacts on the consumption of healthy diets and nutritional outcomes. While several initiatives targeted households with children[29] – a distinctive

as Calculations of coverage consider only one year of inflation-related initiatives (from April 2022 to May 2023) compared to the two years of the pandemic (from March 2020 to February 2022).

component of nutrition-sensitive programmes – few included other nutrition-related components. Well-designed nutrition-sensitive programmes can improve nutritional outcomes, especially for vulnerable groups like women and children, by enhancing dietary diversity and reducing malnutrition risks,[43] even in periods of food price inflation. In 2023, a short-term, nutrition-sensitive cash transfer initiative in Sri Lanka increased the consumption of nutritious foods by children and caregivers; the transfers contributed to improving food consumption and dietary diversity despite the concurrent food price inflation.[44] To this end, taking into account the "affordability gap" (i.e. the gap between food expenditure and the cost of a healthy diet) can support the design of social protection programmes that, combined with other health-related initiatives, protect and promote the consumption of healthy diets in periods of high food prices.[45, 46]

Cash transfer programmes have proven effective in mitigating the impacts of agricultural or price shocks on food security. In Zambia, cash transfers increased monthly food expenditures per capita by 29 to 34 percent and reduced the probability of severe food insecurity by 22 to 23 percent during times of crisis.[47] On average, a USD 100 transfer led to a monthly increase in food expenditure of between USD 1.99 and USD 2.13. The positive effects of the transfers lasted around three years as, not only did they boost immediate household food consumption, but they could also be used for longer-term savings and investments.[48] In Mexico, the Progresa-Oportunidades conditional cash transfer programme helped cushion the effects of rising food prices between 2003 and 2007. During the 2007 food price crisis, food consumption among households not producing food fell by over 30 percent, but the programme's cash transfers mitigated this decline by approximately 11 percentage points. This highlights the programme's important role as a buffer during periods of price volatility.[49] In Togo, government cash transfer policies effectively mitigated the negative impacts of rising food prices. The simulation results show that cash transfers slightly outperformed food subsidies in improving household consumption and welfare.[50]

Cash transfers can sometimes exacerbate economic challenges during crises like food price surges. In high-inflation environments, the value of cash transfers can erode rapidly, requiring careful adjustments to balance beneficiary protection with fiscal costs.[51, 52] For instance, if local food prices are already significantly higher than international prices and local market supply is limited, cash transfers can further drive food price inflation, as happened in Kenya with the Hunger Safety Net Programme.[52] Similarly, Ethiopia's Productive Safety Net Programme contributed to rising inflation, significantly reducing the purchasing power of the poorest populations.[53] Indexing transfers to food prices or providing direct food assistance (Box 4.1) may be more effective in maintaining purchasing power.[51, 52]

4.1.2 From easing to tightening: monetary policy during surging inflation

Monetary policy, managed by central banks, regulates money supply to stabilize prices and control economic fluctuations, often through inflation targeting. *Easing* expands the money supply, fuelling inflation;[57] on the other hand, *tightening* curbs the supply by raising interest rates, which increases borrowing costs and discourages spending. Contractionary monetary policy has consistently reduced food price inflation in major emerging economies (e.g. Brazil, China, India, Russian Federation and South Africa), highlighting its effectiveness in stabilizing food prices.[at, 59] Fiscal and monetary policies are closely linked, as government deficits require borrowing, making them sensitive to interest rate changes. Higher interest rates raise borrowing costs, limiting fiscal expansion, while fiscal policy affects exchange rates by shaping investor confidence – rising debt can weaken confidence, depreciating the domestic currency. The interplay of fiscal and monetary policies affects food prices across countries.

At the beginning of the inflationary period, low- and middle-income countries, especially those reliant on commodity imports, were among

at Nevertheless, contractionary monetary policy can hinder economic growth; it is therefore necessary to adopt a balanced approach to address inflation while limiting the spillover on GDP growth.[58]

BOX 4.1 HUMANITARIAN CASH AND IN-KIND TRANSFERS IN HIGH INFLATION CONTEXTS

Cash and in-kind transfers are widely implemented in humanitarian contexts to protect livelihoods.[54] The choice of transfer modality is informed by assessments that consider market functionality among other factors, including operational feasibility, cost-efficiency, people's preferences, and alignment with government and other actors.

The use of cash transfers in high-inflation settings has been debated due to concerns about their potential to contribute to price increases and loss of purchasing power. However, evidence indicates that cash transfers have limited effects on local food price increases when markets are functioning.[55, 56] Furthermore, humanitarian cash transfers remain effective in high inflation contexts when various programmatic adaptations are implemented. These adaptations include mechanisms for regularly updating the transfer value, adjustments in payment frequency and currency, incorporation of economic risks in contingency plans, and frequent monitoring of local prices and other economic and financial variables.

In some humanitarian situations, when markets are disrupted and food prices are high, using in-kind assistance may be appropriate in order to avoid placing further pressure on local markets.[54, 56] For example, before the escalation of conflict in Gaza, the World Food Programme (WFP) relied mainly on cash-based transfers, underpinned by a robust retail network and adequate market supply. However, when conflict disrupted access and markets, WFP shifted to ready-to-eat food parcels to maintain support. Similarly, in the Sudan, market assessments indicated severe increases in the price of sorghum – a key staple in the country – prompting WFP to deliver in-kind transfers of this essential commodity to mitigate the erosion of people's purchasing power.

While evidence of the comparative effects of different transfer modalities on food security is mixed, the design and implementation of humanitarian social protection programmes should remain context-specific and people-centered to ensure maximum effectiveness and efficiency.

the first to respond to inflation concerns by raising interest rates. This was driven by rapid food price increases, wage-price indexation and less-anchored inflation expectations. Countries like Brazil, Chile and Mexico led the tightening cycle, with most LICs and MICs taking significant action by the end of 2021.[15] In contrast, high-income countries, benefiting from strong policy credibility and historically stable inflation, initially delayed tightening, viewing inflation as temporary. However, once they shifted course, they moved swiftly, implementing aggressive monetary tightening policies despite complications from ongoing asset purchase programmes and forward guidance strategies.[au, 61]

au A forward guidance strategy is a communication tool used by central banks to influence market expectations about future monetary policy. It involves providing explicit signals about the likely direction of interest rates or other policy measures based on economic conditions.[60]

The combination of pandemic-era fiscal stimuli and subsequent monetary tightening to control inflation has significantly exacerbated public debt levels, reducing countries' ability to access financing including for investments for food security and nutrition. Low- and middle-income countries have been particularly affected, with their debt rising at twice the rate of that of advanced economies. By 2023, LICs and MICs accounted for 30 percent of global debt, up from just 16 percent in 2010. This rapid debt accumulation has dramatically increased interest payments, with 3.3 billion people now living in countries that spend more on debt servicing than on education or health care.[62] This can compromise the availability of financing needed to end hunger, food insecurity and malnutrition by 2030.[38, 63]

4.1.3 A double-edged sword in a game of trade

Dynamic trade patterns: the evolving impact on food price inflation

Effective trade policies play a crucial role in stabilizing food prices and ensuring market resilience. During periods of high food prices, governments often adjust trade measures such as tariffs, quotas and export bans to protect domestic consumers. Reducing import tariffs can lower the cost and increase the supply of foods, thereby mitigating price spikes. Conversely, export bans can help stabilize domestic prices, but may disrupt global markets, particularly when implemented by major food exporters.[18, 64, 65] Trade restrictions can alter the balance between global food supply and demand, with harmful effects on both exporting and importing countries.[65, 66] Countries that are more open to trade usually achieve higher levels of adequacy of nutrient supply.[67]

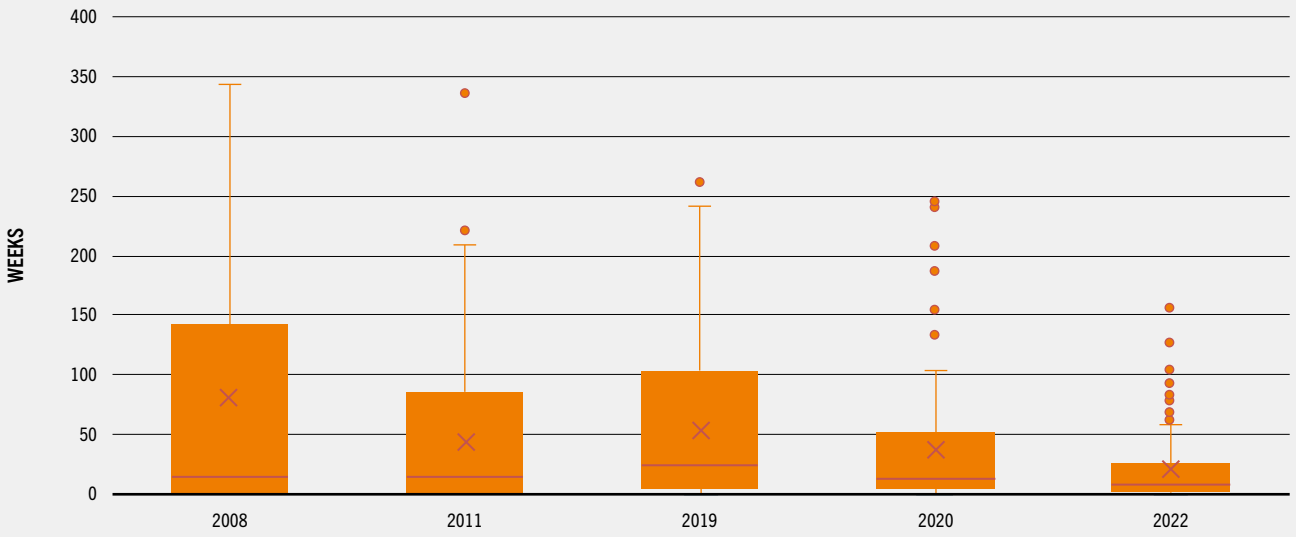
The 2022 episode of food price inflation was less affected by trade measures compared to the 2007 to 2008 food price crisis. During the 2007 to 2008 crisis, major exporters like Argentina and Ukraine imposed wheat export bans, while China and India restricted rice exports.[66] In contrast, during the 2022 commodity price surge, only a few major exporters implemented trade restrictions, and most were temporary with minimal long-term effects on trade flows.[66] For example, export restrictions during the 2007 to 2008 crisis affected over 15 percent of internationally traded staple food calories, whereas in the early months of the COVID-19 lockdowns, this figure reached 7.5 percent. Following the outbreak of the war in Ukraine, trade restrictions impacted between 7 percent and 12 percent of traded calories throughout much of 2022.[68]

Nevertheless, global trade policies on agricultural products have remained a key tool for food security in recent years, with major economies adjusting tariffs and trade relationships in response to shifting market dynamics and geopolitical tensions. In response to the introduction of tariffs on steel and aluminium by the United States of America in 2018, several trading partners, such as Canada, China, Mexico and the European Union imposed retaliatory tariffs on a wide range of US agricultural products.[69] These elevated tariffs remained largely in place through 2021, contributing to ongoing trade tensions and influencing global agricultural trade dynamics. In response to current or expected tariffs, many countries, including China, Nigeria, the Philippines and the United Kingdom of Great Britain and Northern Ireland, have increased diversification strategies towards their trade partners. For example, China has diversified by increasing imports from alternative countries such as Brazil and the Russian Federation, and by promoting domestic production through increased productivity and supportive policies, among other measures.[70, 71]

In response to the significant 2022 surge in agricultural commodity prices and its effects on domestic food price inflation, countries exhibited varied approaches regarding trade measures on agrifood products. India reduced import duties on edible oils.[72] Similarly, Indonesia and Malaysia adjusted their export policies in response to volatile market conditions. While Malaysia withdrew an export ban on live chicken and chicken meat, Indonesia lifted an export ban and a tariff on wheat, but also implemented and then rapidly removed an export ban on palm oil to protect local supply.[73, 74] Temporary export bans were also applied by Bangladesh (on rice), China (on corn starch) and India (on rice), among others. Conversely, Argentina took a different approach, maintaining tariffs while implementing price controls and export restrictions on wheat and other key agricultural commodities to manage domestic inflation. Meanwhile, the European Union increased regulatory scrutiny on potential price manipulation in international markets, reflecting a broader strategy of balancing trade liberalization with market oversight.[75]

Interestingly, most recent trade interventions have been short-lived, helping to avoid long-term market distortions and disruptions to global supply chains. In response to the pandemic and subsequent food price surges, many countries implemented measures – for example, export restrictions, import tariff reductions, and quotas – in order to stabilize domestic markets and ensure food security and nutrition. However, these interventions were often temporary and were lifted once market conditions improved

FIGURE 4.3 SHORTENING POLICY DURATIONS: A TREND TOWARDS QUICK REVERSALS



NOTES: The box plot illustrates how long trade policy interventions lasted, measured in weeks. Only trade-distortive interventions affecting the food sector are included, and those still in place are excluded. The central line inside each box and the X represent the median and average duration, respectively, while the whiskers extend to capture most of the remaining interventions, excluding extreme outliers. Interventions are grouped based on their start year. Over time, the median duration of these interventions has decreased, suggesting a shift towards shorter policy measures.

SOURCE: Authors' (FAO) own elaboration based on Global Trade Alert. 2025. Global Trade Alert Data Center. [Accessed on 28 February 2025]. https://globaltradealert.org/data-center. Licence: CC-BY-4.0.

https://doi.org/10.4060/cd6008en-fig4.3

or the immediate crisis subsided. For instance, several countries imposed export bans on staple foods during the pandemic (2020 to 2021), but most of these were removed within months as supply chains adjusted and food availability stabilized. Similarly, during the 2022 episode of high food prices, some governments introduced export controls on key commodities yet swiftly rolled them back to minimize trade disruptions. In general, countries tend to use short-duration trade interventions (Figure 4.3) to address short-term challenges without causing prolonged market distortions or harming trade relationships.

While export restrictions may offer short-term relief, they can exacerbate price volatility at the global level. Past events have shown how such measures can significantly inflate prices on a global scale. Trade restrictions on fertilizers, including phosphates, played a role in driving price spikes during the last three global food crises (2007 to 2008, 2011 to 2012, and 2022 to 2023) (Box 4.2). Given the interconnected nature of global food markets, uncoordinated trade restrictions can create cascading effects, disproportionately affecting vulnerable populations, and potentially lowering domestic producer prices below international market prices.[19, 66, 76, 77] For instance, about three-quarters of the increase in the price of rice that occurred in 2008 can be associated with adverse policy responses, such as export bans, from some major exporters.[78] Also, an announcement of trade restrictions and other trade measures can increase price volatility.[79] To mitigate these risks, international cooperation is essential. Strengthening commitments to open and predictable trade, particularly through global and regional trade agreements, can help reduce uncertainty and promote market stability.

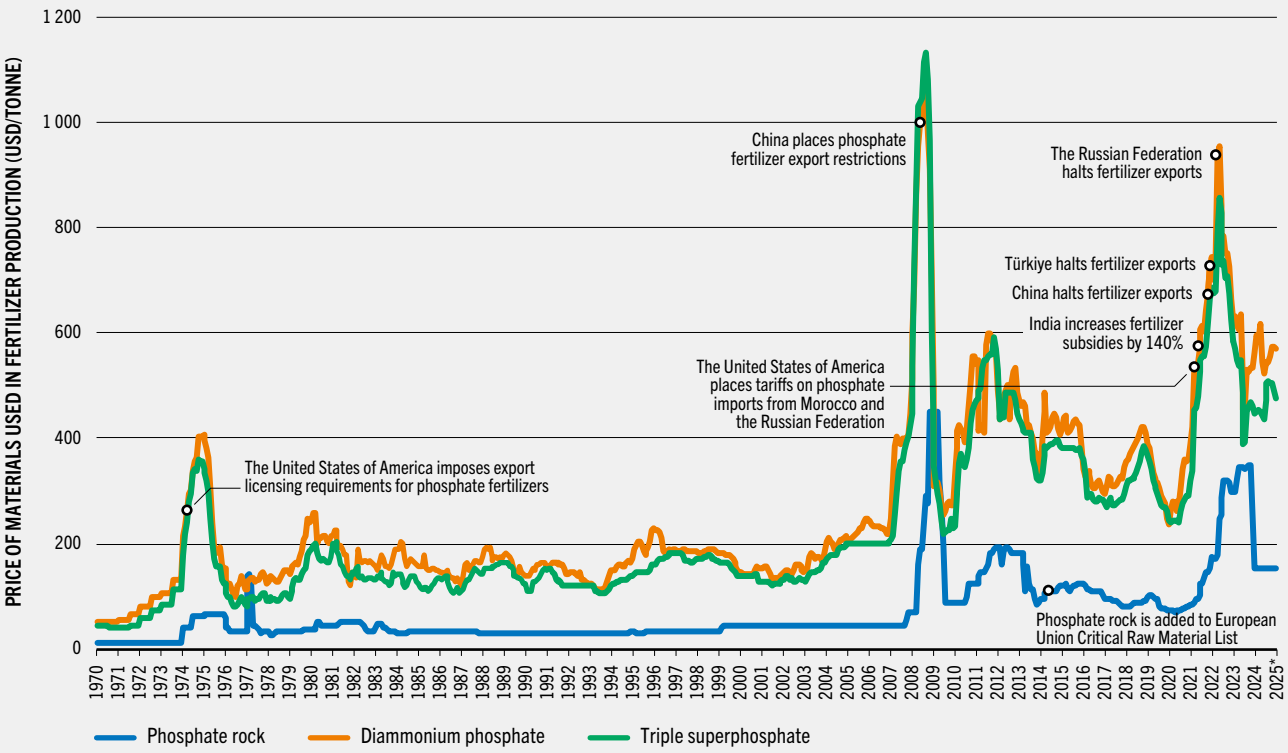
BOX 4.2 EXPORT BANS AND TRADE RESTRICTIONS SHAPED GLOBAL PRICES OF PHOSPHATE FERTILIZERS

Phosphate fertilizers are essential for agricultural production as they promote strong root development, enhance crop yield and support overall plant health, especially in nutrient-deficient soils. Phosphate fertilizer prices have historically been shaped by both long-term structural trends and short-term shocks, with trade restrictions playing a key role in market volatility. Three major price spikes – in 1974, 2008, and 2021 to 2022 – were driven in part by export restrictions, alongside supply–demand imbalances, rising energy costs, and geopolitical tensions.[80]

Export bans and restrictions have been critical factors in these disruptions (Figure A). In 2008, China imposed export restrictions on phosphate fertilizers to protect domestic supply, exacerbating global shortages.[81] A similar pattern emerged during the 2021 to 2022 price surge, when China once again limited phosphate exports, worsening supply constraints at a time of rising global fertilizer demand.[82, 83] The 2022 outbreak of the war in Ukraine further disrupted phosphate trade, as sanctions and supply chain shifts reshaped global commodity flows.[84]

Beyond these recent events, trade policies have historically influenced phosphate fertilizer markets. The United States of America, as a major phosphate exporter, has faced political sensitivities around its trade practices. In the 1970s, debates over the US State of Florida's phosphate shipments to the former Soviet Union underscored concerns about resource security.[85] Although large-scale phosphate fertilizer export bans are not widely documented from that period, some countries likely implemented export restrictions, quotas, or licensing requirements to stabilize domestic markets.

FIGURE A MONTHLY EVOLUTION OF PHOSPHATE FERTILIZER PRICES, 1970–2024

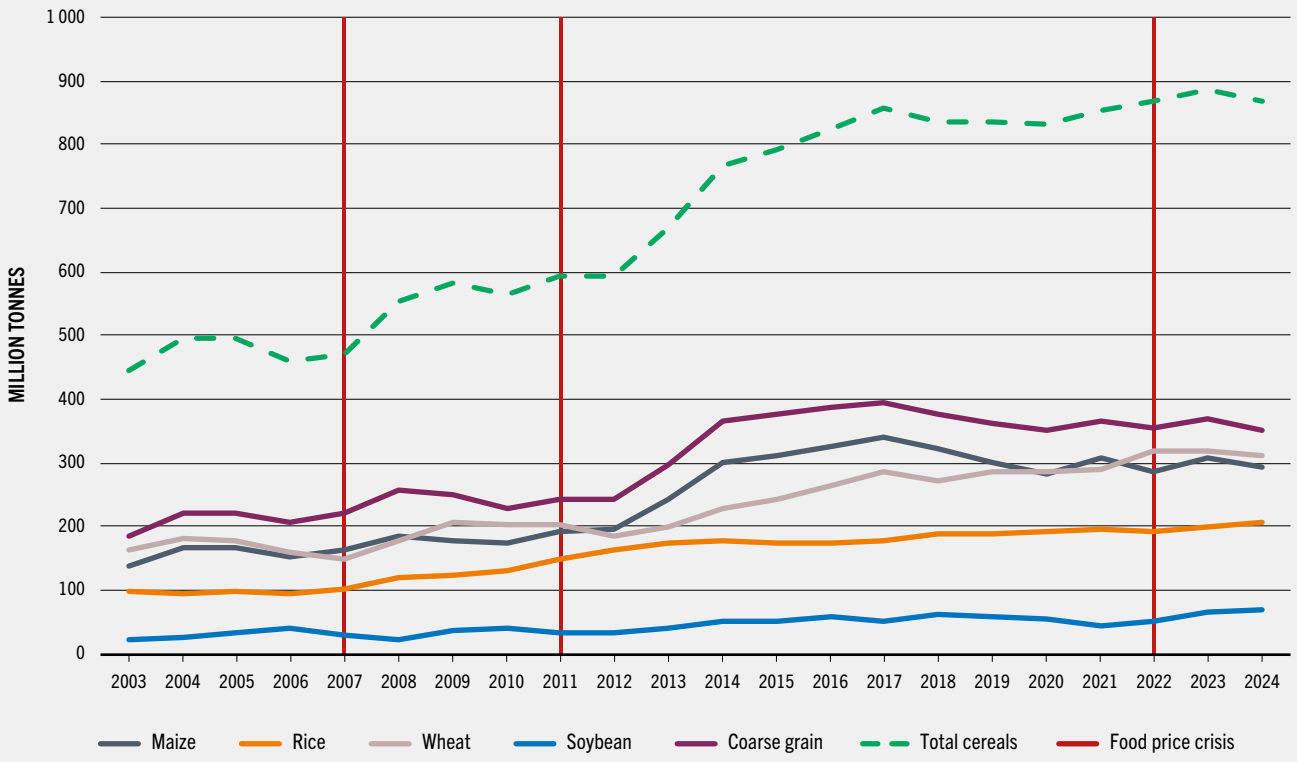


NOTE: * Data are available through December 2024.

SOURCES: Authors' (FAO) own elaboration based on Brownlie, W.J., Sutton, M.A., Cordell, D., Reay, D.S., Heal, K.V., Withers, P.J.A., Vanderbeck, I. & Spears, B.M. 2023. Phosphorus price spikes: A wake-up call for phosphorus resilience. *Frontiers in Sustainable Food Systems*, 7: 1088776. https://doi.org/10.3389/fsufs.2023.1088776. Data are from World Bank. 2025. Commodity Markets "Pink Sheets" Data. [Accessed on 14 March 2025]. https://www.worldbank.org/en/research/commodity-markets. Licence: CC-BY 4.0.

https://doi.org/10.4060/cd6008en-figB4.2A

FIGURE 4.4 GLOBAL CEREAL STOCKS ON THE RISE AFTER PRICE VOLATILITY



SOURCE: Authors' (FAO) own elaboration based on AMIS (Agriculture Market Information System). 2025. Market Database. [Accessed on 13 March 2025]. http://statistics.amis-outlook.org/data/index.html. Licence: CC-BY-4.0.

https://doi.org/10.4060/cd6008en-fig4.4

Are stocks essential again? The return of strategic reserves

Strategic food reserves play a role in mitigating the impact of food supply shocks and ensuring national market stability; the two most common types are emergency and buffer stocks. Both are designed to mitigate food supply disruptions, but they serve distinct purposes. Emergency stocks reduce consumer vulnerability during supply disruptions or food price shocks in emergencies, whereas buffer stocks stabilize domestic market prices to avoid excessive volatility, benefiting both consumers and producers.[76, 86]

The role of public stockholding programmes in managing food prices has been a topic of renewed interest in recent years. During the 1980s and 1990s, many countries significantly reduced or eliminated these programmes as part of structural adjustment and market liberalization policies. However, the food price spikes of 2007 to 2008 prompted a resurgence of public stockholding initiatives as governments sought to stabilize domestic markets and ensure food security (Figure 4.4). The recent surge in food price inflation has once again brought to the forefront the debate on the strategic use of public food reserves.[76]

When effectively managed, reserves can help stabilize prices, reduce reliance on trade restrictions, and provide crucial support for vulnerable populations during crises.[87, 88] For instance, in response to rising wheat prices, India implemented an open market operation in July 2023, releasing 10 million tonnes of wheat from public stocks. This intervention

successfully curbed wheat price inflation, which had exceeded 12 percent, bringing it down to between 3 and 7 percent.[89] Since 2021, Uzbekistan reformed its strategic grain reserves: the release of stocks through commodity exchanges to stabilize supply disruptions was complemented by temporary storage subsidies and cash payments to safety net beneficiaries. These adjustments significantly reduced procured wheat stocks – from 50 percent of total production in 2021 to just 12 percent in 2024 – while cutting the fiscal cost of the strategic grain reserves from USD 537 million (0.8 percent of GDP) to USD 197 million (0.3 percent of GDP) over the same period. Importantly, despite these changes, domestic wheat price volatility remained stable, even amid external challenges.[90]

However, the effectiveness of food reserves and their distribution depend on sound governance, cost efficiency and integration with broader market-based mechanisms. Poorly designed reserves can lead to unintended market distortions, fiscal strain and inefficiencies in food distribution, underscoring the need for careful planning and execution.[91, 92] For instance, in 2023, the release by India of large quantities of wheat into the market reduced public stock levels, potentially limiting the government's ability to respond to future supply shocks. The reliance on public stockholding as a primary tool for managing food price volatility may also lead to fiscal strain, as maintaining and distributing large reserves is costly.[93] Such costs can be significant; for instance, the cost of buffer stocks in India (in 2009) and Zambia (in 2011) was 1.5 percent and 1.9 percent of the national GDP, respectively.[94]

Public buffer stockholding policies may have significant short- and medium-term impacts on domestic and international commodity markets. Increasing public stock levels can stabilize prices in the event of supply shocks, but may lead to higher procurement costs and elevated commodity prices, affecting market dynamics and public expenditures.[95] Conversely, reducing public stock levels can enhance market availability, lower prices and reduce fiscal burdens, but may leave markets more exposed to future shocks.[76] Export subsidies, often applied by large exporters when stocks are released, can depress international prices by increasing global supply, which may benefit consumers in net food-importing developing countries. However, this practice can negatively impact farmers in countries where comparable government support is lacking, making it challenging for them to compete in both domestic and international markets.[76] Policymakers should carefully balance stockholding levels to ensure food security and nutrition while minimizing unintended market distortions and fiscal pressures.[96]

Public buffer stockholding programmes can have unintended consequences for market dynamics, particularly by discouraging private sector participation in grain storage and trade. Major and unpredictable government intervention in markets creates uncertainty among private actors, reducing their incentive to invest in storage infrastructure and trading activities. As a result, market liquidity declines, and the number of participants capable of stabilizing prices diminishes. Over time, this can lead to greater price volatility, undermining the very objectives of public stockholding policies: food security and nutrition, and market stability. This is one of the reasons that many buffer stock programmes have failed to decrease price volatility.[94, 96]

A well-functioning food reserve system requires a coordinated approach that combines reserve holdings with complementary measures such as early warning systems, regional trade cooperation, and private sector involvement. Clear and transparent rules for stock release are essential to ensure that reserves act as a last-resort mechanism rather than a tool for routine market intervention.[91] Regional cooperation can reduce the need to have large stocks;[93] for instance, the required stock levels for an emergency reserve in West Africa can be reduced by up to 40 percent compared to a non-cooperative approach, ensuring more efficient resource allocation and improved resilience to shocks.[97]

4.1.4 Mitigating price pressures with information systems

A well-functioning market information system, supported by timely and high-quality data, is important for fostering informed decision-making and improving the overall efficiency of agricultural

markets. Market information systems play a pivotal role in this regard by collecting, analysing and disseminating data on both input and output markets. A robust MIS consolidates data from multiple sources – markets, major buyers and sellers, and government monitoring services – ensuring credibility and reliability. The accuracy, consistency and timeliness of underlying data are fundamental to the effectiveness of any MIS, as poor-quality data can mislead stakeholders and undermine trust in the system. By providing farmers, traders, processors and policymakers with timely and accurate market intelligence, market information systems help improve decision-making, enhance market efficiency, and reduce the risks of sudden price spikes and volatility.[av, 99]

By promoting transparency and improving policy coordination in global food markets, an MIS can contribute to mitigating unexpected price surges that can affect global food security and nutrition. For instance, the Agricultural Market Information System (AMIS) is an interagency initiative[aw] – launched by the G20 Ministers of Agriculture in 2011 after the global food price crisis of 2007 to 2008 – to support the improvement of market transparency and reduce the risks of price volatility. During the pandemic and since the outbreak of the war in Ukraine, AMIS has facilitated information sharing among countries, enabling policymakers to better understand the dynamics of global agricultural markets and make informed decisions. For instance, the AMIS Rapid Response Forum held a series of policy dialogue events to reduce the impacts of the war in Ukraine on food trade.[101]

The ability to track and compare trends across different regions and commodities allows policymakers to identify vulnerabilities and respond proactively to potential price spikes. For instance, in India, during the pandemic in 2020, the government actively leveraged the eNAM (National Agriculture Market) platform, which connects farmers to wholesale buyers nationwide using real-time data to track prices and market trends, mitigate supply chain disruptions, and ensure farmers maintain market access. Beyond enabling online trading, the government further strengthened the platform by integrating additional markets and providing direct financial support to farmers, enhancing their resilience during the crisis.[102]

Quick access to market information systems, whether through traditional or modern communication channels, can significantly reduce price volatility and improve market efficiency. When information is limited or costly, market participants cannot engage in optimal arbitrage, leading to price dispersion and inefficient allocation of goods. However, internet access or mobile phones can help alleviate these issues. For example, in Kerala, India, between 1997 and 2001, the adoption of mobile phones by fishermen and wholesalers led to a dramatic reduction in price dispersion, the elimination of waste, and near-perfect adherence to the Law of One Price.[ax, 104] Similarly, in the Niger, the introduction of mobile phone services between 2001 and 2006 reduced grain price dispersion by between 10 and 16 percent, with the greatest impact in remote markets.[105] Box 4.3 showcases how the integration of innovative technology solutions into rural agricultural practices is transforming how small-scale producers access markets, resources and financial services in Latin America.

4.1.5 Strategic investments to prevent future food price increases

Recent food price spikes in global food markets have underscored the need for sustained investment in agriculture to enhance the resilience of agrifood systems and protect food security and nutrition. Farmers in key agricultural economies, including China, India and the Russian Federation, responded to the crisis-induced

av A good example of such an initiative is the Agriculture and Food Chain Observatory portal to be employed by the European Commission.[98]

aw Integrated by FAO, the Group on Earth Observations Global Agricultural Monitoring Initiative (GEOGLAM), the International Food Policy Research Institute (IFPRI), the International Fund for Agricultural Development (IFAD), the International Grains Council (IGC), the Organisation for Economic Co-operation and Development (OECD), the United Nations Conference on Trade and Development (UNCTAD), the World Bank, the World Food Programme (WFP) and the World Trade Organization (WTO).[100]

ax The Law of One Price is an economic principle stating that, if goods are efficiently allocated across markets, the price for these identical goods in different locations should not differ by more than the transportation costs.[103]

BOX 4.3 INNOVATIVE MARKET INFORMATION TOOLS SUPPORTING SMALLHOLDER FARMERS

In Latin America, innovative market information tools are making a significant impact on small-scale producers' livelihoods by connecting the producers to financial and non-financial services, market opportunities, and critical agricultural information.

One notable initiative is the Innovatech project grant, which in its first edition collaborated with 12 tech startups across five Latin American countries (Plurinational State of Bolivia, El Salvador, Guatemala, Honduras and Mexico). The project aimed to mainstream the use of digital solutions developed by these startups, integrating them into the work delivered through other projects to support the development of agrifood value chains. By linking startups with agrifood value chain initiatives, the project provided target groups with digital solutions to address their pre-identified problems. The project reached approximately 21 000 households, including women, youth and Indigenous Peoples, by connecting 382 organizations with technology-driven solutions.

In the Plurinational State of Bolivia, Hola Tractor has transformed its business model to better serve smallholder farmers. Originally catering to medium producers, Hola Tractor now includes small-scale producers in its client base through alliances with large producer organizations. This expansion has provided a larger client pool, and has allowed them to introduce new equipment services, such as rototillers, tailored to the needs of small llama producers in the highlands. These changes enable small-scale producers to access affordable mechanized solutions, enhancing their productivity and reducing labour costs, thus improving the prices of their products.

In El Salvador, the Alfi initiative empowers small-scale producers by strengthening their financial skills through an engaging mix of gamification, microlearning and behavioural insights.

In Guatemala, SiembraCo leverages virtual planting techniques and advanced technologies such as satellite imagery to boost agricultural productivity. This initiative supports small-scale producers by providing training, access to high-quality inputs, appropriate tools and equipment, and technical assistance for crop implementation. By integrating these resources, SiembraCo aims to empower farmers to increase their yields and improve their livelihoods.

In Honduras, the MiCaja App was designed to digitalize all operations of small village banks. This app enables these banks to generate daily financial and profit-and-loss statements, significantly improving the transparency of their financial management. As a result, the banks are able to access more capital for their lending operations. This, in turn, has helped farmers secure more credit at better rates, thereby reducing their risk of over-indebtedness.

Finally, in Mexico, Nilus provides affordable and nutritious foods to low-income urban populations through disintermediation, food rescue, and group buying. The model relies on partnerships with commercial agribusinesses, restaurants, hotels and large agricultural producers to source fresh and rescued produce, which is then redistributed through a network of community leaders. Nilus has formed alliances with producer organizations and begun purchasing from small-scale producers in rural areas to supply urban consumers. This approach not only supports small-scale producers, but also ensures a steady supply of nutritious foods to urban communities at affordable prices.

SOURCE: IFAD. 2022. *INNOVATECH Mission Completion Report.* Rome. https://www.ifad.org/documents/48415603/49457717/Project+Completion+Report+RPSF+2022+Dec.pdf/d69c5c6b-aff9-4be3-b905-40c4e761039b?t=1726605714309

price spikes of 2007 to 2008 with record levels of investment in agriculture.[106] After a decrease during 2021 and 2022, global public expenditure on agriculture increased again in 2023, reaching USD 701 billion in nominal value.[107] The year 2023 also saw an increase in credit to the agricultural sector, reaching USD 1.21 billion. However, this did not represent an increase in share (constant at 2.30 percent), because other sectors saw even greater credit increases in the same period.[108] Sustained investment – both public and private – in agriculture have the

potential to strengthen long-term food production capacity, improving market resilience; however, without complementary policy measures and considerations to ensure that these investments promote healthy diets, global food security and nutrition remains at risk should another crisis emerge.[106, 109]

Strategic investments in agricultural research and development (R&D) are reshaping global leadership in innovation, with shifting funding priorities across major economies. These investments can play a key role in reducing food prices through increases in agricultural productivity.[110] Notably, China has emerged as a global leader, with annual average public agricultural R&D spending surpassing that of Brazil, India and the United States of America combined between 2019 and 2021.[111] Conversely, the United States of America has experienced a decline in public agricultural R&D investment, with expenditures in 2019 approximately one-third lower in real terms compared to the peak in 2002.[112] Similarly, while the European Union allocated EUR 381 billion to overall R&D in 2023, the growth rate in agricultural research funding has been modest compared to that in Japan and the Republic of Korea, for example.[113]

Investing in resilient transport infrastructure – including maritime corridors, port facilities and inland logistics networks – can enhance food supply chain efficiency and reduce the risk of price spikes caused by infrastructure bottlenecks. The stability of food supply chains increasingly depends on a handful of critical bottlenecks that facilitate the movement of key commodities. International trade of agricultural commodities is growing, increasing pressure on a small number of "chokepoints" – critical junctures on transport routes through which exceptional volumes of trade pass. Three principal kinds of chokepoints are critical to global food security and nutrition: maritime corridors such as straits and canals, coastal infrastructure in major crop-exporting regions, and inland transport infrastructure in major crop-exporting regions.[114] A serious interruption at one or more of these chokepoints could conceivably lead to supply shortfalls and price spikes, with systemic consequences potentially reaching beyond food markets. More commonplace disruptions may not in themselves trigger crises but can add to delays, spoilage and transport costs, constraining market responsiveness and contributing to higher prices and increased volatility.

Similarly, investing in storage infrastructure is critical for enhancing price stability. Adequate storage facilities, including warehouses and cold chains, allow farmers to store their produce and sell at more favourable prices, rather than being forced to offload at low prices during peak harvest periods. This reduces price volatility and ensures a more stable supply of agricultural products throughout the year, contributing to food security and nutrition. Moreover, improved storage minimizes post-harvest losses, particularly in developing countries where inadequate facilities result in significant food loss.

Investing in cold chain infrastructure is crucial for improving the availability and quality of nutritious foods, enhancing producer prices and reducing food loss. Sustainable cooling technologies, which offer low operational costs, are increasingly being adopted, especially for the early stages of the cold chain, such as removal of heat from the field and storage of large quantities of produce.[115] These solutions are particularly beneficial in off-grid remote areas[116] and can contribute to reducing the price of nutrient-dense foods such as fruits and vegetables.[110] For example, walk-in cold storage containers equipped with solar panels have become a cost-effective option for storing fruits and vegetables in South and Southeast Asia. An evaluation of this technology in Northern Nigeria demonstrated significant improvements in both the volume of produce sold and the profits of users, while reducing losses and waste before sale.[117] Off-grid integrated solutions for cooling, transportation and solar-powered cold storage for vegetable value chains are currently being tested, often alongside innovative business models such as Cooling as a Service, which help address affordability and financing barriers, particularly in sub-Saharan Africa.[116] Additionally, technologies are being developed to reduce the reliance on imported components and facilitate maintenance by combining traditional and modern materials. A hybrid technology project in Mali, supported by the Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ)

[German Agency for International Cooperation] and Germany's Federal Ministry for Economic Cooperation and Development, increased income by 25 percent and extended the shelf-life of potatoes by one month.[116]

Limited storage capacity creates a sequence of market distortions. Farmers are compelled to sell produce immediately after harvest, creating market oversupply that reduces prices, diminishes bargaining power and heightens susceptibility to price volatility. The magnitude of this problem is substantial – in sub-Saharan Africa, inadequate grain storage facilities result in post-harvest losses and seasonal price fluctuations with an annual cost of USD 4 billion for grains alone.[118] In India, inadequate cold chains lead to substantial loss of produce before even reaching consumers, worsening food price inflation. Cold storage infrastructure is therefore vital to stabilize prices of perishable goods such as fruits, vegetables and dairy products. Investments in both traditional and cold storage facilities consistently reduce post-harvest losses and contribute to price stabilization and improved market functioning.

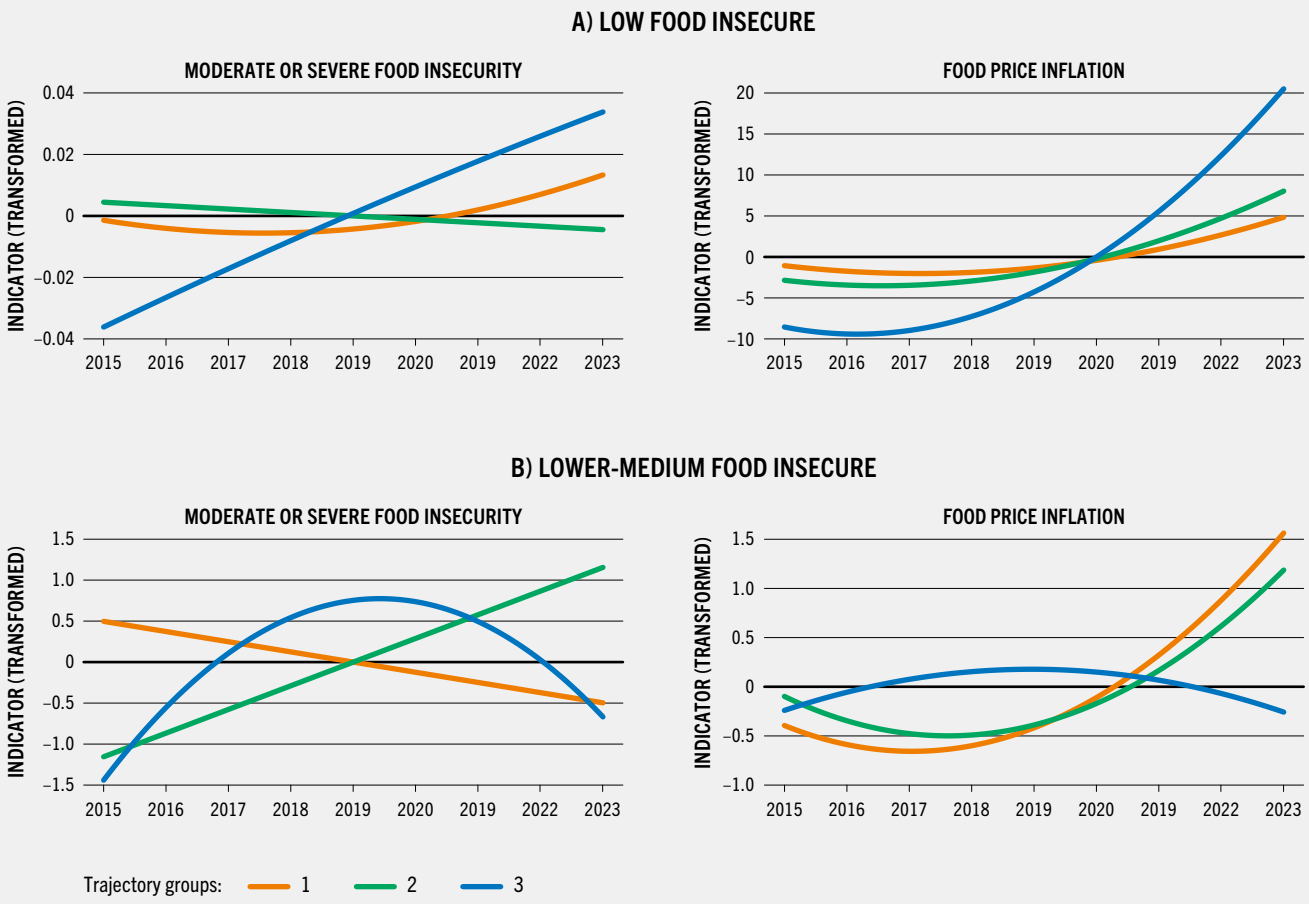
Investments in small and medium-sized enterprises (SMEs) in the midstream and downstream of agrifood systems play a critical role in rural economies by providing value chain opportunities for small-scale producers. These enterprises – which source, process, package and distribute food – are essential for increasing agricultural output, improving producer prices and reducing food losses along the value chain.[119] However, they may struggle to access appropriate finance tailored to their needs, as microfinance institutions often provide insufficient funding while commercial banks may consider SME customers to be too risky.[120, 121] Addressing these financing gaps enables agrifood SMEs to generate significant economic opportunities along the rural–urban continuum,[122] and if oriented towards sustainable manufacturing of nutritious foods, they can support nutritional outcomes. In fact, investments in agriculture yield the highest leverage ratio for developing economies,[123] with agrifood SMEs having strong multiplier effects that contribute to sustainable production and rural transformation. Several development projects have demonstrated the positive impacts of such investments. In Colombia, the Building Rural Entrepreneurial Capacities Programme (2012–2022) successfully increased income per capita by 34 percent, wages by 36 percent, and household assets by 10 percent. Additionally, project participants were less exposed to climate shocks and saw a 4 percent increase in dietary diversity.[124] The Rural Clustering and Transformation Project (2017–2022) in Montenegro helped participants increase their income by 35 percent, primarily through livestock, with a remarkable 92 percent increase in livestock sales.[125] ■

4.2 PATTERNS, POLICIES AND PATHWAYS: A TRAJECTORY ANALYSIS

Countries follow distinct trajectories in how food price inflation affects their food security outcomes. Despite facing comparable global food price pressures, countries demonstrate remarkable variation in domestic food price inflation rates and food security. This heterogeneity can help identify effective policy interventions that have successfully mitigated food price pressures and protected food security. While **Chapter 3** examined general relationships between food price inflation and food insecurity outcomes, this section analyses distinct patterns across countries to better understand if and what policies have helped maintain food security despite inflationary pressure. An analysis of 153 countries from 2015 to 2023 reveals that, even among those with initially comparable levels of food security, outcomes vary significantly: while some countries managed to maintain relative stability despite rising inflation, others experienced worsening food security outcomes (Figure 4.5).

Countries are categorized based on the 2023 prevalence of moderate or severe food insecurity in four groups: i) low (72 countries); ii) lower-medium (33 countries); iii) upper-medium (33 countries); and iv) high food insecure (15 countries). This ensures that countries are compared with peers facing similar initial food security conditions, acknowledging that any percentage change in food insecurity has fundamentally

FIGURE 4.5 DISTINCTIVE TRAJECTORIES OF FOOD SECURITY AND FOOD PRICE INFLATION, 2015–2023

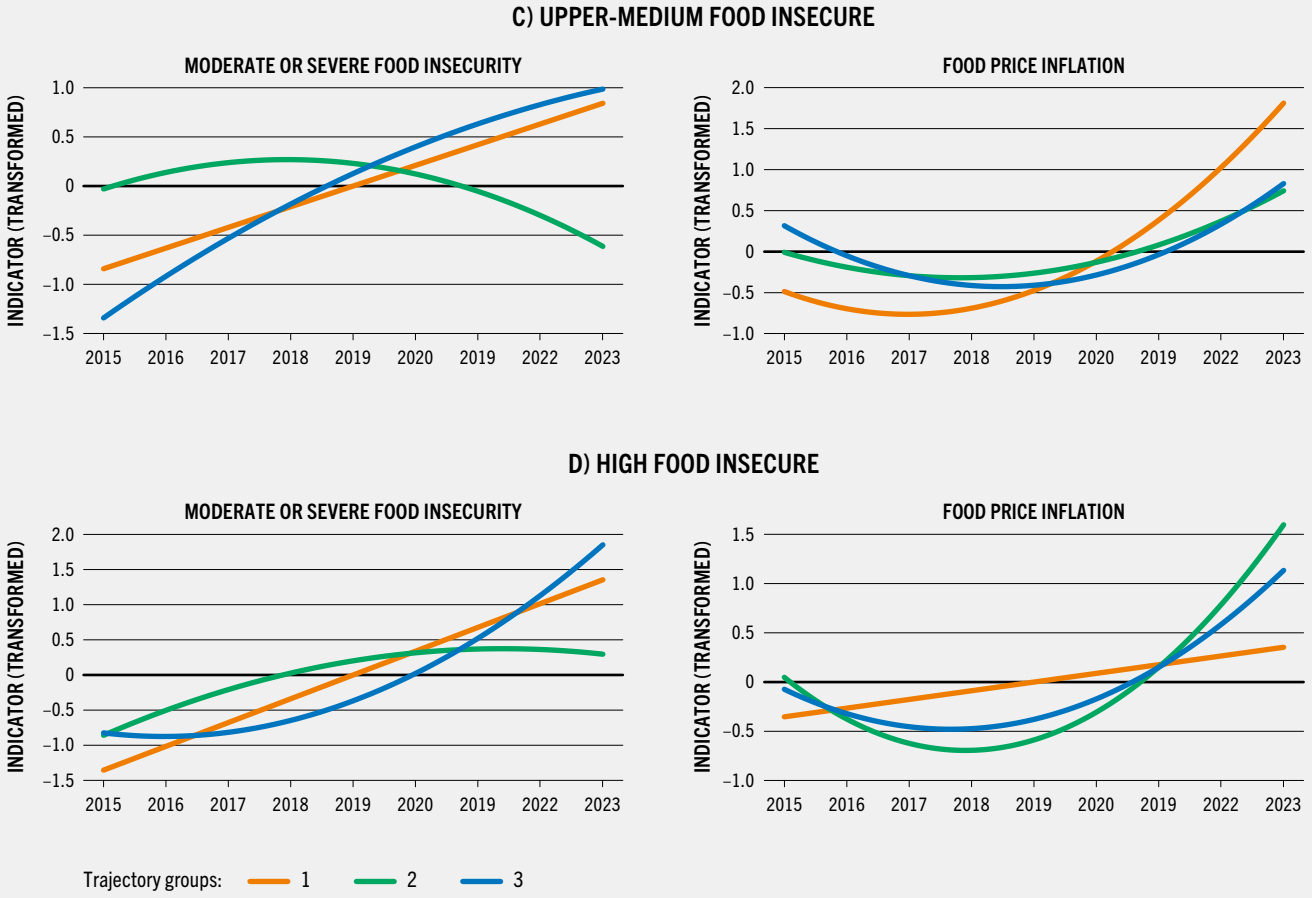


different implications for food-insecure versus food-secure populations.

Across all four baseline categories, three consistent trajectory patterns emerged with distinctive inflation–food security relationships. The first identified pattern shows minimal change in food security, despite moderate to severe food price inflation increases. The second exhibits deteriorating food security with varying levels of food price inflation, indicating challenges. The third displays unique dynamics specific to each baseline group, ranging from extreme deterioration to significant improvement in food security, despite food price inflation pressures. Correlation coefficients between food price inflation and food insecurity ranged from positive (0.58) to negative (–0.45) across these trajectory groups.[126]

Despite facing high-inflation volatility, some countries have managed to achieve marginal improvements in food security, while others have experienced significant setbacks. In the low food insecurity baseline category, 35 countries slightly improved food security despite annual food price inflation surging from 2.33 percent in 2015 to 10.75 percent in 2023. Similarly, 13 countries in the lower-medium food insecurity category achieved minor food insecurity reductions, despite extreme food

FIGURE 4.5 (Continued)



NOTES: Countries are grouped using Jenks natural breaks into low, lower-medium, upper-medium and high food insecure. Each panel shows trajectories of countries from 2015 to 2023 as estimated using group-based trajectory modelling with quadratic functions. The Y-axis shows transformed indicator values corresponding to moderate or severe food insecurity (left panels) and food price inflation (right panels), displaying relative changes from respective country averages within different groups. The numbered trajectories (1, 2, 3) represent distinct patterns within each food insecurity category: Low food insecurity: Group 1 – Stable food security, moderate inflation; Group 2 – Improving food security, strong inflation; Group 3 – Deteriorating food security, strong inflation. Lower-medium food insecurity: Group 1 – Improving food security, severe inflation; Group 2 – Declining food security, moderate inflation; Group 3 – Initially declining, then improving food security and mild inflation. Upper-medium food insecurity: Group 1 – Deteriorating food security, strong inflation; Group 2 – Improving food security, mild inflation; Group 3 – Declining food security, moderate inflation. High food insecurity: Group 1 – Deteriorating food security, mild inflation; Group 2 – Initially declining, then improving food security, severe inflation; Group 3 – Severely deteriorating food security, moderate inflation.

SOURCE: Mamidanna, S., Ignaciuk, A. & Carrasco Azzini, G. (forthcoming). *A global analysis of policy patterns across divergent food security trajectories under food price inflation – Background paper for The State of Food Security and Nutrition in the World 2025*. FAO Agricultural Development Economics Working Paper 25-08. Rome, FAO.

https://doi.org/10.4060/cd6008en-fig4.5

price inflation increases from 3.94 percent to 21.75 percent in the same period. In contrast, among countries with upper-medium food insecurity, 16 nations experienced substantial increases in food insecurity, associated with food price inflation spikes from 3.74 percent to 17.13 percent. These latter cases exhibited the strongest positive correlations between inflation and food insecurity.

Analysis of over 10 000 policy records and 35 policy instruments covering market management, production support and trade reveals distinctive patterns across different food security trajectories (Figure 4.6).[ay] Price controls and production subsidies are more common in lower-medium and high food-insecure countries,

ay For details regarding policy data sources, see Mamidanna, Ignaciuk and Carrasco Azzini (forthcoming).[126]

FIGURE 4.6 OBSERVED POLICY IMPLEMENTATION RATES ACROSS COUNTRIES BY FOOD INSECURITY (2023 LEVELS) AND TRAJECTORY GROUP

POLICY INSTRUMENTS	LOW FOOD INSECURITY		LOWER-MEDIUM FOOD INSECURITY			UPPER-MEDIUM FOOD INSECURITY			HIGH FOOD INSECURITY		
	Group 1	Group 2	Group 1	Group 2	Group 3	Group 1	Group 2	Group 3	Group 1	Group 2	Group 3
Social protection	2.9%	2.5%	7.9%	6.6%	4.2%	7.7%	5.7%	6.3%	9.9%	3.0%	6.2%
Price control	8.1%	8.9%	16.8%	25.3%	4.2%	13.7%	14.0%	9.6%	7.0%	6.8%	30.0%
Production subsidies	15.8%	13.2%	23.2%	18.5%	4.2%	12.4%	1.8%	13.9%	37.2%	4.1%	10.0%
Export restrictions	23.9%	29.3%	15.8%	22.8%	12.5%	13.1%	19.3%	16.5%	11.6%	8.1%	0.0%
Export restrictions removal	12.3%	16.1%	5.3%	12.3%	4.2%	7.8%	3.5%	1.7%	2.3%	1.4%	0.0%
Import tariffs	67.2%	73.0%	35.8%	37.7%	8.3%	39.2%	26.3%	48.7%	51.2%	36.5%	20.0%
Import tariffs reduction	64.8%	67.7%	26.3%	38.9%	4.2%	33.3%	14.0%	38.3%	34.9%	23.0%	20.0%
Fertilizer export restrictions	18.5%	21.1%	2.1%	6.2%	4.2%	2.0%	0.0%	2.6%	0.0%	0.0%	0.0%
Fertilizer export restrictions removal	3.0%	1.5%	0.0%	2.5%	0.0%	2.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Fertilizer import tariffs	46.8%	45.4%	3.2%	11.1%	0.0%	2.6%	0.0%	3.5%	0.0%	0.0%	0.0%
Fertilizer import tariffs reduction	27.3%	26.3%	7.4%	17.3%	0.0%	11.1%	7.0%	6.1%	9.3%	5.4%	0.0%

NOTES: Percentages represent the proportion of country-years where each policy was active, calculated as the mean of binary indicators (0/1) across all observations in each group based on 153 countries from 2015 to 2023. Policy data were compiled from multiple sources to maximize coverage, though some records remain incomplete due to data availability constraints. Social protection figures are aggregated across all social protection instruments. Values below 0.5 percent are shown as 0 percent. Trajectory group of each baseline: Low food insecurity: Group 1 – Stable food security, moderate inflation; Group 2 – Improving food security, strong inflation; Group 3 is omitted as it has only one country. Lower-medium food insecurity: Group 1 – Improving food security, severe inflation; Group 2 – Declining food security, moderate inflation; Group 3 – Initially declining, then improving food security, mild inflation. Upper-medium food insecurity: Group 1 – Deteriorating food security, strong inflation; Group 2 – Improving food security, mild inflation; Group 3 – Declining food security, moderate inflation. High food insecurity: Group 1 – Deteriorating food security, mild inflation; Group 2 – Initially declining, then improving food security, severe inflation; Group 3 – Severely deteriorating food security, moderate inflation.

SOURCE: Mamidanna, S., Ignaciuk, A. & Carrasco Azzini, G. (forthcoming). *A global analysis of policy patterns across divergent food security trajectories under food price inflation – Background paper for The State of Food Security and Nutrition in the World 2025*. FAO Agricultural Development Economics Working Paper 25-08. Rome, FAO.

https://doi.org/10.4060/cd6008en-fig4.6

suggesting varied strategies to combat food insecurity. Export restrictions show an inverse pattern, with higher implementation rates in low food-insecure countries and decreasing presence as baseline food insecurity rises. Import policies are widely implemented across most country groupings, though their specific patterns differ based on food security trajectory.[126]

Lower-medium and high food-insecure countries tended to apply more price control measures and provide more subsidies for agricultural production. Price control measures were higher in lower-medium food-insecure countries (25.3 percent) and high food-insecure countries (30 percent), particularly among those on declining food security trajectories with moderate food price inflation. Among high food-insecure countries, production subsidies showed statistically significant differences, with the highest implementation rates (37.2 percent) in those experiencing deteriorating food security with mild inflation. These subsidies were also significant in lower-medium food-insecure countries (23.2 percent) that exhibited improving food security despite severe food price inflation.

Low food-insecure countries with stable or improving food security tended to adopt a more strategic mix of trade policy instruments,

in contrast to high food-insecure countries where the use of such instruments was more limited. Export restrictions were more frequently observed in low food-insecure countries (23 to 29 percent) with stable or improving conditions, with the use of these measures declining as baseline food insecurity increased. Among high food-insecure countries, those experiencing deteriorating conditions alongside mild food price inflation had markedly higher rates of import restrictions (37.2 percent) compared to those where food security improved after an initial decline (5.4 percent), despite facing severe food price inflation. A similar trend was evident in lower-medium food-insecure countries, where import tariff liberalization was more common in contexts of declining food security (38.9 percent) than it was in those countries showing recovery after earlier setbacks (4.2 percent). These patterns point to a largely reactive application of trade policies, which may contribute to their limited effectiveness in improving food security outcomes.

Association rule learning[az] is used to identify recurring policy patterns and combinations that consistently appear within different trajectory groups, providing insights into policy associations without implying causation. The relationship between policy implementation and food security trajectories presents significant analytical challenges due to both endogeneity concerns and data limitations. Higher policy implementation rates may reflect responses to deteriorating conditions rather than causal factors, while absence of policy records could indicate either confirmed absence or missing information.

Open trade policies are associated more frequently with stable or improving trajectories in low food-insecure countries. Countries in this group with stable food security despite food price inflation are more likely to have free or preferential trade agreements combined with no records of food stock management (lift: 1.60, confidence: 80 percent).[ba] They also show patterns linking competition policies and import tariffs (lift: 1.52, confidence: 76 percent). Countries with improved food security under strong food price inflation more frequently use policies that ease export restrictions. These patterns suggest that maintaining open trade channels through formal agreements, while limiting selective market interventions, may have contributed to improved food security outcomes in the face of food price inflation.

In lower-medium food-insecure countries on improving trajectories, a balanced mix of production support measures – combined with limited market management[bb] and export restrictions – was commonly observed. Countries that achieved better food security outcomes despite severe food price inflation often exhibited policy patterns characterized by adoption of production subsidies without accompanying price controls (lift: 1.97; confidence: 67 percent), as well as government procurement through imports.

In contrast, countries experiencing worsening food security were more likely to apply fertilizer-specific import tariffs without the use of export taxes as a policy instrument (lift: 1.56; confidence: 90 percent). A common pattern among countries on declining trajectories included the use of multiple policy instruments aimed at restricting exports, such as bans and quotas, and easing imports (lift: 1.58; confidence: 91 percent), along with a broader set of production support measures and fewer social protection interventions (lift: 1.35; confidence: 78 percent).

az Association rule learning is a machine-learning technique that identifies frequent patterns and statistical relationships in datasets by discovering rules of the form "if X, then Y". It calculates the probability that certain factor combinations co-occur with specific outcomes, using measures like confidence (conditional probability) and lift (association strength). Unlike causal inference, it identifies correlational patterns without establishing causality, making it useful for exploratory analysis of complex environments where multiple factors may be simultaneously present.

ba Lift values measure the strength of association between specific policy combinations and country trajectories. A lift value of 1.60 means countries implementing those specific policy combinations are 60 percent more likely to belong in that trajectory group compared to the average country in that baseline group. Higher lift values indicate stronger associations between policies and outcomes. Confidence represents the percentage of countries with those specific policy combinations that follow a particular trajectory.

bb Market management here represents a policy intensity measure across five instruments: food stock management, price controls, government market intervention, agricultural risk management, and value chain development.

In upper-medium food-insecure countries, a combination of both restrictive and liberalizing trade measures was commonly observed alongside declining food security trajectories. In contexts of moderate inflation, countries experiencing worsening food security often pursued policies that removed import restrictions. In these cases, government procurement through imports was frequently implemented without parallel efforts to ease export restrictions (lift: 1.73; confidence: 61 percent).

Among countries facing strong food price inflation and deteriorating food security, the most prevalent policy combination involved agricultural input support without accompanying food stock interventions (lift: 1.44; confidence: 68 percent). These patterns indicate that trade-focused approaches, when not complemented by adequate social protection systems, are observed alongside less favourable food security outcomes in settings with moderate levels of food insecurity. ■

CHAPTER 5 CONCLUSIONS

The recent period of global turbulence, marked by the COVID-19 pandemic, the war in Ukraine, and subsequent inflationary pressures, has once again tested the resilience of the world's agrifood systems for meeting Sustainable Development Goal (SDG) Targets 2.1 and 2.2 – end hunger, food insecurity and all forms of malnutrition by 2030. And while the challenges have been substantial and unprecedented, a clear message emerges: this time, the world has responded better.

The signs of improvement in hunger and food insecurity in recent years suggest that measures taken to turn the situation around after the setbacks caused by the pandemic and the war in Ukraine have had a positive effect at the global level. However, the contrasting regional trends point to important disparities in the challenges faced by countries and the policy options available to them, and most countries remain off track to achieve the 2030 SDG targets related to malnutrition. This year's report emphasizes the importance of an overarching analysis encompassing food prices and trade trends, as well as population-level food security and nutrition data, in order to better understand multidimensional impacts of food price inflation.

Compared to previous crises, such as the food price spikes of 2007 to 2008, the global response to the sources of the 2021 to 2023 inflationary shock was more coordinated, informed and restrained when looking at food security and nutrition. Governments and institutions showed greater awareness of the potential repercussions of uncoordinated action, and policy responses were more measured, better targeted, and grounded in lessons learned.

One of the clearest improvements is in the area of **trade policy**. While earlier crises were marked by widespread export bans and restrictive measures that amplified global uncertainty and price volatility, the recent episode saw fewer such interventions. Where they did occur, they were generally more short-lived and less disruptive. This shift has been crucial in maintaining the flow of agricultural commodities and ensuring that global markets remain functional, even during significant stress.

Similarly, the importance of **market transparency and timely information** has been reaffirmed. Initiatives such as the Agricultural Market Information System, established by the G20 in response to the 2007 to 2008 crisis, have played a key role in enhancing transparency of global food markets. By providing reliable data and improving communication between countries, these mechanisms help temper speculation and reduce the risk of panic-driven policy reactions. Strengthening these systems has proven to be one of the most effective tools in dampening extreme price movements and enhancing trust among market participants.

The response to the high food inflationary period also demonstrates the value of **robust institutions and established policy frameworks**. Countries with sound emergency response structures, including well-established social protection mechanisms,

were able to act faster and more effectively in supporting their vulnerable populations. Likewise, stronger coordination between fiscal and monetary institutions allowed for more coherent policy packages that balanced short-term relief with long-term stability.

Notwithstanding the progress made, more needs to happen to fully understand the effect of recent food price inflation on nutrition, and to further improve the resilience of people including women and children to food price shocks, as well as to the major drivers challenging the global efforts for the eradication of hunger, food insecurity and malnutrition.

Going forwards, effective responses to food price inflation should combine well-targeted fiscal measures, structural reforms, and coordinated policy actions. Short-term price interventions should be carefully calibrated to avoid market distortions and ensure long-term sustainability. In times of crisis, fiscal responses – such as cash transfers or temporary tax reductions – should be both targeted and time-bound, with clear exit strategies. Social protection programmes should be nutrition-sensitive and better designed to shield the most vulnerable while also accounting for the erosion of transfer value in high-inflation contexts.

At the macroeconomic level, sound fiscal management working in tandem with credible and transparent monetary policy helps stabilize markets and reinforce investor confidence. Central banks play a crucial role in anchoring inflation expectations, but success depends on anticipating fiscal trends and aligning policy tools accordingly. Strengthening coordination between fiscal and monetary authorities is key to ensuring policy coherence, especially in the context of food price inflation that can rapidly ripple through entire economies.

Structural measures are equally essential. Investments in food storage, transport infrastructure, and market information systems can reduce food losses, improve supply chain efficiency, and dampen future price volatility. Maintaining well-designed strategic reserves and enhancing market transparency contribute to more stable food markets and can be integrated into comprehensive risk management frameworks.

This year's report reaffirms that while food price inflation remains a pressing concern, it is not undefeatable. Sustained investments, strengthened policy coordination, greater transparency, enhanced policy focus on supporting healthy diets, and continued institutional innovation will be vital in building resilience to future shocks. The lessons of the past several years offer a roadmap for addressing both the immediate impacts of food price inflation on food security and nutrition, and the medium-term goal of achieving SDG 2 and affordable healthy diets for all. ■

COUNTRY NOT SPECIFIED
Freshly baked bread.
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ANNEXES

ANNEX 1A
Statistical tables to Chapter 2 106

ANNEX 1B
Methodological notes for the food security and nutrition indicators 152

ANNEX 2
Glossary 173

The supplementary material to *The State of Food Security and Nutrition in the World 2025* is available at:
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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 AND LOW BIRTHWEIGHT

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	
	2004–06 (%)	2022–24[4] (%)	2014–16 (%)	2022–24 (%)	2014–16 (%)	2022–24 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2022 (%)	2012 (%)	2023 (%)	2012[6] (%)	2023[7] (%)	2012 (%)	2020 (%)
WORLD	11.9	8.5	7.6	10.3	21.7	28.3	6.6	26.4	23.2	5.3	5.5	12.1	15.8	27.6	30.7	37.0	47.8	15.0	14.7
Least developed countries	24.9	21.3	18.9	21.5	50.0	57.3	6.7	38.5	33.9	3.0	3.3	4.9	8.1	35.1	37.2	45.5	52.7	16.1	15.3
Landlocked developing countries	24.1	17.0	15.6	17.4	44.3	50.5	5.2	35.5	29.1	4.1	4.1	9.7	13.4	29.4	32.2	45.2	50.0	15.2	14.7
Small Island Developing States	17.1	16.9	22.9	21.4	49.7	49.2	4.0	21.0	21.3	6.9	8.6	18.0	22.6	24.5	28.7	37.0	41.5	14.0	14.4
Low-income countries	27.3	27.7	21.2	25.1	55.3	64.3	6.4	39.6	35.8	3.7	3.5	6.5	9.6	33.2	35.7	42.9	51.7	15.4	14.9
Lower-middle-income countries	18.7	12.8	12.2	17.2	29.5	42.3	9.5	36.6	28.9	3.5	4.0	7.2	11.2	42.0	43.8	39.9	51.3	21.2	19.5
Upper-middle-income countries	8.1	2.6	2.9	3.2	12.9	13.4	2.1	13.3	10.8	8.0	8.6	10.7	15.8	19.0	20.1	31.0	39.9	8.0	8.4
High-income countries	<2.5	<2.5	1.4	1.6	8.0	7.8	0.4	3.9	4.0	7.5	8.4	22.3	25.7	14.1	17.4	n.a.	n.a.	7.9	8.0
Low-income food-deficit countries	25.6	24.4	20.1	24.1	51.8	61.4	5.8	36.7	32.1	3.9	4.0	8.0	11.7	33.8	36.0	41.0	50.8	14.6	14.0

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	
	2004–06 (%)	2022–24[4] (%)	2014–16 (%)	2022–24 (%)	2014–16 (%)	2022–24 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2022 (%)	2012 (%)	2023 (%)	2012[6] (%)	2023[7] (%)	2012 (%)	2020 (%)
AFRICA	**19.0**	**19.7**	**17.2**	**21.6**	**46.2**	**57.9**	**5.4**	**34.0**	**30.3**	**4.9**	**4.5**	**12.8**	**16.2**	**34.9**	**35.9**	**35.2**	**45.2**	**14.5**	**13.9**
Northern Africa*	**6.7**	**9.6**	**9.8**	**12.1**	**28.7**	**33.9**	**5.2**	**23.1**	**18.1**	**11.3**	**8.5**	**25.9**	**31.7**	**29.5**	**32.0**	**40.9**	**35.7**	**14.0**	**14.1**
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	23.8	30.2	31.6	25.4	28.6	6.9	7.2
Egypt	5.8	9.4	8.4	12.0	27.8	30.8	3.3	23.5	12.9	14.5	11.2	37.4	44.3	29.0	32.7	52.8	40.2	n.a.	n.a.
Libya	4.9	16.5	11.2	17.2	29.1	35.1	3.5[g]	25.8	9.2	23.0	4.7	32.0	36.7	28.3	29.3	n.a.	n.a.	n.a.	n.a.
Morocco	4.8	7.0	n.a.	n.a.	n.a.	n.a.	2.4[g]	15.6	13.7	10.2	4.2	16.7	21.8	28.6	29.5	27.8	35.0	16.1	14.8
Sudan	–	n.a.	n.r.	n.r.	n.r.	n.r.	n.a.	35.9	35.4	2.5	2.6	11.5	17.0	32.3	34.0	41.0	n.a.	n.a.	n.a.
Tunisia	4.0	3.0	9.1	9.6	18.2	25.4	2.1	8.9	8.9	13.6	17.5	22.0	26.8	26.5	27.7	8.5	13.5	8.1	8.2
Northern Africa (excluding the Sudan)	**5.5**	**7.3**	**9.1**	**10.4**	**26.1**	**28.8**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**28.0**	**34.1**	**29.0**	**31.5**	**40.9**	**35.7**	**13.9**	**13.9**
Sub-Saharan Africa	**22.2**	**21.9**	**18.9**	**23.7**	**50.4**	**63.2**	**5.5**	**36.0**	**32.2**	**3.7**	**3.9**	**8.5**	**11.4**	**36.3**	**36.8**	**34.2**	**46.3**	**14.5**	**13.9**
Eastern Africa	**31.8**	**25.8**	**21.9**	**24.5**	**58.5**	**64.6**	**4.8**	**38.7**	**31.2**	**3.9**	**3.9**	**4.9**	**8.1**	**27.3**	**31.4**	**48.5**	**59.2**	**14.7**	**14.0**
Burundi	n.a.	n.a.	n.a.	20.9[a]	n.a.	70.8[a]	7.8[g]	55.4	55.3	2.0	2.4	3.0	5.0	26.8	39.0	69.3	85.0	15.1	14.8
Comoros	16.3	15.4	n.a.	27.4	n.a.	79.7	5.1	31.6	17.4	10.6	3.9	10.7	16.3	26.3	29.9	11.4	22.6	24.1	23.0
Djibouti	28.9	12.9	n.a.	16.5	n.a.	49.2	12.1[g]	27.8	20.9	1.2	5.5	7.1	11.3	27.2	31.8	12.4	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	2.7	4.8	31.5	35.6	68.7	n.a.	15.4	15.2
Ethiopia	36.4	19.7	14.5	19.0[c]	56.2	61.4[c]	6.8	42.1	35.5	2.7	3.3	1.5	2.8	18.1	23.1	52.0	58.8	n.a.	n.a.
Kenya	28.0	36.8	15.0[a, b]	28.1[b]	50.7[a, b]	73.9[b]	4.5	29.0	17.9	5.0	4.3	8.1	12.4	27.2	32.2	31.9	59.7	10.8	10.0
Madagascar	32.9	39.5	n.a.	17.8	n.a.	72.6	7.2	48.2	38.4	1.6	2.3	2.3	4.3	32.2	37.2	41.9	54.4	19.5	18.7
Malawi	21.5	21.4	47.7[a, b]	55.6[a, b]	78.1[a, b]	81.7[a, b]	2.4	43.5	33.2	4.8	4.4	4.5	7.7	26.4	32.4	70.8	64.1	15.8	15.6
Mauritius	5.4	8.7	5.2	12.2	13.0	31.1	n.a.	8.2[f]	7.8[f]	5.1[f]	4.8[f]	16.5	19.2	20.8	32.8	n.a.	n.a.	19.1	18.7
Mozambique	29.2	21.8	n.r.	n.r.	n.r.	n.r.	3.8	42.6	37.0	5.7	4.4	6.1	10.3	45.1	47.0	40.0	55.5	18.1	17.8

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	
	2004–06 (%)	2022–24[4] (%)	2014–16 (%)	2022–24 (%)	2014–16 (%)	2022–24 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2022 (%)	2012 (%)	2023 (%)	2012[6] (%)	2023[7] (%)	2012 (%)	2020 (%)
Rwanda	36.7	24.4	n.r.	n.r.	n.r.	n.r.	1.1	41.3	29.8	6.2	5.1	2.4	4.9	14.1	16.1	83.8	80.9	9.3	9.4
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	25.1	29.4	21.5	25.8	n.a.	n.a.	12.3	12.5
Somalia	69.7	53.2	n.a.	n.a.	n.a.	n.a.	n.a.	29.4	23.9	2.7	2.5	9.6	14.6	41.9	46.2	5.3	33.7	n.a.	n.a.
South Sudan	–	22.3	n.a.	63.1[a]	n.a.	88.1[a]	n.a.	31.0	30.0	5.9	4.3	5.3	8.6	29.4	35.0	44.5	n.a.	n.a.	n.a.
Uganda	18.8	22.0	21.5[b]	14.9[a, b]	66.3[b]	54.6[a, b]	3.2	33.4	23.5	4.0	4.2	4.2	7.9	24.3	27.2	62.2	n.a.	n.a.	n.a.
United Republic of Tanzania	28.5	20.2	20.6[b]	24.4[b]	48.8[b]	58.0[b]	3.1	37.7	29.9	4.3	4.7	7.5	12.6	36.7	38.8	48.7	64.3	10.5	9.7
Zambia	49.4	37.2	22.4[b]	17.2[b]	51.2[b]	45.3[b]	4.2	40.8	32.3	6.4	6.3	6.8	11.1	26.5	27.1	59.9	64.1	12.0	11.2
Zimbabwe	29.5	19.7	35.5	25.1	64.7	68.8	5.1	31.0	23.7	4.5	4.0	10.1	14.2	25.9	27.5	31.3	42.4	12.2	11.8
Middle Africa	**28.4**	**29.6**	**n.a.**	**36.8**	**n.a.**	**76.9**	**5.5**	**37.8**	**40.1**	**4.7**	**5.2**	**6.6**	**9.3**	**44.1**	**41.7**	**28.4**	**43.9**	**12.8**	**12.2**
Angola	42.9	22.5	n.a.	n.a.	n.a.	n.a.	n.a.	31.4	47.7	3.1	4.7	8.5	11.5	45.2	43.8	n.a.	n.a.	15.7	15.5
Cameroon	13.8	4.8	22.3	24.7	49.9	61.2	4.3	32.3	27.2	8.1	13.6	11.8	14.9	37.4	38.9	19.9	39.4	12.9	12.5
Central African Republic	34.8	29.8	n.a.	n.a.	n.a.	n.a.	5.2[g]	39.6	38.9	2.6	2.3	5.9	9.3	44.0	43.4	33.0	36.2	15.9	16.4
Chad	30.9	32.0	32.4[b]	25.2[b]	67.9[b]	66.3[b]	7.8	37.4	31.5	2.3	2.5	4.5	6.7	50.1	46.5	3.2	7.4	n.a.	n.a.
Congo	28.4	26.4	n.r.	n.r.	n.r.	n.r.	n.a.	23.1	16.3	5.1	5.3	7.4	8.5	50.9	46.7	20.2	n.a.	11.6	11.9
Democratic Republic of the Congo	27.3	38.5	n.a.	42.5	n.a.	81.5	7.2	42.9	44.1	4.7	4.2	4.4	6.6	43.7	40.0	36.4	52.5	11.0	10.2
Equatorial Guinea	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	24.9	17.1	8.6	7.5	13.9	17.7	43.1	41.3	7.4	n.a.	n.a.	n.a.
Gabon	14.3	25.3	n.r.	n.r.	n.r.	n.r.	3.4	17.2	13.7	6.5	6.1	15.5	21.0	60.0	59.9	5.1	19.4	14.9	14.6
Sao Tome and Principe	10.4	17.4	n.a.	n.a.	n.a.	n.a.	4.1	18.6	10.0	3.1	6.4	11.8	16.5	41.3	39.7	50.3	63.1	10.6	11.1

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	
	2004–06 (%)	2022–24[4] (%)	2014–16 (%)	2022–24 (%)	2014–16 (%)	2022–24 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2022 (%)	2012 (%)	2023 (%)	2012[6] (%)	2023[7] (%)	2012 (%)	2020 (%)
Southern Africa	**4.9**	**10.9**	**9.1**	**10.7**	**21.5**	**25.2**	**3.0**	**23.2**	**24.1**	**12.3**	**12.1**	**27.3**	**29.7**	**26.0**	**31.0**	**n.a.**	**n.a.**	**16.4**	**16.4**
Botswana	26.9	24.0	18.4[b]	26.1[a, b]	46.4[b]	53.9[a, b]	n.a.	24.7	21.0	10.6	11.5	14.7	18.3	27.0	30.9	20.3	30.0	17.3	16.8
Eswatini	11.7	14.7	n.a.	22.2[a, b]	n.a.	59.0[a, b]	1.8	27.9	18.9	10.2	10.2	23.2	30.1	23.8	28.3	43.8	54.0	10.6	10.2
Lesotho	n.a.	n.a.	n.a.	24.7[a, b]	n.a.	59.9[a, b]	1.6	37.5	35.0	7.0	7.5	15.9	21.0	23.6	34.2	52.9	60.7	14.8	14.4
Namibia	19.9	18.1	28.9[b]	30.0[b]	53.2[b]	55.9[b]	n.a.	24.0	16.4	4.2	5.8	14.0	17.0	18.9	24.9	22.1	n.a.	15.9	15.6
South Africa	3.3	10.0	n.a.	8.5[a]	n.a.	20.7[a]	3.6[g]	22.3	24.4	13.1	12.8	28.6	30.8	26.4	31.2	n.a.	n.a.	16.6	16.6
Western Africa	**12.7**	**16.0**	**11.2**	**18.8**	**39.6**	**61.6**	**6.5**	**33.8**	**29.7**	**2.1**	**2.2**	**8.1**	**11.6**	**45.2**	**41.9**	**21.9**	**35.1**	**14.9**	**14.3**
Benin	9.2	14.3	10.4[b]	15.0[b]	55.0[b]	65.6[b]	8.3	34.2	33.2	1.8	3.7	8.1	11.2	50.2	50.0	32.5	41.4	17.5	16.4
Burkina Faso	17.0	13.1	n.a.	7.3[b]	n.a.	41.4[b]	9.8	32.0	19.5	1.0	2.8	3.7	6.7	46.9	44.3	38.2	51.3	19.1	18.5
Cabo Verde	12.7	13.5	n.a.	6.1[a]	n.a.	32.1[a]	2.4	8.4	5.3	5.5	8.4	11.3	15.8	42.6	40.6	59.6	41.8	n.a.	n.a.
Côte d'Ivoire	17.6	11.1	6.2[b]	8.4[b]	34.1[b]	38.4[b]	8.1	28.7	20.3	2.3	3.5	8.2	11.6	50.0	51.4	11.8	34.0	19.1	18.3
Gambia	17.6	16.8	n.a.	21.7	n.a.	54.8	5.1	22.5	14.0	1.9	2.7	9.4	14.9	53.1	46.1	33.2	53.6	13.7	13.2
Ghana	11.1	6.3	5.1[a, b]	9.4[a, b]	38.3[a, b]	44.5[a, b]	5.8	22.3	15.6	2.6	1.8	10.2	12.9	41.3	36.0	45.7	52.6	14.9	14.4
Guinea	16.4	11.4	n.r.	n.r.	n.r.	n.r.	6.4	33.6	26.6	4.2	4.4	5.9	9.5	46.1	45.7	20.4	43.7	n.a.	n.a.
Guinea-Bissau	18.6	22.1	n.a.	n.a.	n.a.	n.a.	6.5	28.0	28.3	2.2	3.6	7.9	11.5	46.1	45.7	38.3	59.3	21.8	19.5
Liberia	35.7	35.5	38.6	37.1	79.7	80.8	3.4	34.6	26.9	3.1	6.1	10.3	17.0	40.8	42.5	27.8	55.2	19.7	19.9
Mali	11.2	12.3	n.a.	2.6[b]	n.a.	20.6[b]	5.4	29.2	23.2	1.3	1.3	7.6	11.4	54.1	56.5	20.2	40.3	n.a.	n.a.
Mauritania	10.3	8.7	4.6[b]	13.1[b]	26.3[b]	66.3[b]	13.6[g]	25.2	21.5	1.5	1.6	16.2	22.7	52.5	54.5	26.7	40.9	n.a.	n.a.
Niger	18.0	12.9	n.a.	7.6[b]	n.a.	50.9[b]	10.9	45.0	48.3	0.6	2.6	3.9	6.0	44.4	47.1	23.3	24.5	n.a.	n.a.
Nigeria	9.1	19.9	11.0[a, b]	24.3[b]	34.7[a, b]	74.8[b]	11.6[g]	36.9	33.8	2.3	1.6	8.7	12.4	43.5	37.9	14.7	28.8	n.a.	n.a.
Senegal	15.8	5.1	7.5[b]	4.0[b]	39.0[b]	29.1[b]	10.2	18.2	17.2	1.4	2.1	7.6	10.2	49.6	43.1	39.0	34.4	19.1	17.2
Sierra Leone	40.2	24.1	26.7[a, b]	33.7	75.8[a, b]	89.8	6.3	33.3	25.2	2.6	5.4	5.8	7.1	45.7	44.6	31.2	50.9	11.4	10.3
Togo	24.8	9.1	16.1[b]	9.9[b]	60.4[b]	58.5[b]	5.7	26.4	23.0	1.3	3.6	7.1	11.6	42.0	41.5	62.1	64.3	15.1	14.3

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	
	2004–06 (%)	2022–24[4] (%)	2014–16 (%)	2022–24 (%)	2014–16 (%)	2022–24 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2022 (%)	2012 (%)	2023 (%)	2012[6] (%)	2023[7] (%)	2012 (%)	2020 (%)
Sub-Saharan Africa (including the Sudan)	**21.3**	**21.8**	**18.7**	**23.5**	**50.0**	**62.9**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**8.6**	**11.7**	**36.2**	**36.7**	**34.5**	**46.3**	**14.5**	**13.9**
ASIA	**13.6**	**7.3**	**6.7**	**9.2**	**17.8**	**24.0**	**9.1**	**28.4**	**23.3**	**4.7**	**5.0**	**6.5**	**10.4**	**30.6**	**33.6**	**39.1**	**51.3**	**17.2**	**17.2**
Central Asia	**13.1**	**2.9**	**1.7**	**3.6**	**9.2**	**16.6**	**2.1**	**14.8**	**7.4**	**7.7**	**6.4**	**18.8**	**25.1**	**32.3**	**32.0**	**29.1**	**33.3**	**6.3**	**6.0**
Kazakhstan	7.3	<2.5	n.a.	0.6[a, b]	n.a.	2.0[a, b]	n.a.	11.2	4.4	11.8	8.7	16.1	18.4	29.0	30.5	31.8	n.a.	5.7	5.3
Kyrgyzstan	7.3	5.1	n.a.	n.a.	n.a.	n.a.	3.0	15.9	11.0	7.5	9.9	20.1	26.6	33.8	32.9	56.0	45.6	6.4	6.0
Tajikistan	38.1	8.4	4.9	5.6	19.1	25.1	6.4	25.7	13.1	5.2	4.6	17.1	23.8	36.1	37.3	32.6	40.8	9.3	8.7
Turkmenistan	4.3	4.3	n.a.	n.a.	n.a.	n.a.	4.1	12.6	6.5	4.9	4.8	17.2	21.4	34.0	34.8	10.9	56.5	4.9	4.3
Uzbekistan	13.0	<2.5	1.9	5.2	11.2	24.4	2.4	13.2	6.7	6.8	5.5	21.0	30.0	32.5	30.4	23.8	25.2	5.8	5.8
Eastern Asia	**6.8**	**<2.5**	**1.0**	**1.0**	**6.0**	**6.2**	**1.4**	**7.6**	**4.8**	**6.5**	**10.1**	**4.5**	**8.1**	**15.9**	**16.0**	**28.5**	**36.5**	**5.5**	**5.5**
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	8.3	15.5	15.6	27.6	35.1	5.1	5.0
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.
Taiwan Province of China	4.5	3.8	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.
China, Hong Kong SAR	<2.5	3.1	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.
China, Macao SAR	14.9	11.2	n.a.	n.a.	n.a.	n.a.	n.a.	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	6.7	10.8	28.0	27.5	68.9	71.4	n.a.	n.a.
Japan	n.a.	n.a.	<0.5	1.1	2.6	5.8	n.a.	6.6	5.2	1.5	2.0	3.9	5.5	19.5	18.7	n.a.	n.a.	11.1	11.3
Mongolia	28.4	<2.5	n.a.	0.7[a]	n.a.	4.8[a]	2.7	12.3	7.1	10.2	12.3	17.6	24.1	19.9	19.1	65.7	51.1	5.7	4.9
Republic of Korea	<2.5	<2.5	<0.5[a]	1.1	4.8[a]	5.4	0.2[g]	1.9	1.8	6.7	5.5	4.1	7.3	13.9	15.7	n.a.	n.a.	6.3	7.5

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	
	2004–06 (%)	2022–24[4] (%)	2014–16 (%)	2022–24 (%)	2014–16 (%)	2022–24 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2022 (%)	2012 (%)	2023 (%)	2012[6] (%)	2023[7] (%)	2012 (%)	2020 (%)
Eastern Asia (excluding China and Japan)	**13.6**	**16.5**	**0.6**	**0.9**	**5.0**	**5.2**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**5.2**	**8.8**	**18.8**	**19.9**	**n.a.**	**n.a.**	**7.6**	**8.4**
South-eastern Asia	**16.7**	**5.1**	**1.7**	**2.0**	**14.6**	**14.4**	**7.0**	**30.4**	**22.7**	**5.9**	**4.3**	**6.0**	**10.0**	**26.0**	**24.2**	**33.5**	**46.4**	**12.8**	**12.5**
Brunei Darussalam	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	17.1	9.9	8.5	9.5	23.3	31.7	15.1	18.3	n.a.	n.a.	13.2	13.6
Cambodia	15.5	5.2	4.6	3.6	39.6	40.0	9.6	34.0	22.0	2.1	5.7	2.2	4.4	39.5	38.0	72.8	50.3	12.7	11.4
Indonesia	18.4	6.3	0.7[a]	<0.5[a]	6.0[a]	4.5[a]	8.4	34.6	22.6	8.3	2.6	5.9	11.2	29.1	26.7	40.9	50.7	10.5	9.9
Lao People's Democratic Republic	n.a.	n.a.	n.a.	5.6	n.a.	35.6	10.7	40.5	29.9	2.2	3.7	4.7	8.0	30.6	28.6	39.7	50.6	17.2	16.7
Malaysia	3.2	<2.5	7.8	5.8	17.4	16.7	11.0	18.1	24.3	6.2	5.3	16.0	22.1	32.9	31.3	n.a.	n.a.	13.0	13.8
Myanmar	24.8	5.4	n.a.	7.2	n.a.	32.7	7.4[g]	31.2	24.5	1.8	0.6	5.2	7.4	36.0	39.7	23.6	n.a.	12.7	12.5
Philippines	17.3	3.0	n.a.	3.0[a, b]	n.a.	32.9[a, b]	5.4	31.9	27.7	3.3	3.3	5.7	8.7	18.7	12.0	33.0	40.9	21.2	21.1
Singapore	n.a.	n.a.	1.0	3.5	2.9	9.5	n.a.	3.2	2.8	2.7	3.8	8.1	13.9	13.0	16.6	n.a.	n.a.	10.6	11.0
Thailand	11.8	4.6	n.a.	0.8[a, b]	n.a.	5.4[a, b]	7.2	14.1	12.3	9.1	9.9	10.0	15.4	22.5	20.7	12.3	28.6	10.5	10.3
Timor-Leste	30.0	18.7	n.a.	n.a.	n.a.	n.a.	8.3	52.7	45.4	2.4	1.2	1.1	2.4	28.1	29.7	50.8	65.0	16.8	18.2
Viet Nam	15.2	5.3	n.a.	2.2	n.a.	10.7	4.4	25.5	19.2	4.3	10.5	0.8	2.0	18.6	20.5	17.0	45.4	7.6	6.3
Southern Asia	**19.5**	**12.3**	**13.1**	**17.8**	**27.6**	**39.8**	**13.6**	**40.2**	**31.4**	**2.6**	**3.2**	**5.6**	**9.7**	**45.9**	**49.3**	**47.2**	**59.1**	**26.1**	**24.4**
Afghanistan	30.6	28.1	14.8	31.0	45.1	80.8	3.6	43.5	42.0	4.8	4.4	10.3	19.2	36.5	45.4	n.a.	63.3	n.a.	n.a.
Bangladesh	15.1	10.4	n.r.	n.r.	n.r.	n.r.	10.7	38.3	25.1	1.7	1.6	2.5	5.3	34.5	37.6	64.1	53.3	24.3	23.0
Bhutan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	5.1	29.1	17.9	7.1	8.0	7.1	12.2	28.3	33.8	48.7	n.a.	11.7	11.4
India	21.1	12.0	n.r.	n.r.	n.r.	n.r.	18.7	41.7	32.9	2.1	3.7	4.1	7.3	50.1	53.7	46.4	63.7	29.5	27.4[h]
Iran (Islamic Republic of)	6.4	6.8	9.5	5.9	48.0	38.8	4.3	5.6	4.8	4.1	2.7	19.9	24.3	20.8	25.5	53.1	47.4	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	
	2004–06 (%)	2022–24[4] (%)	2014–16 (%)	2022–24 (%)	2014–16 (%)	2022–24 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2022 (%)	2012 (%)	2023 (%)	2012[6] (%)	2023[7] (%)	2012 (%)	2020 (%)
Maldives	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	9.1	16.3	14.2	5.8	3.0	11.2	17.3	44.2	43.4	45.3	63.0	13.8	13.7
Nepal	16.9	5.3	10.4	12.8	29.5	36.6	7.0	39.7	26.0	1.3	1.8	3.4	7.0	31.5	33.2	69.6	56.4	20.9	19.7
Pakistan	16.9	16.5	0.9[b]	10.1[b]	14.1[b]	42.1[b]	7.1	43.9	33.6	4.6	2.1	12.7	23.0	45.3	46.5	37.0	47.8	n.a.	n.a.
Sri Lanka	14.2	7.4	0.7[b]	1.1[b]	5.9[b]	11.2[b]	9.3	15.9	10.1	1.2	0.9	5.7	10.6	25.5	20.9	75.8	n.a.	18.5	18.0
Southern Asia (excluding India)	**15.3**	**13.2**	**7.2**	**11.1**	**27.0**	**39.6**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**9.9**	**16.1**	**35.7**	**38.8**	**48.9**	**51.2**	**19.5**	**19.0**
Western Asia	**10.2**	**12.4**	**9.7**	**13.5**	**31.0**	**38.1**	**3.5**	**20.0**	**18.0**	**9.1**	**6.2**	**29.3**	**33.6**	**28.0**	**28.7**	**31.8**	**30.8**	**12.2**	**12.2**
Armenia	14.8	<2.5	n.a.	<0.5[a, b]	n.a.	7.8[a, b]	n.a.	14.2	6.2	14.8	12.9	20.3	24.5	18.7	18.7	34.1	n.a.	8.3	8.3
Azerbaijan	5.3	<2.5	<0.5	1.3	5.9	14.0	3.5	16.4	6.8	11.3	4.2	21.4	26.5	35.6	35.6	10.8	18.4	11.0	11.0
Bahrain	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	6.5[f]	4.6[f]	n.a.	n.a.	31.7	36.1	39.6	38.4	n.a.	n.a.	11.6	12.4
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	22.9	12.5	16.4	n.a.	n.a.	n.a.	n.a.
Georgia	4.8	<2.5	7.0	6.2	31.8	26.6	0.6	8.9	4.7	13.7	4.1	27.2	34.7	30.1	30.2	54.8	20.4	6.9	7.4
Iraq	16.5	14.9	n.r.	n.r.	n.r.	n.r.	3.0	19.8	9.4	10.3	4.6	34.4	40.5	26.9	27.1	19.4	25.8	10.8	10.9
Israel	<2.5	<2.5	1.3[a, b]	0.9[b]	11.6[a, b]	9.2[b]	n.a.	n.a.	n.a.	n.a.	n.a.	21.9	22.5	11.7	14.6	n.a.	n.a.	9.4	9.0
Jordan	5.4	14.3	n.r.	n.r.	n.r.	n.r.	2.3	7.8	7.7	6.1	10.6	36.3	38.5	28.5	33.0	22.7	23.9	17.0	18.9
Kuwait	<2.5	<2.5	4.9	3.4	12.6	8.4	3.5	4.9	4.5	8.8	10.1	40.7	41.4	26.2	27.7	n.a.	n.a.	12.4	14.4
Lebanon	7.1	8.7	n.a.	10.1	n.a.	42.4	1.3	11.4	10.1	6.6	4.5	26.2	29.8	28.8	34.0	n.a.	22.7	12.2	12.6
Oman	10.1	5.9	n.a.	n.a.	n.a.	n.a.	9.3	11.2	12.9	2.8	8.8	24.9	31.1	33.9	34.4	n.a.	23.2	13.3	13.2
Palestine	n.a.	n.a.	n.a.	6.3[a, d]	n.a.	27.0[a, d]	1.3	10.3	8.0	8.0	8.8	34.2	37.6	24.1	24.8	28.7	38.9	9.8	10.4
Qatar	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1.6[g]	6.3	5.4	10.3	8.6	36.1	43.1	25.4	23.6	29.3	n.a.	9.9	10.0
Saudi Arabia	4.2	<2.5	n.r.	n.r.	n.r.	n.r.	3.9[g]	12.5	11.1	9.5	8.4	35.0	40.6	19.2	17.6	n.a.	n.a.	n.a.	n.a.
Syrian Arab Republic	6.2	39.0	n.r.	n.r.	n.r.	n.r.	n.a.	26.5	23.5	16.6	11.0	29.2	33.9	29.0	31.0	42.6	28.5	n.a.	n.a.
Türkiye	9.4	<2.5	n.r.	n.r.	n.r.	n.r.	1.7	9.2	5.5	10.0	7.7	29.6	33.3	29.1	29.3	41.6	40.7	14.0	12.9

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	
	2004–06 (%)	2022–24[4] (%)	2014–16 (%)	2022–24 (%)	2014–16 (%)	2022–24 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2022 (%)	2012 (%)	2023 (%)	2012[6] (%)	2023[7] (%)	2012 (%)	2020 (%)
United Arab Emirates	3.1	<2.5	n.a.	0.9[a]	n.a.	3.6[a]	n.a.	n.a.	n.a.	n.a.	n.a.	31.9	32.1	28.3	28.2	n.a.	n.a.	13.9	13.9
Yemen	n.a.	n.a.	n.a.	n.a.	45.7	73.0	16.8	48.5	47.4	2.4	1.7	9.2	13.7	34.6	36.4	n.a.	n.a.	n.a.	n.a.
Central Asia and Southern Asia	**19.2**	**12.0**	**12.7**	**17.2**	**26.9**	**38.9**	**13.0**	**39.3**	**30.2**	**2.8**	**3.3**	**6.1**	**10.2**	**45.4**	**48.7**	**46.4**	**58.1**	**25.4**	**23.5**
Eastern Asia and South-eastern Asia	**9.4**	**<2.5**	**1.2**	**1.3**	**8.5**	**8.6**	**4.0**	**16.0**	**13.1**	**6.3**	**7.5**	**4.9**	**8.6**	**18.8**	**18.7**	**30.4**	**41.2**	**8.1**	**8.7**
Western Asia and Northern Africa	**8.6**	**11.1**	**9.8**	**12.8**	**29.9**	**36.1**	**4.4**	**21.5**	**18.1**	**10.2**	**7.4**	**27.8**	**32.7**	**28.7**	**30.2**	**37.3**	**33.5**	**13.1**	**13.1**
LATIN AMERICA AND THE CARIBBEAN	**8.5**	**5.4**	**6.6**	**8.7**	**24.4**	**27.3**	**1.3**	**12.8**	**12.4**	**7.3**	**8.8**	**22.4**	**29.9**	**17.7**	**19.9**	**34.0**	**43.4**	**9.5**	**9.6**
Caribbean	**17.8**	**17.5**	**n.a.**	**25.1**	**n.a.**	**53.5**	**2.9**	**12.9**	**12.2**	**6.4**	**6.7**	**19.5**	**24.5**	**24.6**	**29.1**	**29.4**	**31.3**	**11.4**	**11.7**
Antigua and Barbuda	n.a.	n.a.	n.a.	3.4[a]	n.a.	13.5[a]	n.a.	n.a.	n.a.	n.a.	n.a.	26.8	33.3	17.6	20.3	n.a.	n.a.	15.1	15.4
Bahamas	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	39.8	47.3	16.4	18.8	n.a.	n.a.	15.3	15.4
Barbados	4.7	4.4	n.a.	n.a.	n.a.	n.a.	n.a.	7.5	5.8	11.9	13.0	30.9	38.0	17.5	20.1	19.7	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	21.8	19.3	22.2	48.6	40.6	7.2	7.1
Dominica	5.1	3.6	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	24.5	31.3	18.9	22.0	n.a.	n.a.	n.a.	n.a.
Dominican Republic	21.3	3.6	24.3[a]	17.9[b]	54.2[a]	43.8[b]	2.2	8.0	5.6	7.7	7.5	22.3	29.3	19.2	22.4	8.0	15.8	12.1	13.4
Grenada	n.a.	n.a.	n.a.	4.7[a]	n.a.	17.3[a]	n.a.	n.a.	n.a.	n.a.	n.a.	23.9	30.3	18.4	20.9	n.a.	n.a.	n.a.	n.a.
Haiti	47.7	54.2	n.a.	45.4	n.a.	83.2	5.0	23.1	21.6	3.5	3.9	8.3	10.7	41.8	45.9	39.3	39.9	n.a.	n.a.
Jamaica	7.1	7.7	25.3	27.8	48.3	56.4	3.2	6.1	6.9	7.0	5.1	26.4	33.8	18.3	21.5	23.8	33.0	14.3	13.7
Puerto Rico	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	34.6	41.1	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.	38.7	45.6	16.8	19.4	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	
	2004–06 (%)	2022–24[4] (%)	2014–16 (%)	2022–24 (%)	2014–16 (%)	2022–24 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2022 (%)	2012 (%)	2023 (%)	2012[6] (%)	2023[7] (%)	2012 (%)	2020 (%)
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	33.5	16.3	19.9	3.5	n.a.	15.9	16.3
Saint Vincent and the Grenadines	7.4	6.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	26.6	33.2	16.6	18.8	n.a.	n.a.	n.a.	n.a.
Trinidad and Tobago	11.1	11.2	n.a.	6.9[a]	n.a.	27.6[a]	n.a.	8.5	7.8	10.7	15.0	24.7	28.1	18.6	22.1	21.5	30.5	15.9	16.3
Central America	**7.2**	**5.0**	**6.3**	**7.0**	**28.8**	**26.2**	**0.9**	**18.1**	**17.2**	**6.5**	**7.0**	**27.9**	**34.4**	**10.6**	**13.8**	**21.6**	**38.6**	**10.9**	**10.9**
Belize	5.0	7.0	n.a.	n.a.	n.a.	n.a.	n.a.	17.5	11.7	8.7	5.6	35.2	42.3	17.9	21.3	14.7	n.a.	11.3	11.6
Costa Rica	3.8	<2.5	1.8[b]	2.7[b]	12.2[b]	15.4[b]	1.8	6.7	10.6	7.6	7.9	24.9	31.4	10.1	13.7	32.5	25.3	8.5	8.7
El Salvador	8.9	6.7	13.8	15.4	42.2	45.5	2.9	15.5	9.4	6.5	8.5	25.3	30.9	10.2	14.4	31.4	45.3	10.4	10.2
Guatemala	19.2	11.8	16.1	21.3	42.7	48.8	0.8	47.7	44.6	4.4	3.7	20.0	26.8	8.6	10.5	49.6	58.5	14.4	14.5
Honduras	18.1	14.8	14.2[b]	15.4[a]	41.6[b]	41.3[a]	1.9	21.8	17.9	5.1	4.2	22.7	29.5	13.8	18.8	30.7	30.2	12.5	13.1
Mexico	4.0	2.7	3.4[a, b]	2.9[a]	24.9[a, b]	19.3[a]	n.a.	n.a.	n.a.	n.a.	n.a.	29.3	36.0	10.2	13.2	14.4	35.9	10.2	10.2
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.
Panama	14.8	5.7	n.r.	n.r.	n.r.	n.r.	1.1	20.2	14.0	11.0	10.9	26.7	36.1	22.6	25.5	n.a.	n.a.	10.7	10.3
South America	**8.0**	**4.2**	**4.5**	**7.7**	**19.3**	**25.1**	**1.3**	**10.1**	**9.9**	**7.8**	**9.9**	**20.7**	**28.6**	**20.0**	**21.8**	**42.1**	**49.8**	**8.6**	**8.8**
Argentina	3.6	3.4	5.8	12.3	19.2	33.8	1.7	7.0	10.7	10.9	14.3	26.3	35.4	20.4	23.5	32.0	n.a.	7.2	7.4
Bolivia (Plurinational State of)	27.6	21.8	n.r.	n.r.	n.r.	n.r.	n.a.	20.0	10.7	8.9	9.9	20.5	28.7	25.5	24.9	64.3	n.a.	8.3	7.9
Brazil	5.7	<2.5	0.7[a, b]	3.4[a, b]	13.3[a, b]	13.5[a, b]	3.4	6.6	8.9	7.7	10.9	19.1	28.1	21.5	21.3	38.6	45.8	8.3	8.7
Chile	2.6	2.5	2.9[b]	3.6[a, b]	10.8[b]	19.2[a, b]	n.a.	1.8	1.7	9.9	8.7	29.6	38.9	9.6	15.7	n.a.	n.a.	6.1	6.8
Colombia	11.0	3.9	4.9[b]	5.0[a, b]	19.9[b]	27.8[a, b]	n.a.	12.7	11.6	5.1	6.8	18.2	23.6	17.9	22.4	42.9	n.a.	10.5	11.0
Ecuador	17.4	12.1	6.0[a, b]	11.9[b]	20.7[a, b]	33.3[b]	0.7	24.3	17.7	6.9	4.7	20.1	27.4	18.1	20.2	n.a.	n.a.	10.9	10.6
Guyana	7.1	<2.5	n.a.	4.7[a]	n.a.	25.5[a]	6.5	14.8	7.1	6.4	5.0	21.4	28.5	37.2	37.5	31.3	28.5	17.0	17.2

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	
	2004–06 (%)	2022–24[4] (%)	2014–16 (%)	2022–24 (%)	2014–16 (%)	2022–24 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2022 (%)	2012 (%)	2023 (%)	2012[6] (%)	2023[7] (%)	2012 (%)	2020 (%)
Paraguay	7.4	5.2	1.2[b]	n.a.	8.3[b]	n.a.	n.a.	9.4	3.2	10.5	15.4	24.8	33.0	19.4	23.2	24.4	n.a.	10.0	10.0
Peru	17.9	6.9	9.9[e]	14.5[e]	30.4[e]	41.0[e]	0.6	18.1	10.6	8.3	9.0	18.5	27.3	18.0	21.0	67.4	70.1	8.3	7.5
Suriname	8.8	9.7	n.a.	n.a.	n.a.	n.a.	5.5	8.3	8.0	3.8	3.7	22.8	29.0	19.0	22.2	2.8	8.9	15.7	16.5
Uruguay	<2.5	<2.5	n.a.	2.7[a]	n.a.	16.2[a]	1.4	9.0	6.5	9.3	13.5	25.0	33.3	19.7	24.5	n.a.	57.7	8.0	7.8
Venezuela (Bolivarian Republic of)	7.8	5.9	n.r.	n.r.	n.r.	n.r.	n.a.	12.2	11.7	6.4	7.3	22.7	22.7	19.1	25.2	n.a.	n.a.	9.0	9.3
OCEANIA	**6.5**	**7.6**	**8.6**	**9.8**	**22.2**	**25.8**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**25.4**	**29.5**	**12.6**	**16.8**	**n.a.**	**n.a.**	**11.3**	**11.8**
Australia and New Zealand	**<2.5**	**<2.5**	**2.8**	**3.8**	**10.6**	**14.4**	**0.5[i]**	**3.5**	**3.1**	**12.4**	**23.4**	**26.3**	**30.8**	**7.4**	**11.3**	**n.a.**	**n.a.**	**6.4**	**6.4**
Australia	<2.5	<2.5	2.8	3.7	10.8	13.8	n.a.	3.4	3.1	13.5	26.4	25.7	30.2	6.9	11.1	n.a.	n.a.	6.4	6.6
New Zealand	<2.5	<2.5	2.8	4.3	10.0	17.3	n.a.	n.a.	n.a.	n.a.	n.a.	29.3	33.6	9.6	12.4	n.a.	n.a.	6.0	5.9
Oceania excluding Australia and New Zealand	**21.2**	**23.6**	**22.3**	**23.3**	**49.6**	**51.6**	**8.4**	**40.6**	**41.5**	**10.3**	**16.0**	**21.6**	**24.8**	**25.4**	**28.8**	**56.6**	**58.9**	**17.4**	**17.9**
Melanesia	**23.5**	**25.5**	**n.a.**	**24.8**	**n.a.**	**54.1**	**n.a.**	**43.0**	**43.6**	**10.6**	**16.6**	**18.3**	**21.9**	**25.8**	**29.1**	**56.8**	**59.2**	**17.6**	**18.0**
Fiji	4.5	6.8	n.a.	n.a.	n.a.	n.a.	4.6	7.0	7.2	6.5	7.3	28.0	33.8	28.5	29.9	n.a.	42.9	7.4	7.4
New Caledonia	8.9	4.9	n.a.	n.a.	n.a.	n.a.	n.a.	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	28.7	n.a.	n.a.	n.a.	n.a.	n.a.	47.7	47.6	11.7	18.5	16.8	20.5	25.2	28.8	56.1	59.7	19.0	19.4
Solomon Islands	12.2	20.0	n.a.	n.a.	n.a.	n.a.	n.a.	31.9	29.8	3.6	6.2	19.1	22.6	29.5	32.6	73.7	n.a.	13.2	13.2
Vanuatu	8.5	7.2	n.a.	n.a.	n.a.	n.a.	n.a.	26.9	31.0	4.9	5.5	18.5	21.3	26.0	30.4	39.5	75.9	12.7	13.1
Micronesia	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**16.3**	**13.6**	**4.5**	**5.1**	**43.2**	**47.1**	**21.6**	**24.5**	**55.7**	**59.6**	**12.4**	**12.3**
Kiribati	4.5	4.1	n.a.	5.8[a]	n.a.	42.9[a]	3.5	16.3	14.7	2.0	2.1	43.2	46.3	24.7	26.9	66.4	63.6	9.3	9.0

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	
	2004–06 (%)	2022–24[4] (%)	2014–16 (%)	2022–24 (%)	2014–16 (%)	2022–24 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2022 (%)	2012 (%)	2023 (%)	2012[6] (%)	2023[7] (%)	2012 (%)	2020 (%)
Marshall Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3.5	37.8	30.0	4.0	4.6	42.0	45.9	21.8	23.5	27.3	43.1	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.	42.4	47.1	18.1	22.1	n.a.	n.a.	n.a.	n.a.
Nauru	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1.3	20.9	16.0	4.3	8.2	67.4	69.9	19.3	22.5	67.2	n.a.	n.a.	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.	39.2	41.1	22.8	25.9	n.a.	n.a.	13.7	13.5
Polynesia	**4.8**	**3.7**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**7.1**	**7.0**	**8.2**	**8.9**	**52.1**	**57.5**	**18.7**	**21.6**	**51.1**	**47.9**	**16.3**	**16.8**
American Samoa	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	72.3	75.2	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.	62.5	68.9	21.1	23.9	n.a.	n.a.	10.1	10.3
French Polynesia	5.6	3.8	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	43.0	48.1	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.	61.2	66.6	21.2	24.0	n.a.	n.a.	n.a.	n.a.
Samoa	3.7	3.6	n.a.	4.5[a, b]	n.a.	18.6[a, b]	3.1	5.0	8.4	6.0	9.4	55.7	62.4	18.8	21.9	51.3	51.7	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.	65.0	69.8	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	62.8	71.7	17.9	20.7	52.2	39.6	n.a.	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	58.9	64.2	19.6	23.2	34.7	43.8	n.a.	n.a.
NORTHERN AMERICA AND EUROPE	**<2.5**	**<2.5**	**1.3**	**1.6**	**8.7**	**8.4**	**n.a.**	**3.9**	**3.8**	**8.4**	**8.6**	**24.8**	**27.9**	**13.2**	**17.3**	**n.a.**	**n.a.**	**7.4**	**7.4**
Northern America	**<2.5**	**<2.5**	**1.0**	**1.1**	**9.9**	**10.3**	**0.2**	**2.6**	**4.1**	**8.5**	**9.8**	**35.7**	**40.3**	**10.3**	**14.9**	**25.5**	**25.8**	**8.0**	**8.1**
Bermuda	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	26.4	33.0	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]	10.2[b]	n.a.	n.a.	n.a.	11.0	11.4	24.7	26.2	7.7	14.0	n.a.	n.a.	6.2	6.6
Greenland	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	23.3	27.0	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	
	2004–06 (%)	2022–24[4] (%)	2014–16 (%)	2022–24 (%)	2014–16 (%)	2022–24 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2022 (%)	2012 (%)	2023 (%)	2012[6] (%)	2023[7] (%)	2012 (%)	2020 (%)
United States of America	<2.5	<2.5	1.1[a]	1.0[a]	10.5[a]	10.3[a]	0.1	2.5	4.2	8.2	9.7	36.9	42.0	10.6	15.0	25.5	25.8	8.2	8.3
Europe	**<2.5**	**<2.5**	**1.4**	**1.8**	**8.1**	**7.4**	**n.a.**	**4.7**	**3.6**	**8.4**	**7.9**	**19.7**	**21.4**	**14.5**	**18.6**	**n.a.**	**n.a.**	**7.1**	**7.0**
Eastern Europe	**<2.5**	**<2.5**	**1.4**	**1.7**	**10.9**	**9.1**	**n.a.**	**6.8**	**4.6**	**10.7**	**9.1**	**22.1**	**25.5**	**19.0**	**23.5**	**n.a.**	**n.a.**	**7.1**	**7.0**
Belarus	3.4	<2.5	n.a.	<0.5[a]	n.a.	1.1[a]	1.3	2.4	1.1	5.5	3.4	21.0	21.4	18.1	22.1	19.0	21.7	5.0	5.1
Bulgaria	6.1	<2.5	1.9	2.0	14.9	11.6	n.a.	7.2	5.5	6.4	5.5	17.6	20.6	21.5	25.8	n.a.	n.a.	11.0	11.4
Czechia	<2.5	<2.5	0.7	1.8	5.8	10.0	n.a.	2.4	2.4	4.9	6.6	21.8	26.0	21.0	24.6	n.a.	n.a.	7.3	7.6
Hungary	2.5	<2.5	1.4	4.5	11.3	15.6	n.a.	n.a.	n.a.	n.a.	n.a.	25.2	31.7	20.1	24.1	n.a.	n.a.	8.4	8.3
Poland	<2.5	<2.5	1.8	<0.5	8.9	3.4	0.8	1.9	1.0	6.0	8.6	22.2	27.5	19.5	23.4	n.a.	n.a.	5.8	5.6
Republic of Moldova	32.3	<2.5	1.6	5.4	19.3	25.1	n.a.	6.8	4.2	5.1	4.1	22.9	23.0	24.8	28.5	36.4	n.a.	6.5	6.5
Romania	<2.5	<2.5	5.6	7.0	19.3	18.6	n.a.	8.8	7.0	6.8	4.8	21.9	34.0	20.9	24.3	n.a.	n.a.	9.5	8.8
Russian Federation	<2.5	<2.5	0.7	<0.5[a]	8.2	2.8[a]	n.a.	n.a.	n.a.	10.4	9.5	22.3	24.2	20.0	24.1	n.a.	n.a.	7.3	7.3
Slovakia	5.6	3.1	1.1	1.4	6.2	7.5	n.a.	n.a.	n.a.	n.a.	n.a.	20.8	26.8	21.6	25.3	n.a.	n.a.	7.5	7.8
Ukraine	<2.5	6.9	2.0	5.3	19.8	32.5	n.a.	18.0	11.7	21.4	16.0	21.8	23.6	13.0	19.4	19.7	n.a.	6.0	5.7
Northern Europe	**<2.5**	**<2.5**	**1.8**	**2.9**	**6.7**	**7.3**	**n.a.**	**2.7**	**3.0**	**7.4**	**7.8**	**22.3**	**24.2**	**11.6**	**14.8**	**n.a.**	**n.a.**	**6.3**	**6.0**
Denmark	<2.5	<2.5	1.0	2.4	5.9	6.9	n.a.	n.a.	n.a.	n.a.	n.a.	12.5	13.3	13.1	17.0	n.a.	n.a.	5.1	4.8
Estonia	<2.5	<2.5	0.9	1.1	9.5	10.8	n.a.	1.3	1.3	4.9	5.6	20.9	22.2	20.8	24.7	n.a.	n.a.	4.5	4.2
Finland	<2.5	<2.5	2.4	2.9	9.3	13.4	1.6	1.6	1.7	3.9	4.7	19.3	21.5	9.4	13.6	n.a.	n.a.	4.1	4.1
Iceland	<2.5	<2.5	1.7	2.1	6.4	7.8	n.a.	n.a.	n.a.	n.a.	n.a.	18.7	21.2	11.2	14.7	n.a.	n.a.	3.8	4.0
Ireland	<2.5	<2.5	3.4	2.1	8.9	4.8	n.a.	2.5	2.2	10.3	11.2	25.0	28.3	11.4	14.0	n.a.	n.a.	5.5	5.6
Latvia	<2.5	<2.5	0.6	1.9	9.9	11.2	1.7[g]	2.1	1.7	5.9	6.6	21.7	24.3	19.2	21.4	n.a.	n.a.	4.5	4.2
Lithuania	<2.5	<2.5	2.5	1.2	15.3	6.5	4.9[g]	1.9	1.6	4.3	4.6	23.0	25.4	19.7	23.7	n.a.	n.a.	4.7	4.4

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	
	2004–06 (%)	2022–24[4] (%)	2014–16 (%)	2022–24 (%)	2014–16 (%)	2022–24 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2022 (%)	2012 (%)	2023 (%)	2012[6] (%)	2023[7] (%)	2012 (%)	2020 (%)
Norway	<2.5	<2.5	1.1	1.6	4.8	7.8	n.a.	n.a.	n.a.	n.a.	n.a.	16.5	19.1	12.7	16.3	n.a.	n.a.	4.7	4.4
Sweden	<2.5	<2.5	0.8	2.5	4.5	6.9	n.a.	n.a.	n.a.	n.a.	n.a.	14.6	15.3	12.8	16.8	n.a.	n.a.	4.2	4.1
United Kingdom of Great Britain and Northern Ireland	<2.5	<2.5	1.9	3.3	6.3	6.9	0.4[g]	2.8	3.5	7.8	7.8	24.8	26.8	10.6	13.6	n.a.	n.a.	7.1	6.8
Southern Europe	**<2.5**	**<2.5**	**1.4**	**1.3**	**7.4**	**5.9**	**n.a.**	**4.2**	**3.6**	**8.6**	**9.0**	**18.2**	**18.9**	**13.3**	**17.2**	**n.a.**	**n.a.**	**8.0**	**8.2**
Albania	8.8	5.4	10.0	8.4	38.8	33.0	1.6	16.5	7.4	20.9	16.7	17.5	23.4	20.1	24.7	37.1	36.5	6.0	6.0
Andorra	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	16.7	18.1	12.6	16.4	n.a.	n.a.	9.1	9.4
Bosnia and Herzegovina	<2.5	<2.5	1.5	1.9	9.6	9.9	n.a.	9.2	7.9	18.3	13.0	17.3	21.2	22.1	26.0	18.2	n.a.	5.2	5.2
Croatia	3.3	<2.5	0.6	1.0	6.5	6.0	n.a.	n.a.	n.a.	n.a.	n.a.	23.0	30.6	20.4	23.3	n.a.	n.a.	5.0	5.0
Greece	<2.5	<2.5	2.6	1.5[a]	15.8	6.6[a]	n.a.	1.8	2.0	13.6	13.5	24.6	28.0	12.2	15.6	n.a.	n.a.	10.9	11.4
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.	16.1	17.3	12.1	16.4	n.a.	n.a.	7.1	7.2
Malta	<2.5	<2.5	1.5	2.1	5.8	9.2	0.4[g]	5.2	3.5	8.2	10.1	30.3	32.3	11.6	15.7	n.a.	n.a.	7.0	7.2
Montenegro	4.1	<2.5	2.1	1.6	12.6	10.4	2.2	8.5	8.0	15.2	8.6	14.8	18.0	20.9	25.8	19.3	19.5	6.4	6.2
North Macedonia	4.5	<2.5	3.6	3.4	15.2	15.2	3.4	5.7	3.8	12.7	12.3	22.2	27.5	16.8	21.5	23.0	27.5	8.2	8.3
Portugal	<2.5	<2.5	4.1	3.1	14.7	11.9	n.a.	3.8	3.2	8.2	9.4	18.7	21.8	11.6	15.0	n.a.	n.a.	8.4	8.9
Serbia	2.6	<2.5	1.7	1.5	11.4	9.5	2.6	5.9	4.6	14.8	12.2	18.2	22.5	20.8	24.9	13.4	23.6	6.0	6.2
Slovenia	<2.5	<2.5	0.9	0.9	12.3	8.2	n.a.	n.a.	n.a.	n.a.	n.a.	16.3	19.4	21.1	25.7	n.a.	n.a.	6.2	6.3
Spain	<2.5	<2.5	1.1	1.4	7.1	6.5	n.a.	n.a.	n.a.	n.a.	n.a.	18.9	15.7	11.9	15.6	n.a.	n.a.	9.5	9.6

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	
	2004–06 (%)	2022–24[4] (%)	2014–16 (%)	2022–24 (%)	2014–16 (%)	2022–24 (%)	2024[5] (%)	2012 (%)	2024 (%)	2012 (%)	2024 (%)	2012 (%)	2022 (%)	2012 (%)	2023 (%)	2012[6] (%)	2023[7] (%)	2012 (%)	2020 (%)
Western Europe	**<2.5**	**<2.5**	**1.3**	**1.9**	**5.2**	**6.0**	**n.a.**	**2.6**	**2.5**	**5.1**	**5.6**	**16.3**	**15.8**	**9.5**	**14.2**	**n.a.**	**n.a.**	**7.0**	**6.8**
Austria	<2.5	<2.5	1.1	1.5	5.5	4.7	n.a.	n.a.	n.a.	n.a.	n.a.	14.2	15.4	12.6	16.7	n.a.	n.a.	6.7	6.3
Belgium	<2.5	<2.5	n.a.	2.4	n.a.	8.1	0.8[g]	2.8	2.6	3.5	4.9	17.8	20.0	11.1	15.0	n.a.	n.a.	7.0	6.8
France	<2.5	<2.5	1.6	2.7	6.8	8.4	n.a.	n.a.	n.a.	n.a.	n.a.	11.7	9.7	8.0	13.1	n.a.	n.a.	7.5	7.4
Germany	<2.5	<2.5	1.0	1.2	4.1	4.1	n.a.	1.5	2.2	3.3	3.3	20.5	20.4	9.1	14.0	n.a.	n.a.	6.9	6.7
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	18.4	11.5	15.4	n.a.	n.a.	7.5	7.7
Netherlands (Kingdom of the)	<2.5	<2.5	1.5	2.7	5.7	7.5	n.a.	1.5	1.6	4.0	5.4	13.8	14.5	12.4	16.5	n.a.	n.a.	6.1	5.7
Switzerland	<2.5	<2.5	1.5	1.1	4.8	2.0	n.a.	n.a.	n.a.	n.a.	n.a.	11.8	12.1	12.4	16.6	n.a.	n.a.	6.4	6.4

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. Regional 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 point estimates for the years 2022 to 2024 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 2017 to 2024 are used.

* Food insecurity estimates for Northern Africa do not reflect updated data for the Sudan after 2018.

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. No updated data are available for Palestine in 2022 and 2023. The estimate for Palestine in 2024 does not include the Gaza Strip and only reflects the likely situation in the West Bank and East Jerusalem.

e. Results based on data collected by FAO through the Gallup© World Poll (see **Annex 1B** for methodology) are provisional and will be revised soon, as the National Institute of Statistics and Informatics (INEI) has adapted the FIES module to the national context and is in the process of collecting FIES data through the National Household Survey (Encuesta Nacional de Hogares – ENAHO), covering the year 2025.

f. Most recent input data are from before 2000; interpret with caution.

g. 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.

h. 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.

i. For wasting, the estimates for Australia and New Zealand were derived applying mixed-effect models with subregions as fixed effects.[42] Data were available only for Australia, preventing the estimation of confidence intervals. Model selection is based on best fit.

SOURCES: Data for undernourishment and food insecurity are from FAO. 2025. FAOSTAT: Suite of Food Security Indicators. [Accessed on 28 July 2025]. 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. *UNICEF-WHO-World Bank: Joint child malnutrition estimates - Levels and trends (2025 edition)* [Cited 4 April 2025]. https://www.who.int/teams/nutrition-and-food-safety/monitoring-nutritional-status-and-food-safety-and-events/joint-child-malnutrition-estimates/latest-estimates; data for exclusive breastfeeding are based on UNICEF. 2024. Infant and young child feeding. In: *UNICEF*. [Cited 6 April 2025]. 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 12 July 2023]. https://data.unicef.org/topic/nutrition/low-birthweight; www.who.int/teams/nutrition-and-food-safety/monitoring-nutritional-status-and-food-safety-and-events/joint-low-birthweight-estimates; data for anaemia are based on WHO. 2025. *WHO global anaemia estimates, 2025 edition.* https://www.who.int/data/gho/data/themes/topics/anaemia_in_women_and_children; data for adult obesity are based on WHO. 2024. Global Health Observatory (GHO) data repository: Prevalence of obesity among adults, BMI ≥ 30, age-standardized. Estimates by country. [Accessed on 24 July 2024]. 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.

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 AND NUMBER OF BABIES BORN WITH LOW BIRTHWEIGHT

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	
	2004–06 (millions)	2022–24[4] (millions)	2014–16 (millions)	2022–24 (millions)	2014–16 (millions)	2022–24 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2022 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2023[7] (millions)	2012 (millions)	2020 (millions)
WORLD	780.4	685.6	567.2	836.5	1 618.0	2 287.9	42.8	180.4	150.2	36.3	35.5	591.4	880.7	505.7	604.8	26.1	30.9	21.6	19.8
Least developed countries	189.4	247.0	182.2	250.1	481.8	665.3	11.4	53.0	57.2	4.2	5.6	22.7	50.0	76.1	108.1	6.6	9.2	4.9	5.2
Landlocked developing countries	91.7	98.5	75.3	100.9	213.8	292.5	4.3	24.7	24.1	2.8	3.4	22.7	41.4	32.1	46.3	3.3	4.2	2.3	2.5
Small Island Developing States	10.2	12.2	15.4	15.4	33.4	35.4	0.2	1.3	1.3	0.4	0.5	7.7	11.2	4.1	5.1	0.2	0.2	0.2	0.2
Low-income countries	122.9	203.8	125.6	185.2	327.5	474.0	7.5	36.7	41.7	3.4	4.1	17.4	35.0	42.4	63.3	4.2	6.2	3.2	3.5
Lower-middle-income countries	437.7	393.6	336.5	530.1	816.1	1 304.8	29.2	113.5	88.7	10.9	12.3	114.2	217.0	281.6	349.2	12.7	16.0	13.7	12.4
Upper-middle-income countries	203.7	74.3	80.0	91.4	351.7	381.9	3.2	26.7	16.8	16.0	13.3	208.0	337.2	136.2	137.3	6.4	5.9	3.4	2.8
High-income countries	n.r.	n.r.	18.7	22.5	107.0	108.2	0.3	3.0	2.7	5.7	5.6	236.5	287.3	44.0	53.3	n.a.	n.a.	1.2	1.1
Low-income food-deficit countries	172.1	260.1	174.2	256.4	450.0	654.2	9.4	48.1	51.8	5.2	6.5	32.7	63.8	64.9	93.9	5.7	8.5	4.2	4.6
AFRICA	179.2	291.9	209.4	319.6	564.2	857.6	11.7	61.7	64.8	8.8	9.7	74.1	123.9	94.4	129.9	6.8	10.0	5.8	6.2
Northern Africa*	13.0	25.9	22.9	32.6	66.8	91.0	1.5	6.3	5.2	3.1	2.5	34.3	51.2	16.7	21.5	1.2	1.0	0.8	0.8
Algeria	2.0	n.r.	5.2	2.3	9.2	8.1	0.1	0.5	0.4	0.6	0.6	4.7	6.9	3.1	3.5	0.1	0.1	0.1	0.1
Egypt	4.7	10.8	8.4	13.8	27.6	35.3	0.4	2.8	1.5	1.7	1.3	20.8	30.4	6.9	9.4	0.7	0.5	n.a.	n.a.
Libya	0.3	1.2	0.7	1.3	1.9	2.6	<0.1[g]	0.2	0.1	0.2	<0.1	1.2	1.7	0.5	0.6	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	
	2004–06 (millions)	2022–24[4] (millions)	2014–16 (millions)	2022–24 (millions)	2014–16 (millions)	2022–24 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2022 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2023[7] (millions)	2012 (millions)	2020 (millions)
Morocco	1.5	2.6	n.a.	n.a.	n.a.	n.a.	0.1[g]	0.5	0.4	0.3	0.1	3.7	5.6	2.6	2.8	0.1	0.1	0.1	0.1
Sudan	–	n.a.	n.r.	n.r.	n.r.	n.r.	n.a.	2.2	2.7	0.2	0.2	2.1	4.2	2.8	4.2	0.3	n.a.	n.a.	n.a.
Tunisia	0.4	0.4	1.0	1.2	2.1	3.1	<0.1	0.1	0.1	0.1	0.2	1.8	2.4	0.8	0.9	<0.1	<0.1	<0.1	<0.1
Northern Africa (excluding the Sudan)	**8.9**	**16.0**	**17.5**	**22.8**	**50.2**	**63.0**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**32.0**	**46.6**	**13.9**	**17.3**	**0.9**	**0.7**	**0.6**	**0.6**
Sub-Saharan Africa	**166.2**	**266.0**	**186.5**	**287.0**	**497.4**	**766.7**	**10.2**	**55.4**	**59.6**	**5.7**	**7.2**	**38.2**	**68.8**	**77.7**	**108.5**	**5.6**	**8.9**	**5.0**	**5.4**
Eastern Africa	**95.1**	**125.9**	**86.7**	**119.5**	**231.3**	**315.3**	**3.6**	**23.9**	**23.3**	**2.4**	**2.9**	**8.7**	**19.8**	**23.4**	**38.0**	**3.1**	**4.5**	**2.0**	**2.1**
Burundi	n.a.	n.a.	n.a.	2.9[a]	n.a.	9.7[a]	0.2[g]	1.1	1.2	<0.1	0.1	0.1	0.3	0.6	1.3	0.1	0.2	0.1	0.1
Comoros	<0.1	0.1	n.a.	0.2	n.a.	0.7	<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	0.1	n.a.	0.2	n.a.	0.6	<0.1[g]	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	0.1	0.1	<0.1	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
Ethiopia	28.5	25.4	15.1	24.5[c]	58.4	79.1[c]	1.3	6.5	6.9	0.4	0.6	0.7	1.9	4.0	7.4	0.8	1.2	n.a.	n.a.
Kenya	10.0	20.4	7.1[a, b]	15.5[b]	23.9[a, b]	40.9[b]	0.3	2.1	1.3	0.4	0.3	1.8	3.7	2.9	4.7	0.2	0.4	0.2	0.1
Madagascar	6.3	12.3	n.a.	5.6	n.a.	22.6	0.3	1.8	1.8	0.1	0.1	0.3	0.7	1.8	2.9	0.2	0.3	0.2	0.2
Malawi	2.8	4.5	8.2[a, b]	11.7[a, b]	13.4[a, b]	17.2[a, b]	0.1	1.2	1.0	0.1	0.1	0.3	0.8	1.0	1.8	0.2	0.2	0.1	0.1
Mauritius	<0.1	0.1	<0.1	0.2	0.2	0.4	n.a.	<0.1[f]	<0.1[f]	<0.1[f]	<0.1[f]	0.2	0.2	0.1	0.1	n.a.	n.a.	<0.1	<0.1
Mozambique	5.9	7.3	n.r.	n.r.	n.r.	n.r.	0.2	1.9	2.1	0.2	0.3	0.7	1.7	2.6	3.8	0.2	0.3	0.2	0.2
Rwanda	3.3	3.4	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
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
Somalia	7.4	9.8	n.a.	n.a.	n.a.	n.a.	n.a.	0.7	0.8	0.1	0.1	0.5	1.2	1.1	1.9	<0.1	0.1	n.a.	n.a.
South Sudan	–	2.6	n.a.	7.2[a]	n.a.	10.1[a]	n.a.	0.6	0.5	0.1	0.1	0.3	0.5	0.8	1.0	0.1	n.a.	n.a.	n.a.
Uganda	5.2	10.7	8.1[b]	7.3[a, b]	24.9[b]	26.6[a, b]	0.3	2.1	1.9	0.3	0.3	0.6	1.8	1.9	3.2	0.4	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	
	2004–06 (millions)	2022–24[4] (millions)	2014–16 (millions)	2022–24 (millions)	2014–16 (millions)	2022–24 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2022 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2023[7] (millions)	2012 (millions)	2020 (millions)
United Republic of Tanzania	11.2	13.4	10.7[b]	16.2[b]	25.4[b]	38.7[b]	0.3	3.1	3.3	0.3	0.5	1.7	4.1	4.0	6.3	0.4	0.7	0.2	0.2
Zambia	5.8	7.7	3.7[b]	3.6[b]	8.4[b]	9.4[b]	0.1	1.1	1.0	0.2	0.2	0.5	1.1	0.9	1.4	0.2	0.2	0.1	0.1
Zimbabwe	3.7	3.2	5.1	4.1	9.3	11.2	0.1	0.7	0.6	0.1	0.1	0.7	1.2	0.9	1.2	0.1	0.1	0.1	0.1
Middle Africa	**32.9**	**61.0**	**n.a.**	**75.9**	**n.a.**	**158.6**	**2.0**	**10.0**	**14.7**	**1.2**	**1.9**	**4.6**	**8.8**	**14.5**	**19.6**	**0.8**	**1.7**	**0.8**	**0.9**
Angola	8.3	8.3	n.a.	n.a.	n.a.	n.a.	n.a.	1.5	3.0	0.1	0.3	1.0	2.0	2.6	3.7	n.a.	n.a.	0.2	0.2
Cameroon	2.4	1.4	5.1	7.0	11.4	17.4	0.2	1.1	1.2	0.3	0.6	1.2	2.1	1.8	2.7	0.1	0.2	0.1	0.1
Central African Republic	1.5	1.6	n.a.	n.a.	n.a.	n.a.	0.1[g]	0.3	0.4	<0.1	<0.1	0.1	0.2	0.5	0.5	<0.1	<0.1	<0.1	<0.1
Chad	3.2	6.2	4.7[b]	4.9[b]	10.0[b]	12.8[b]	0.3	1.0	1.2	0.1	0.1	0.3	0.5	1.5	2.0	<0.1	<0.1	n.a.	n.a.
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	0.3	0.6	0.7	<0.1	n.a.	<0.1	<0.1
Democratic Republic of the Congo	16.1	40.7	n.a.	45.0	n.a.	86.2	1.4	5.8	8.7	0.6	0.8	1.5	3.1	7.1	9.4	0.5	1.1	0.4	0.4
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.
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
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
Southern Africa	**2.7**	**7.9**	**5.9**	**7.7**	**13.8**	**18.2**	**0.2**	**1.5**	**1.7**	**0.8**	**0.8**	**10.7**	**13.4**	**4.5**	**6.2**	**n.a.**	**n.a.**	**0.2**	**0.2**
Botswana	0.5	0.6	0.4[b]	0.6[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	<0.1	<0.1	<0.1
Eswatini	0.1	0.2	n.a.	0.3[a, b]	n.a.	0.7[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
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
Namibia	0.4	0.5	0.7[b]	0.9[b]	1.3[b]	1.7[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
South Africa	1.6	6.3	n.a.	5.4[a]	n.a.	13.1[a]	0.2[g]	1.3	1.4	0.7	0.8	10.0	12.3	4.1	5.5	n.a.	n.a.	0.2	0.2

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	
	2004–06 (millions)	2022–24[4] (millions)	2014–16 (millions)	2022–24 (millions)	2014–16 (millions)	2022–24 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2022 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2023[7] (millions)	2012 (millions)	2020 (millions)
Western Africa	**35.4**	**71.2**	**41.1**	**83.9**	**145.5**	**274.6**	**4.4**	**19.9**	**19.9**	**1.2**	**1.5**	**13.4**	**25.2**	**35.2**	**44.7**	**1.4**	**2.4**	**2.0**	**2.1**
Benin	0.8	2.0	1.2[b]	2.1[b]	6.3[b]	9.3[b]	0.2	0.6	0.7	<0.1	0.1	0.4	0.8	1.2	1.7	0.1	0.1	0.1	0.1
Burkina Faso	2.4	3.0	n.a.	1.7[b]	n.a.	9.5[b]	0.3	1.0	0.7	<0.1	0.1	0.3	0.8	1.9	2.5	0.1	0.2	0.1	0.1
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.
Côte d'Ivoire	3.5	3.5	1.6[b]	2.6[b]	8.6[b]	12.0[b]	0.4	1.1	0.9	0.1	0.2	0.9	1.7	2.8	3.9	0.1	0.2	0.2	0.2
Gambia	0.3	0.5	n.a.	0.6	n.a.	1.5	<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
Ghana	2.5	2.1	1.5[a, b]	3.2[a, b]	11.0[a, b]	15.0[a, b]	0.2	0.9	0.7	0.1	0.1	1.5	2.5	2.8	3.1	0.2	0.2	0.1	0.1
Guinea	1.5	1.6	n.r.	n.r.	n.r.	n.r.	0.1	0.6	0.6	0.1	0.1	0.3	0.7	1.2	1.6	<0.1	0.1	n.a.	n.a.
Guinea-Bissau	0.3	0.5	n.a.	n.a.	n.a.	n.a.	<0.1	0.1	0.1	<0.1	<0.1	0.1	0.1	0.2	0.2	<0.1	<0.1	<0.1	<0.1
Liberia	1.2	2.0	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
Mali	1.5	2.9	n.a.	0.6[b]	n.a.	4.9[b]	0.2	1.0	1.0	<0.1	0.1	0.6	1.2	2.0	3.0	0.1	0.2	n.a.	n.a.
Mauritania	0.3	0.4	0.2[b]	0.7[b]	1.0[b]	3.3[b]	0.1[g]	0.2	0.2	<0.1	<0.1	0.3	0.6	0.5	0.7	<0.1	<0.1	n.a.	n.a.
Niger	2.5	3.4	n.a.	2.0[b]	n.a.	13.3[b]	0.5	1.6	2.3	<0.1	0.1	0.3	0.7	1.6	2.7	0.1	0.1	n.a.	n.a.
Nigeria	13.2	45.4	21.1[a, b]	55.3[b]	66.1[a, b]	170.4[b]	3.9[g]	11.5	11.4	0.7	0.5	7.3	13.6	17.4	20.6	0.5	1.0	n.a.	n.a.
Senegal	1.8	0.9	1.1[b]	0.7[b]	5.7[b]	5.3[b]	0.3	0.4	0.4	<0.1	0.1	0.5	0.9	1.6	1.9	0.1	0.1	0.1	0.1
Sierra Leone	2.2	2.0	1.9[a, b]	2.8	5.3[a, b]	7.6	0.1	0.4	0.3	<0.1	0.1	0.2	0.3	0.7	1.0	<0.1	0.1	<0.1	<0.1
Togo	1.5	0.8	1.2[b]	0.9[b]	4.6[b]	5.4[b]	0.1	0.3	0.3	<0.1	<0.1	0.3	0.5	0.7	0.9	0.1	0.1	<0.1	<0.1
Sub-Saharan Africa (including the Sudan)	**166.2**	**275.9**	**191.9**	**296.8**	**514.0**	**794.6**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**40.3**	**73.1**	**80.5**	**112.7**	**5.9**	**9.2**	**5.2**	**5.6**
ASIA	**542.5**	**348.8**	**299.0**	**437.6**	**797.0**	**1 144.4**	**30.0**	**108.8**	**76.8**	**17.9**	**16.3**	**192.9**	**353.9**	**345.9**	**394.3**	**15.2**	**16.5**	**13.7**	**11.8**
Central Asia	**7.8**	**2.3**	**1.2**	**2.9**	**6.4**	**13.4**	**0.2**	**1.1**	**0.7**	**0.6**	**0.6**	**8.0**	**12.4**	**5.9**	**6.4**	**0.2**	**0.3**	**0.1**	**0.1**
Kazakhstan	1.2	n.r.	n.a.	0.1[a, b]	n.a.	0.4[a, b]	n.a.	0.2	0.1	0.2	0.2	1.9	2.4	1.4	1.5	0.1	n.a.	<0.1	<0.1
Kyrgyzstan	0.4	0.4	n.a.	n.a.	n.a.	n.a.	<0.1	0.1	0.1	0.1	0.1	0.7	1.1	0.5	0.6	<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	
	2004–06 (millions)	2022–24[4] (millions)	2014–16 (millions)	2022–24 (millions)	2014–16 (millions)	2022–24 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2022 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2023[7] (millions)	2012 (millions)	2020 (millions)
Tajikistan	2.6	0.9	0.4	0.6	1.6	2.6	0.1	0.3	0.2	0.1	0.1	0.8	1.4	0.8	1.0	<0.1	0.1	<0.1	<0.1
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	0.9	0.6	0.7	<0.1	<0.1	<0.1	<0.1
Uzbekistan	3.4	n.r.	0.6	1.9	3.4	8.7	0.1	0.4	0.3	0.2	0.2	4.0	6.8	2.6	2.7	0.1	0.1	<0.1	<0.1
Eastern Asia	**104.2**	**n.r.**	**16.6**	**16.7**	**98.6**	**103.7**	**0.9**	**7.5**	**2.9**	**6.5**	**6.1**	**55.1**	**106.4**	**66.8**	**57.9**	**2.9**	**1.9**	**1.2**	**0.8**
China	91.8	n.r.	n.r.	n.r.	n.r.	n.r.	1.0	6.6	2.4	6.1	5.8	48.0	94.3	57.8	49.9	2.5	1.6	1.0	0.6
China, mainland	90.6	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.
Taiwan Province of China	1.0	0.9	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.
China, Hong Kong SAR	n.r.	0.2	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.
China, Macao SAR	<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.
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	2.2	1.9	1.7	0.1	0.1	n.a.	n.a.
Japan	n.a.	n.a.	n.r.	1.3	3.3	7.3	n.a.	0.4	0.2	0.1	0.1	4.2	5.9	5.2	4.4	n.a.	n.a.	0.1	0.1
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
Republic of Korea	n.r.	n.r.	n.r.	0.6	2.4[a]	2.8	<0.1[g]	<0.1	<0.1	0.2	0.1	1.6	3.3	1.8	1.8	n.a.	n.a.	<0.1	<0.1
Eastern Asia (excluding China and Japan)	**10.2**	**13.5**	**0.6**	**1.0**	**5.6**	**5.9**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**3.1**	**5.9**	**3.8**	**3.7**	**n.a.**	**n.a.**	**0.1**	**0.1**
South-eastern Asia	**94.4**	**35.1**	**10.9**	**13.7**	**94.1**	**99.5**	**3.6**	**17.7**	**11.6**	**3.4**	**2.2**	**25.0**	**48.0**	**43.6**	**43.4**	**2.0**	**2.3**	**1.5**	**1.4**
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

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	
	2004–06 (millions)	2022–24[4] (millions)	2014–16 (millions)	2022–24 (millions)	2014–16 (millions)	2022–24 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2022 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2023[7] (millions)	2012 (millions)	2020 (millions)
Cambodia	2.1	0.9	0.7	0.6	6.2	7.0	0.2	0.6	0.4	<0.1	0.1	0.2	0.5	1.6	1.7	0.1	0.1	<0.1	<0.1
Indonesia	42.4	17.7	1.8[a]	n.r.	15.7[a]	12.5[a]	1.9	8.4	5.0	2.0	0.6	10.0	21.6	19.8	19.4	1.0	1.1	0.5	0.4
Lao People's Democratic Republic	n.a.	n.a.	n.a.	0.4	n.a.	2.7	0.1	0.3	0.2	<0.1	<0.1	0.2	0.4	0.5	0.6	<0.1	<0.1	<0.1	<0.1
Malaysia	0.8	n.r.	2.4	2.0	5.4	5.9	0.2	0.5	0.5	0.2	0.1	3.2	5.4	2.6	2.9	n.a.	n.a.	0.1	0.1
Myanmar	11.8	2.9	n.a.	3.9	n.a.	17.7	0.3[g]	1.4	1.1	0.1	<0.1	1.8	2.8	4.9	5.7	0.1	n.a.	0.1	0.1
Philippines	15.2	3.4	n.a.	3.5[a, b]	n.a.	37.8[a, b]	0.5	3.9	2.5	0.4	0.3	3.4	6.5	4.8	3.7	0.4	0.4	0.5	0.5
Singapore	n.a.	n.a.	<0.1	0.2	0.2	0.5	n.a.	<0.1	<0.1	<0.1	<0.1	0.4	0.7	0.2	0.3	n.a.	n.a.	<0.1	<0.1
Thailand	7.8	3.3	n.a.	0.6[a, b]	n.a.	3.9[a, b]	0.2	0.6	0.4	0.4	0.3	5.3	8.9	4.3	3.6	<0.1	0.1	0.1	0.1
Timor-Leste	0.3	0.3	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
Viet Nam	12.3	5.3	n.a.	2.3	n.a.	10.7	0.3	1.9	1.4	0.3	0.7	0.5	1.5	4.8	5.3	0.1	0.3	0.1	0.1
Southern Asia	**314.8**	**252.1**	**244.7**	**363.4**	**516.0**	**812.2**	**24.4**	**77.0**	**56.4**	**5.0**	**5.7**	**63.4**	**130.8**	**212.2**	**264.9**	**9.1**	**10.7**	**10.2**	**8.8**
Afghanistan	7.5	11.7	5.0	12.9	15.2	33.6	0.2	2.4	2.8	0.3	0.3	1.4	3.9	2.5	4.5	n.a.	0.4	n.a.	n.a.
Bangladesh	21.8	17.9	n.r.	n.r.	n.r.	n.r.	1.8	6.2	4.2	0.3	0.3	2.4	6.2	14.5	18.3	1.0	0.9	0.7	0.7
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	n.a.	<0.1	<0.1
India	243.9	172.1	n.r.	n.r.	n.r.	n.r.	21.3	53.3	37.4	2.7	4.2	33.6	71.4	164.0	203.5	5.9	7.2	7.7	6.3[h]
Iran (Islamic Republic of)	4.6	6.2	7.9	5.3	39.7	35.2	0.3	0.4	0.3	0.3	0.2	11.2	15.6	4.8	6.2	0.4	0.3	n.a.	n.a.
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	<0.1	<0.1	<0.1
Nepal	4.4	1.6	2.9	3.8	8.2	10.9	0.2	1.2	0.7	<0.1	<0.1	0.5	1.4	2.3	2.8	0.2	0.2	0.1	0.1
Pakistan	29.6	40.9	2.0[b]	25.0[b]	30.5[b]	104.3[b]	2.3	13.2	10.7	1.4	0.7	14.1	31.0	22.7	28.2	1.2	1.6	n.a.	n.a.
Sri Lanka	2.9	1.7	0.1[b]	0.3[b]	1.3[b]	2.6[b]	0.2	0.3	0.2	<0.1	<0.1	0.8	1.7	1.4	1.2	0.1	n.a.	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	
	2004–06 (millions)	2022–24[4] (millions)	2014–16 (millions)	2022–24 (millions)	2014–16 (millions)	2022–24 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2022 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2023[7] (millions)	2012 (millions)	2020 (millions)
Southern Asia (excluding India)	**71.0**	**80.0**	**39.1**	**66.9**	**146.6**	**239.5**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**30.3**	**59.9**	**48.3**	**61.4**	**3.2**	**3.4**	**2.6**	**2.5**
Western Asia	**21.3**	**37.6**	**25.7**	**40.9**	**82.0**	**115.6**	**1.0**	**5.4**	**5.1**	**2.5**	**1.8**	**46.5**	**65.3**	**17.4**	**21.7**	**0.9**	**0.9**	**0.7**	**0.7**
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	0.5	0.5	0.2	0.1	<0.1	n.a.	<0.1	<0.1
Azerbaijan	0.5	n.r.	n.r.	0.1	0.6	1.4	<0.1	0.1	<0.1	0.1	<0.1	1.4	2.0	1.0	1.0	<0.1	<0.1	<0.1	<0.1
Bahrain	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1[f]	<0.1[f]	n.a.	n.a.	0.3	0.4	0.1	0.1	n.a.	n.a.	<0.1	<0.1
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.
Georgia	0.2	n.r.	0.3	0.2	1.2	1.0	<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
Iraq	4.6	6.7	n.r.	n.r.	n.r.	n.r.	0.2	1.0	0.5	0.5	0.3	6.1	10.1	2.3	3.1	0.1	0.1	0.1	0.1
Israel	n.r.	n.r.	0.1[a, b]	<0.1[b]	0.9[a, b]	0.9[b]	n.a.	n.a.	n.a.	n.a.	n.a.	1.1	1.4	0.2	0.3	n.a.	n.a.	<0.1	<0.1
Jordan	0.3	1.6	n.r.	n.r.	n.r.	n.r.	<0.1	0.1	0.1	0.1	0.1	1.5	2.7	0.5	1.0	<0.1	<0.1	<0.1	<0.1
Kuwait	n.r.	n.r.	0.2	0.2	0.5	0.4	<0.1	<0.1	<0.1	<0.1	<0.1	1.0	1.3	0.2	0.3	n.a.	n.a.	<0.1	<0.1
Lebanon	0.3	0.5	n.a.	0.6	n.a.	2.4	<0.1	0.1	<0.1	<0.1	<0.1	0.9	1.1	0.4	0.5	n.a.	<0.1	<0.1	<0.1
Oman	0.2	0.3	n.a.	n.a.	n.a.	n.a.	<0.1	<0.1	0.1	<0.1	<0.1	0.6	1.0	0.3	0.4	n.a.	<0.1	<0.1	<0.1
Palestine	n.a.	n.a.	n.a.	0.3[a, d]	n.a.	1.5[a, d]	<0.1	0.1	0.1	0.1	0.1	0.7	1.1	0.3	0.3	<0.1	<0.1	<0.1	<0.1
Qatar	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	<0.1[g]	<0.1	<0.1	<0.1	<0.1	0.6	1.0	0.1	0.1	<0.1	n.a.	<0.1	<0.1
Saudi Arabia	0.9	n.r.	n.r.	n.r.	n.r.	n.r.	0.1[g]	0.3	0.3	0.3	0.2	7.1	10.3	1.1	1.3	n.a.	n.a.	n.a.	n.a.
Syrian Arab Republic	1.2	9.2	n.r.	n.r.	n.r.	n.r.	n.a.	0.8	0.6	0.5	0.3	3.8	4.6	1.7	2.0	0.1	0.1	n.a.	n.a.
Türkiye	6.5	n.r.	n.r.	n.r.	n.r.	n.r.	0.1	0.6	0.3	0.6	0.4	15.3	20.6	5.8	6.6	0.3	0.2	0.2	0.2
United Arab Emirates	0.1	n.r.	n.a.	<0.1[a]	n.a.	0.4[a]	n.a.	n.a.	n.a.	n.a.	n.a.	2.2	2.5	0.5	0.7	n.a.	n.a.	<0.1	<0.1
Yemen	n.a.	n.a.	n.a.	n.a.	14.2	28.8	1.1	2.2	3.1	0.1	0.1	1.2	2.5	2.4	3.5	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	
	2004–06 (millions)	2022–24[4] (millions)	2014–16 (millions)	2022–24 (millions)	2014–16 (millions)	2022–24 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2022 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2023[7] (millions)	2012 (millions)	2020 (millions)
Central Asia and Southern Asia	**322.7**	**254.4**	**245.9**	**366.3**	**522.4**	**825.6**	**24.6**	**78.1**	**57.1**	**5.5**	**6.3**	**71.3**	**143.2**	**218.1**	**271.3**	**9.3**	**11.1**	**10.3**	**8.9**
Eastern Asia and South-eastern Asia	**198.5**	**n.r.**	**27.5**	**30.3**	**192.7**	**203.1**	**4.4**	**25.3**	**14.6**	**9.9**	**8.3**	**80.3**	**154.6**	**110.4**	**101.3**	**4.9**	**4.3**	**2.7**	**2.2**
Western Asia and Northern Africa	**34.3**	**63.5**	**48.6**	**73.5**	**148.8**	**206.6**	**2.5**	**11.7**	**10.4**	**5.6**	**4.2**	**80.7**	**116.5**	**34.1**	**43.2**	**2.1**	**1.9**	**1.5**	**1.5**
LATIN AMERICA AND THE CARIBBEAN	**47.2**	**35.3**	**41.1**	**57.2**	**151.3**	**179.8**	**0.6**	**6.8**	**5.8**	**3.9**	**4.1**	**91.4**	**141.4**	**28.6**	**34.6**	**1.8**	**2.0**	**1.0**	**0.9**
Caribbean	**7.1**	**7.8**	**n.a.**	**11.1**	**n.a.**	**23.7**	**0.1**	**0.5**	**0.4**	**0.2**	**0.2**	**5.5**	**7.6**	**2.6**	**3.1**	**0.1**	**0.1**	**0.1**	**0.1**
Antigua and Barbuda	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
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	0.1	<0.1	<0.1	n.a.	n.a.	<0.1	<0.1
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.
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	2.0	0.6	0.5	<0.1	<0.1	<0.1	<0.1
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.
Dominican Republic	2.0	0.4	2.5[a]	2.0[b]	5.7[a]	5.0[b]	<0.1	0.1	0.1	0.1	0.1	1.4	2.2	0.5	0.7	<0.1	<0.1	<0.1	<0.1
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.
Haiti	4.3	6.3	n.a.	5.3	n.a.	9.7	0.1	0.3	0.3	<0.1	<0.1	0.5	0.8	1.1	1.4	0.1	<0.1	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	0.7	0.1	0.2	<0.1	<0.1	<0.1	<0.1
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	1.1	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.
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

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	
	2004–06 (millions)	2022–24[4] (millions)	2014–16 (millions)	2022–24 (millions)	2014–16 (millions)	2022–24 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2022 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2023[7] (millions)	2012 (millions)	2020 (millions)
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.
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	0.3	0.1	0.1	<0.1	<0.1	<0.1	<0.1
Central America	**10.5**	**9.1**	**10.6**	**12.8**	**48.4**	**47.5**	**0.1**	**3.0**	**2.6**	**1.1**	**1.1**	**28.5**	**42.5**	**4.6**	**6.8**	**0.4**	**0.6**	**0.4**	**0.3**
Belize	<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.	<0.1	<0.1
Costa Rica	0.2	n.r.	<0.1[b]	0.1[b]	0.6[b]	0.8[b]	<0.1	<0.1	<0.1	<0.1	<0.1	0.8	1.2	0.1	0.2	<0.1	<0.1	<0.1	<0.1
El Salvador	0.5	0.4	0.9	1.0	2.6	2.9	<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
Guatemala	2.5	2.1	2.6	3.9	6.8	8.8	<0.1	0.9	0.8	0.1	0.1	1.7	2.9	0.3	0.5	0.1	0.1	0.1	0.1
Honduras	1.4	1.6	1.3[b]	1.6[a]	3.8[b]	4.4[a]	<0.1	0.2	0.2	0.1	<0.1	1.1	2.0	0.3	0.5	<0.1	<0.1	<0.1	<0.1
Mexico	4.2	3.5	4.2[a, b]	3.8[a]	30.2[a, b]	25.1[a]	n.a.	n.a.	n.a.	n.a.	n.a.	22.2	32.3	3.3	4.6	0.2	0.4	0.2	0.2
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.
Panama	0.5	0.3	n.r.	n.r.	n.r.	n.r.	<0.1	0.1	<0.1	<0.1	<0.1	0.7	1.1	0.2	0.3	n.a.	n.a.	<0.1	<0.1
South America	**29.7**	**18.4**	**18.5**	**33.4**	**78.9**	**108.6**	**0.4**	**3.3**	**2.8**	**2.6**	**2.8**	**57.4**	**91.2**	**21.3**	**24.7**	**1.4**	**1.4**	**0.6**	**0.5**
Argentina	1.4	1.5	2.5	5.6	8.3	15.4	<0.1	0.3	0.3	0.4	0.4	7.7	11.6	2.1	2.7	0.1	n.a.	0.1	<0.1
Bolivia (Plurinational State of)	2.6	2.7	n.r.	n.r.	n.r.	n.r.	n.a.	0.2	0.1	0.1	0.1	1.3	2.2	0.7	0.8	0.1	n.a.	<0.1	<0.1
Brazil	10.5	n.r.	1.5[a, b]	7.1[a, b]	26.8[a, b]	28.5[a, b]	0.4	1.0	1.2	1.1	1.4	27.2	45.7	11.7	11.9	0.6	0.6	0.2	0.2
Chile	0.4	0.5	0.5[b]	0.7[a, b]	1.9[b]	3.8[a, b]	n.a.	<0.1	<0.1	0.1	0.1	3.8	5.9	0.4	0.8	n.a.	n.a.	<0.1	<0.1
Colombia	4.6	2.0	2.3[b]	2.6[a, b]	9.4[b]	14.6[a, b]	n.a.	0.5	0.4	0.2	0.2	5.7	9.1	2.2	3.2	0.2	n.a.	0.1	0.1
Ecuador	2.4	2.2	1.0[a, b]	2.1[b]	3.4[a, b]	6.0[b]	<0.1	0.4	0.2	0.1	0.1	2.0	3.4	0.7	1.0	n.a.	n.a.	<0.1	<0.1
Guyana	<0.1	n.r.	n.a.	<0.1[a]	n.a.	0.2[a]	<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

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	
	2004–06 (millions)	2022–24[4] (millions)	2014–16 (millions)	2022–24 (millions)	2014–16 (millions)	2022–24 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2022 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2023[7] (millions)	2012 (millions)	2020 (millions)
Paraguay	0.4	0.4	<0.1[b]	n.a.	0.5[b]	n.a.	n.a.	0.1	<0.1	0.1	0.1	0.9	1.5	0.3	0.4	<0.1	n.a.	<0.1	<0.1
Peru	5.0	2.3	3.0[e]	4.9[e]	9.3[e]	13.9[e]	<0.1	0.5	0.3	0.2	0.2	3.6	6.4	1.4	1.9	0.2	0.2	0.1	<0.1
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
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
Venezuela (Bolivarian Republic of)	2.1	1.7	n.r.	n.r.	n.r.	n.r.	n.a.	0.4	0.2	0.2	0.2	4.4	4.3	1.5	1.7	n.a.	n.a.	0.1	<0.1
OCEANIA	**2.2**	**3.5**	**3.5**	**4.5**	**9.0**	**11.7**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**n.a.**	**6.9**	**9.6**	**1.2**	**1.8**	**n.a.**	**n.a.**	**0.1**	**0.1**
Australia and New Zealand	**n.r.**	**n.r.**	**0.8**	**1.2**	**3.0**	**4.6**	**<0.1[i]**	**0.1**	**0.1**	**0.2**	**0.4**	**5.5**	**7.6**	**0.5**	**0.8**	**n.a.**	**n.a.**	**<0.1**	**<0.1**
Australia	n.r.	n.r.	0.7	1.0	2.6	3.7	n.a.	0.1	<0.1	0.2	0.4	4.5	6.2	0.4	0.7	n.a.	n.a.	<0.1	<0.1
New Zealand	n.r.	n.r.	0.1	0.2	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
Oceania excluding Australia and New Zealand	**2.0**	**3.3**	**2.7**	**3.2**	**6.0**	**7.2**	**0.1**	**0.6**	**0.7**	**0.2**	**0.3**	**1.3**	**2.0**	**0.7**	**1.0**	**0.1**	**0.1**	**0.1**	**0.1**
Melanesia	**2.0**	**3.2**	**n.a.**	**3.2**	**n.a.**	**6.9**	**n.a.**	**0.6**	**0.6**	**0.1**	**0.2**	**1.0**	**1.6**	**0.6**	**0.9**	**0.1**	**0.1**	**0.1**	**0.1**
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
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.
Papua New Guinea	1.8	3.0	n.a.	n.a.	n.a.	n.a.	n.a.	0.5	0.6	0.1	0.2	0.8	1.2	0.5	0.8	0.1	0.1	<0.1	<0.1
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
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
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**
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
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	<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	
	2004–06 (millions)	2022–24[4] (millions)	2014–16 (millions)	2022–24 (millions)	2014–16 (millions)	2022–24 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2022 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2023[7] (millions)	2012 (millions)	2020 (millions)
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.
Nauru	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.
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
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**
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.
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
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.
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.
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.
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.
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.
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.
NORTHERN AMERICA AND EUROPE	**n.r.**	**n.r.**	**14.2**	**17.6**	**96.4**	**94.3**	**n.a.**	**2.5**	**2.0**	**5.3**	**4.7**	**215.1**	**250.5**	**34.0**	**42.9**	**n.a.**	**n.a.**	**0.9**	**0.8**
Northern America	**n.r.**	**n.r.**	**3.7**	**4.0**	**35.9**	**39.4**	**<0.1**	**0.6**	**0.8**	**1.9**	**2.0**	**96.1**	**119.2**	**8.5**	**12.8**	**0.5**	**0.5**	**0.3**	**0.3**
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.
Canada	n.r.	n.r.	0.2[a]	0.7[b]	1.8[a]	4.0[b]	n.a.	n.a.	n.a.	0.2	0.2	6.8	8.2	0.6	1.2	n.a.	n.a.	<0.1	<0.1
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.
United States of America	n.r.	n.r.	3.5[a]	3.3[a]	34.1[a]	35.3[a]	<0.1	0.5	0.8	1.7	1.8	89.2	110.9	7.9	11.6	0.5	0.5	0.3	0.3

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	
	2004–06 (millions)	2022–24[4] (millions)	2014–16 (millions)	2022–24 (millions)	2014–16 (millions)	2022–24 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2022 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2023[7] (millions)	2012 (millions)	2020 (millions)
Europe	**n.r.**	**n.r.**	**10.5**	**13.6**	**60.4**	**54.9**	**n.a.**	**1.9**	**1.2**	**3.4**	**2.6**	**118.0**	**129.0**	**25.5**	**30.1**	**n.a.**	**n.a.**	**0.6**	**0.5**
Eastern Europe	**n.r.**	**n.r.**	**4.2**	**4.8**	**32.2**	**26.2**	**n.a.**	**1.1**	**0.6**	**1.8**	**1.2**	**52.9**	**59.2**	**14.0**	**15.4**	**n.a.**	**n.a.**	**0.3**	**0.2**
Belarus	0.3	n.r.	n.a.	n.r.	n.a.	<0.1[a]	<0.1	<0.1	<0.1	<0.1	<0.1	1.7	1.6	0.4	0.5	<0.1	<0.1	<0.1	<0.1
Bulgaria	0.5	n.r.	0.1	0.1	1.1	0.8	n.a.	<0.1	<0.1	<0.1	<0.1	1.1	1.2	0.4	0.4	n.a.	n.a.	<0.1	<0.1
Czechia	n.r.	n.r.	<0.1	0.2	0.6	1.1	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
Hungary	0.3	n.r.	0.1	0.4	1.1	1.5	n.a.	n.a.	n.a.	n.a.	n.a.	2.1	2.6	0.5	0.5	n.a.	n.a.	<0.1	<0.1
Poland	n.r.	n.r.	0.7	n.r.	3.4	1.3	<0.1	<0.1	<0.1	0.1	0.1	7.0	9.0	1.8	2.1	n.a.	n.a.	<0.1	<0.1
Republic of Moldova	1.3	n.r.	<0.1	0.2	0.6	0.8	n.a.	<0.1	<0.1	<0.1	<0.1	0.6	0.6	0.2	0.2	<0.1	n.a.	<0.1	<0.1
Romania	n.r.	n.r.	1.1	1.3	3.8	3.5	n.a.	0.1	0.1	0.1	<0.1	3.6	5.4	1.0	1.0	n.a.	n.a.	<0.1	<0.1
Russian Federation	n.r.	n.r.	1.0	n.r.	12.0	4.0[a]	n.a.	n.a.	n.a.	0.9	0.7	26.0	27.7	7.3	8.2	n.a.	n.a.	0.1	0.1
Slovakia	0.3	0.2	<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
Ukraine	n.r.	2.7	0.9	2.1	9.1	12.6	n.a.	0.5	0.1	0.5	0.2	8.1	7.7	1.5	1.7	0.1	n.a.	<0.1	<0.1
Northern Europe	**n.r.**	**n.r.**	**1.8**	**3.1**	**6.9**	**7.9**	**n.a.**	**0.2**	**0.2**	**0.5**	**0.4**	**17.7**	**20.4**	**2.7**	**3.5**	**n.a.**	**n.a.**	**0.1**	**0.1**
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	0.6	0.2	0.2	n.a.	n.a.	<0.1	<0.1
Estonia	n.r.	n.r.	<0.1	<0.1	0.1	0.1	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
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	1.0	0.1	0.2	n.a.	n.a.	<0.1	<0.1
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
Ireland	n.r.	n.r.	0.2	0.1	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
Latvia	n.r.	n.r.	<0.1	<0.1	0.2	0.2	<0.1[g]	<0.1	<0.1	<0.1	<0.1	0.4	0.4	0.1	0.1	n.a.	n.a.	<0.1	<0.1
Lithuania	n.r.	n.r.	<0.1	<0.1	0.4	0.2	<0.1[g]	<0.1	<0.1	<0.1	<0.1	0.6	0.6	0.1	0.1	n.a.	n.a.	<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	
	2004–06 (millions)	2022–24[4] (millions)	2014–16 (millions)	2022–24 (millions)	2014–16 (millions)	2022–24 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2022 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2023[7] (millions)	2012 (millions)	2020 (millions)
Norway	n.r.	n.r.	<0.1	<0.1	0.2	0.4	n.a.	n.a.	n.a.	n.a.	n.a.	0.6	0.8	0.1	0.2	n.a.	n.a.	<0.1	<0.1
Sweden	n.r.	n.r.	<0.1	0.3	0.4	0.7	n.a.	n.a.	n.a.	n.a.	n.a.	1.1	1.3	0.3	0.4	n.a.	n.a.	<0.1	<0.1
United Kingdom of Great Britain and Northern Ireland	n.r.	n.r.	1.2	2.3	4.1	4.7	<0.1[g]	0.1	0.1	0.3	0.3	12.4	14.3	1.6	2.0	n.a.	n.a.	0.1	<0.1
Southern Europe	**n.r.**	**n.r.**	**2.1**	**1.9**	**11.3**	**8.9**	**n.a.**	**0.3**	**0.2**	**0.7**	**0.5**	**22.8**	**23.6**	**4.7**	**5.3**	**n.a.**	**n.a.**	**0.1**	**0.1**
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	<0.1	<0.1	<0.1
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
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
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
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	2.4	0.3	0.3	n.a.	n.a.	<0.1	<0.1
Italy	n.r.	n.r.	n.a.	n.r.	n.a.	1.0[a]	n.a.	n.a.	n.a.	n.a.	n.a.	8.0	8.6	1.7	1.9	n.a.	n.a.	<0.1	<0.1
Malta	n.r.	n.r.	<0.1	<0.1	<0.1	<0.1	<0.1[g]	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	n.a.	n.a.	<0.1	<0.1
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
North Macedonia	<0.1	n.r.	<0.1	<0.1	0.3	0.3	<0.1	<0.1	<0.1	<0.1	<0.1	0.4	0.5	0.1	0.1	<0.1	<0.1	<0.1	<0.1
Portugal	n.r.	n.r.	0.4	0.3	1.5	1.2	n.a.	<0.1	<0.1	<0.1	<0.1	1.6	1.9	0.3	0.3	n.a.	n.a.	<0.1	<0.1
Serbia	0.2	n.r.	0.2	0.1	1.0	0.8	<0.1	<0.1	<0.1	0.1	<0.1	1.1	1.3	0.4	0.4	<0.1	<0.1	<0.1	<0.1
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
Spain	n.r.	n.r.	0.5	0.7	3.3	3.1	n.a.	n.a.	n.a.	n.a.	n.a.	7.2	6.2	1.3	1.6	n.a.	n.a.	<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	
	2004–06 (millions)	2022–24[4] (millions)	2014–16 (millions)	2022–24 (millions)	2014–16 (millions)	2022–24 (millions)	2024[5] (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2024 (millions)	2012 (millions)	2022 (millions)	2012 (millions)	2023 (millions)	2012[6] (millions)	2023[7] (millions)	2012 (millions)	2020 (millions)
Western Europe	**n.r.**	**n.r.**	**2.4**	**3.8**	**10.1**	**12.0**	**n.a.**	**0.2**	**0.2**	**0.5**	**0.5**	**25.0**	**25.2**	**4.1**	**5.9**	**n.a.**	**n.a.**	**0.1**	**0.1**
Austria	n.r.	n.r.	<0.1	0.1	0.5	0.4	n.a.	n.a.	n.a.	n.a.	n.a.	1.0	1.1	0.3	0.3	n.a.	n.a.	<0.1	<0.1
Belgium	n.r.	n.r.	n.a.	0.3	n.a.	0.9	<0.1[g]	<0.1	<0.1	<0.1	<0.1	1.6	1.9	0.3	0.4	n.a.	n.a.	<0.1	<0.1
France	n.r.	n.r.	1.0	1.8	4.4	5.6	n.a.	n.a.	n.a.	n.a.	n.a.	5.8	5.0	1.1	1.8	n.a.	n.a.	0.1	0.1
Germany	n.r.	n.r.	0.8	1.0	3.3	3.4	n.a.	0.1	0.1	0.1	0.1	13.9	14.2	1.6	2.3	n.a.	n.a.	<0.1	0.1
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
Netherlands (Kingdom of the)	n.r.	n.r.	0.3	0.5	1.0	1.4	n.a.	<0.1	<0.1	<0.1	<0.1	1.8	2.1	0.5	0.6	n.a.	n.a.	<0.1	<0.1
Switzerland	n.r.	n.r.	0.1	<0.1	0.4	0.2	n.a.	n.a.	n.a.	n.a.	n.a.	0.8	0.9	0.2	0.3	n.a.	n.a.	<0.1	<0.1

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. Regional 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 point estimates for the years 2022 to 2024 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 2017 to 2024 are used.

* Food insecurity estimates for Northern Africa do not reflect updated data for the Sudan after 2018.

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. No updated data are available for Palestine in 2022 and 2023. The estimate for Palestine in 2024 does not include the Gaza Strip and only reflects the likely situation in the West Bank and East Jerusalem.

e. Results based on data collected by FAO through the Gallup© World Poll (see **Annex 1B** for methodology) are provisional and will be revised soon, as the National Institute of Statistics and Informatics (INEI) has adapted the FIES module to the national context and is in the process of collecting FIES data through the National Household Survey (Encuesta Nacional de Hogares – ENAHO), covering the year 2025.

f. Most recent input data are from before 2000; interpret with caution.

g. 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.

h. 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.

i. For wasting, the estimates for Australia and New Zealand were derived applying mixed-effect models with subregions as fixed effects.[42] Data were available only for Australia, preventing the estimation of confidence intervals. Model selection is based on best fit.

SOURCES: Data for undernourishment and food insecurity are from FAO. 2025. FAOSTAT: Suite of Food Security Indicators. [Accessed on 28 July 2025]. 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. *UNICEF-WHO-World Bank: Joint child malnutrition estimates - Levels and trends (2025 edition)* [Cited 4 April 2025]. https://www.who.int/teams/nutrition-and-food-safety/monitoring-nutritional-status-and-food-safety-and-events/joint-child-malnutrition-estimates/latest-estimates; data for exclusive breastfeeding are based on UNICEF. 2024. Infant and young child feeding. In: *UNICEF*. [Cited 6 April 2025]. 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 12 July 2023]. https://data.unicef.org/topic/nutrition/low-birthweight; www.who.int/teams/nutrition-and-food-safety/monitoring-nutritional-status-and-food-safety-and-events/joint-low-birthweight-estimates; data for anaemia are based on WHO. 2025. *WHO global anaemia estimates, 2025 edition.* https://www.who.int/data/gho/data/themes/topics/anaemia_in_women_and_children; data for adult obesity are based on WHO. 2024. Global Health Observatory (GHO) data repository: Prevalence of obesity among adults, BMI ≥ 30, age-standardized. Estimates by country. [Accessed on 24 July 2024]. 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.

TABLE A1.3 PREVALENCE OF MODERATE OR SEVERE FOOD INSECURITY, AND SEVERE FOOD INSECURITY ONLY, BY DEGREE OF URBANIZATION IN 2024

	Prevalence of severe food insecurity			Prevalence of moderate or severe food insecurity		
	Rural	Peri-urban	Urban	Rural	Peri-urban	Urban
		(%)			(%)	
WORLD	**11.5**	**11.0**	**8.1**	**32.0**	**28.6**	**23.9**
AFRICA	**24.1**	**22.2**	**20.6**	**62.8**	**58.6**	**55.7**
Northern Africa	12.7	12.2	12.3	39.2	32.8	34.7
Sub-Saharan Africa	25.3	24.4	23.4	65.3	64.2	62.9
Eastern Africa	25.5	24.3	24.5	67.0	64.5	62.6
Middle Africa	38.1	42.3	34.1	80.0	79.0	75.0
Southern Africa	15.0	8.9	9.5	34.6	23.3	23.9
Western Africa	20.7	21.0	19.5	60.8	65.3	63.6
ASIA	**9.2**	**10.4**	**6.6**	**26.3**	**25.8**	**19.2**
Central Asia	1.9	3.1	3.2	14.4	18.1	15.1
Eastern Asia	1.3	1.2	0.7	11.8	5.0	5.3
South-eastern Asia	2.4	2.1	1.6	17.4	15.4	11.3
Southern Asia	18.5	19.1	13.5	40.9	42.1	33.3
Western Asia	15.6	16.5	10.7	42.3	45.0	31.6
Western Asia and Northern Africa	*14.3*	*14.2*	*11.4*	*40.8*	*38.6*	*33.0*
LATIN AMERICA AND THE CARIBBEAN	**8.9**	**9.3**	**6.7**	**27.9**	**27.3**	**23.2**
Caribbean	27.0	27.0	23.4	55.4	55.3	49.7
Latin America	7.8	7.3	5.7	26.3	24.2	21.6
Central America	9.6	8.9	4.8	32.2	28.9	21.2
South America	6.9	6.6	6.1	23.3	22.0	21.7
OCEANIA	**14.9**	**10.3**	**4.8**	**36.3**	**28.1**	**17.4**
NORTHERN AMERICA AND EUROPE	**1.4**	**1.6**	**1.6**	**7.6**	**7.8**	**9.0**
Europe	1.6	2.0	1.6	6.9	7.2	7.0
Eastern Europe	1.6	1.3	1.1	8.6	8.6	8.2
Northern Europe	2.3	5.3	3.3	6.7	9.6	6.6
Southern Europe	1.3	0.8	1.3	5.5	4.1	5.6
Western Europe	1.7	2.3	1.7	5.4	6.6	6.3
Northern America	1.0	0.8	1.5	9.2	8.9	12.9
COUNTRY INCOME GROUPS						
Low-income countries	24.5	27.4	24.5	65.6	66.8	61.6
Lower-middle-income countries	19.6	17.6	14.6	47.4	42.4	38.0
Upper-middle-income countries	3.4	2.5	2.6	16.7	10.4	12.4
High-income countries	1.7	1.7	1.7	7.5	7.4	8.0

SOURCE: FAO. 2025. FAOSTAT: Suite of Food Security Indicators. [Accessed on 28 July 2025]. 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 2024

	Prevalence of severe food insecurity		Prevalence of moderate or severe food insecurity	
	Men	Women	Men	Women
	(%)		(%)	
WORLD	**8.6**	**9.4**	**24.2**	**26.1**
AFRICA	**21.0**	**22.3**	**57.1**	**58.2**
Northern Africa	11.6	12.8	35.2	33.7
Sub-Saharan Africa	23.4	24.6	62.7	64.2
Eastern Africa	24.2	25.3	63.9	66.1
Middle Africa	35.1	38.6	75.4	78.9
Southern Africa	10.5	10.5	25.8	26.2
Western Africa	20.1	20.5	63.1	63.4
ASIA	**7.8**	**8.7**	**21.2**	**23.1**
Central Asia	2.8	3.0	16.1	15.9
Eastern Asia	1.1	0.9	6.8	5.5
South-eastern Asia	2.0	1.8	13.4	13.9
Southern Asia	15.3	18.1	35.1	41.0
Western Asia	12.9	13.0	35.3	37.5
Western Asia and Northern Africa	*12.3*	*12.9*	*35.2*	*35.7*
LATIN AMERICA AND THE CARIBBEAN	**6.9**	**8.2**	**22.1**	**27.4**
Caribbean	23.5	25.7	49.8	53.5
Latin America	5.7	7.0	20.1	25.6
Central America	6.3	7.5	22.3	28.8
South America	5.5	6.8	19.2	24.2
OCEANIA	**8.8**	**8.7**	**23.6**	**25.8**
NORTHERN AMERICA AND EUROPE	**1.8**	**1.7**	**7.3**	**8.9**
Europe	2.1	1.9	6.7	7.3
Eastern Europe	1.2	1.3	6.9	9.2
Northern Europe	3.8	2.7	8.2	7.1
Southern Europe	0.9	1.3	4.5	5.6
Western Europe	1.9	1.9	6.2	6.1
Northern America	0.9	1.4	8.6	12.7

SOURCE: FAO. 2025. FAOSTAT: Suite of Food Security Indicators. [Accessed on 28 July 2025]. www.fao.org/faostat/en/#data/FS. Licence: CC-BY-4.0.

TABLE A1.5 COST OF A HEALTHY DIET, 2017–2024

Regions/subregions/ countries/territories	Cost of a healthy diet				
	2017	2019	2021	2023	2024
	(PPP dollars per person per day)				
WORLD	**3.14**	**3.30**	**3.60**	**4.30**	**4.46**
Low-income countries	**2.99**	**3.07**	**3.47**	**4.12**	**4.41**
Lower-middle-income countries	**3.20**	**3.33**	**3.68**	**4.33**	**4.48**
Upper-middle-income countries	**3.38**	**3.57**	**3.88**	**4.68**	**4.83**
High-income countries	**2.99**	**3.16**	**3.40**	**4.08**	**4.22**
AFRICA	**3.10**	**3.21**	**3.52**	**4.18**	**4.41**
Northern Africa	**3.36**	**3.46**	**3.65**	**4.51**	**4.76**
Algeria	4.10	4.18	4.47	5.41	5.53
Egypt	3.81	3.98	4.01	5.96	6.38[b]
Libya	n.a.	n.a.	n.a.	n.a.	n.a.
Morocco	2.63	2.47	2.76	3.45	3.54
Sudan	2.59	2.87	3.03	2.94[b]	3.32[b]
Tunisia	3.66	3.79	3.97	4.77	5.02
Sub-Saharan Africa	**3.07**	**3.18**	**3.51**	**4.15**	**4.37**
Eastern Africa*	**3.11**	**3.23**	**3.51**	**4.18**	**4.48**
Burundi	3.40	3.10	3.54	4.50	4.55
Comoros	4.61	4.54	4.48	4.93[a]	5.14[a]
Djibouti	2.97	3.10	3.40	4.06	4.20[b]
Eritrea	n.a.	n.a.	n.a.	n.a.	n.a.
Ethiopia	2.94	3.27	3.88	4.41	4.78[b]
Kenya	2.56	2.83	3.42	4.10	4.26
Madagascar	3.08	3.21	3.34	3.87	3.96[b]
Malawi	2.38	2.77	3.43	4.29	4.64
Mauritius	3.38	3.46	3.77	4.42	4.72
Mozambique	2.74	2.77	3.23	3.81	4.14[b]
Rwanda	3.05	2.98	3.31	4.59	4.52
Seychelles	3.53	3.53	3.79	4.22	4.31
Somalia	3.61	3.98	4.08	4.65[a]	4.47[a]
South Sudan	3.13	3.55[a]	3.90	5.33[a]	8.39[a]
Uganda	3.12	2.93	2.95	3.68	3.65
United Republic of Tanzania	2.14	2.45	2.79	3.32	3.37
Zambia	2.73	2.88	3.28	3.81	3.99[b]
Zimbabwe	3.54	n.r.	n.r.	n.r.	n.r.
Middle Africa	**3.12**	**3.25**	**3.64**	**4.24**	**4.39**
Angola	3.18	3.43	4.11	4.72	5.00
Cameroon	2.60	2.90	3.41	4.20	4.38[b]
Central African Republic	2.95	3.22	3.63	4.08	4.21[b]
Chad	2.82	2.80	3.04	3.77	3.94
Congo	3.04	3.24	3.74	4.33	4.43[b]
Democratic Republic of the Congo	4.27	3.44	3.11	3.55[a]	3.46[a]

TABLE A1.5 (Continued)

Regions/subregions/ countries/territories	Cost of a healthy diet				
	2017	2019	2021	2023	2024
	(PPP dollars per person per day)				
Equatorial Guinea	3.70	3.81	4.07	4.62[b]	4.79[b]
Gabon	3.24	3.44	3.81	4.45	4.64
Sao Tome and Principe	2.31	2.98	3.80	4.43	4.64[b]
Southern Africa	**3.24**	**3.28**	**3.64**	**4.27**	**4.44**
Botswana	3.01	3.04	3.41	4.01	4.21
Eswatini	3.36	3.33	3.62	4.09[a]	4.21[a]
Lesotho	3.59	3.74	4.31	4.96	5.24
Namibia	3.26	3.33	3.75	4.50	4.67
South Africa	3.00	2.94	3.14	3.76	3.89
Western Africa	**2.95**	**3.06**	**3.39**	**4.01**	**4.21**
Benin	2.85	2.89	3.07	3.30	3.39[b]
Burkina Faso	2.77	2.72	2.97	3.55	3.73
Cabo Verde	3.16	2.86	2.92	3.69	3.81[b]
Côte d'Ivoire	2.66	2.66	2.91	3.45	3.58
Gambia	2.69	2.98	3.45	4.13	4.43[b]
Ghana	3.54	3.48	3.50	4.29	4.49
Guinea	2.59	3.05	3.72	4.65	5.10
Guinea-Bissau	3.01	3.14	3.45	3.98[b]	4.09[b]
Liberia	3.24	3.51	3.67	4.17[b]	4.52[b]
Mali	2.97	2.97	3.16	3.72	3.86
Mauritania	3.86	4.02	4.43	5.28	5.40[b]
Niger	3.25	3.34	4.02	4.68	4.98
Nigeria	2.78	3.16	3.76	4.39	4.72[b]
Senegal	2.65	2.79	3.04	3.63	3.73[b]
Sierra Leone	2.64	2.76	3.08	3.74	3.84
Togo	2.54	2.65	3.12	3.58	3.76[b]
ASIA	**3.21**	**3.36**	**3.72**	**4.31**	**4.43**
Central Asia	**3.11**	**3.10**	**3.38**	**3.81**	**3.78**
Kazakhstan	2.12	2.28	2.59	3.02	3.06
Kyrgyzstan	3.23	2.94	3.36	3.77	3.76[b]
Tajikistan	2.99	3.17	3.53	3.68[a]	3.62[a]
Turkmenistan	n.a.	n.a.	n.a.	n.a.	n.a.
Uzbekistan	4.11	4.00	4.06	4.78	4.67
Eastern Asia	**4.08**	**4.36**	**4.89**	**5.74**	**5.95**
China, mainland	2.80	3.00	3.13	3.53	3.60
Taiwan Province of China	4.00	n.a.	4.95	n.a.	n.a.
China, Hong Kong SAR	3.33	3.78	4.20	4.77	4.81
China, Macao SAR	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.

TABLE A1.5 (Continued)

Regions/subregions/ countries/territories	Cost of a healthy diet				
	2017	2019	2021	2023	2024
	(PPP dollars per person per day)				
Japan	5.48	5.57	5.98	7.29	7.62
Mongolia	4.11	4.56	5.55	6.74	7.02
Republic of Korea	4.73	4.90	5.55	6.39	6.68
South-eastern Asia	**3.53**	**3.72**	**3.97**	**4.52**	**4.63**
Brunei Darussalam	4.11	4.36	4.85	5.67	5.89
Cambodia	3.55	3.68	3.95	4.47	4.60[b]
Indonesia	3.61	3.68	4.00	4.63	4.75[b]
Lao People's Democratic Republic	3.74	3.91	4.33	5.07	5.19
Malaysia	3.10	3.30	3.52	4.15	4.27
Myanmar	3.56	3.93	3.64	3.72[a]	3.49[a]
Philippines	3.26	3.47	3.73	4.21	4.39
Singapore	2.78	2.92	3.09	3.46	3.52
Thailand	4.27	4.50	4.75	5.46	5.65[b]
Timor-Leste	n.a.	n.a.	n.a.	n.a.	n.a.
Viet Nam	3.27	3.47	3.88	4.35	4.49
Southern Asia	**3.32**	**3.43**	**3.79**	**4.41**	**4.57**
Afghanistan	n.a.	n.a.	n.a.	n.a.	n.a.
Bangladesh	3.09	3.40	3.83	4.33	4.49
Bhutan	4.14	4.44	5.14	5.69	5.96
India	2.77	3.01	3.40	3.86	4.07
Iran (Islamic Republic of)	3.01	3.35	3.37	4.46	4.39[b]
Maldives	3.36	3.28	3.39	4.01	4.30
Nepal	3.35	3.36	3.62	4.01	4.20[b]
Pakistan	2.97	2.95	3.30	4.08	3.95
Sri Lanka	3.86	3.70	4.27	4.89	5.16
Western Asia	**2.66**	**2.85**	**3.16**	**3.81**	**3.92**
Armenia	3.22	3.44	3.80	4.33	4.35
Azerbaijan	2.90	3.10	3.44	4.13	4.20
Bahrain	3.04	3.30	3.25	4.12	4.33
Cyprus	2.89	3.04	3.10	3.65	3.82
Georgia	n.a.	n.a.	n.a.	n.a.	n.a.
Iraq	3.32	3.50	3.42	3.97	4.10[b]
Israel	2.51	2.60	2.75	3.23	3.41
Jordan	2.88	2.94	2.99	3.28	3.37[b]
Kuwait	2.13	2.19	2.46	2.93	3.09
Lebanon	1.71	1.88	3.71	6.46[b]	6.25[b]
Oman	2.29	2.49	2.45	2.87	3.03[b]
Palestine	2.52	2.76	2.72	3.16	3.33[b]
Qatar	2.32	2.45	2.35	2.58	2.66
Saudi Arabia	2.46	2.48	2.62	2.96	3.02
Syrian Arab Republic	2.50	2.61	5.01	5.61[a]	5.77[a]

TABLE A1.5 (Continued)

Regions/subregions/ countries/territories	Cost of a healthy diet				
	2017	2019	2021	2023	2024
	(PPP dollars per person per day)				
Türkiye	3.45	3.88	3.80	4.65	4.77
United Arab Emirates	2.46	2.87	2.66	3.11	3.22[b]
Yemen	n.a.	n.a.	n.a.	n.a.	n.a.
LATIN AMERICA AND THE CARIBBEAN	**3.58**	**3.78**	**4.16**	**4.97**	**5.16**
Caribbean	**3.79**	**4.04**	**4.42**	**5.24**	**5.48**
Antigua and Barbuda	3.77	4.38	4.92	5.80	5.90[b]
Aruba	3.38	3.79	4.00	4.82[a]	5.00[a]
Bahamas	4.20	4.12	4.28	5.25	5.54[b]
Barbados	n.a.	n.a.	n.a.	n.a.	n.a.
British Virgin Islands	3.50	3.64	3.94	5.05[a]	5.23[a]
Cuba	n.a.	n.a.	n.a.	n.a.	n.a.
Cayman Islands	3.50	3.61	4.09	4.61[a]	4.70[a]
Curaçao	2.95	3.35	4.00	5.01[a]	5.54[a]
Dominica	4.28	4.75	5.26	6.08	6.36[b]
Dominican Republic	3.39	3.74	4.41	5.21	5.40
Grenada	4.43	4.44	4.59	5.58	5.83[b]
Haiti	3.93	4.28	4.88	5.53	6.21[b]
Jamaica	4.88	4.83	4.90	5.83	6.02
Puerto Rico	n.a.	n.a.	n.a.	n.a.	n.a.
Saint Kitts and Nevis	3.37	3.65	3.95	4.84	5.04[b]
Saint Lucia	3.60	4.03	4.57	5.22	5.16[b]
Saint Vincent and the Grenadines	4.30	4.48	4.87	6.03	6.43
Sint Maarten (Dutch part)	4.43	4.67	4.82	5.06[a]	5.17[a]
Trinidad and Tobago	3.72	3.93	4.43	5.35	5.56
Turks and Caicos Islands	2.80	2.99	3.27	3.88	4.05
Central America	**3.35**	**3.46**	**3.71**	**4.51**	**4.69**
Belize	2.56	2.90	3.52	4.32	4.54
Costa Rica	3.54	3.67	3.70	4.52	4.62
El Salvador	n.a.	n.a.	n.a.	n.a.	n.a.
Guatemala	2.88	3.45	4.01	4.78	5.03
Honduras	3.69	3.64	3.81	4.64	4.75
Mexico	2.90	2.98	3.27	4.20	4.41
Nicaragua	n.r.	n.r.	n.r.	n.r.	n.r.
Panama	4.19	3.78	3.63	4.20	4.34
South America**	**3.41**	**3.60**	**4.03**	**4.85**	**4.98**
Argentina	3.26	n.a.	n.a.	n.a.	n.a.
Bolivia (Plurinational State of)	3.62	3.75	3.96	4.57	4.82
Brazil	3.15	3.39	3.97	4.55	4.69
Chile	3.38	3.66	3.87	5.04	5.22
Colombia	2.84	2.95	3.30	4.69	4.67
Ecuador	2.50	2.63	2.91	3.43	3.56

TABLE A1.5 (Continued)

Regions/subregions/ countries/territories	Cost of a healthy diet				
	2017	2019	2021	2023	2024
	(PPP dollars per person per day)				
Guyana	4.62	5.06	5.90	6.64	6.83
Paraguay	3.74	3.71	3.95	4.71	5.04
Peru	3.25	3.24	3.50	4.30	4.34
Suriname	4.40	4.67	5.44	6.40	6.16
Uruguay	2.78	3.08	3.65	4.29	4.41
Venezuela (Bolivarian Republic of)	n.a.	n.a.	n.a.	n.a.	n.a.
OCEANIA	**2.73**	**2.84**	**3.09**	**3.75**	**3.86**
American Samoa	n.a.	n.a.	n.a.	n.a.	n.a.
Australia	2.33	2.40	2.61	3.10	3.20
Cook Islands	n.a.	n.a.	n.a.	n.a.	n.a.
Fiji	3.20	3.41	3.81	4.58	4.82[b]
French Polynesia	n.a.	n.a.	n.a.	n.a.	n.a.
Kiribati	n.a.	n.a.	n.a.	n.a.	n.a.
Marshall Islands	n.a.	n.a.	n.a.	n.a.	n.a.
Micronesia (Federated States of)	n.a.	n.a.	n.a.	n.a.	n.a.
Nauru	n.a.	n.a.	n.a.	n.a.	n.a.
New Caledonia	n.a.	n.a.	n.a.	n.a.	n.a.
New Zealand	2.65	2.70	2.86	3.56	3.56
Niue	n.a.	n.a.	n.a.	n.a.	n.a.
Palau	n.a.	n.a.	n.a.	n.a.	n.a.
Papua New Guinea	n.a.	n.a.	n.a.	n.a.	n.a.
Samoa	n.a.	n.a.	n.a.	n.a.	n.a.
Solomon Islands	n.a.	n.a.	n.a.	n.a.	n.a.
Tokelau (Associate Member)	n.a.	n.a.	n.a.	n.a.	n.a.
Tonga	n.a.	n.a.	n.a.	n.a.	n.a.
Tuvalu	n.a.	n.a.	n.a.	n.a.	n.a.
Vanuatu	n.a.	n.a.	n.a.	n.a.	n.a.
NORTHERN AMERICA AND EUROPE	**2.77**	**2.96**	**3.14**	**3.90**	**4.02**
Northern America	**2.71**	**2.84**	**3.14**	**3.75**	**3.85**
Bermuda	2.88	3.12	3.55	4.23[a]	4.39[a]
Canada	3.08	3.19	3.52	4.27	4.39
Greenland	n.a.	n.a.	n.a.	n.a.	n.a.
United States of America	2.17	2.20	2.36	2.76	2.79
Europe	**2.77**	**2.97**	**3.14**	**3.91**	**4.03**
Eastern Europe	**2.83**	**3.06**	**3.25**	**4.05**	**4.18**
Belarus	3.13	3.19	3.30	3.72	3.83
Bulgaria	3.39	3.67	3.93	5.16	5.32
Czechia	2.81	2.97	2.90	3.65	3.58
Hungary	3.36	3.60	3.68	5.08	5.08
Poland	2.95	3.25	3.35	4.04	4.14
Republic of Moldova	2.34	2.65	3.08	3.56	3.69

TABLE A1.5 (Continued)

Regions/subregions/ countries/territories	Cost of a healthy diet				
	2017	2019	2021	2023	2024
	(PPP dollars per person per day)				
Romania	2.79	3.03	3.22	3.93	4.39
Russian Federation	2.25	2.45	2.77	3.17[a]	3.29[a]
Slovakia	2.46	2.69	3.01	4.14	4.25
Ukraine	n.a.	n.a.	n.a.	n.a.	n.a.
Northern Europe	**2.62**	**2.77**	**2.90**	**3.58**	**3.68**
Denmark	2.20	2.34	2.49	2.94	3.03
Estonia	3.14	3.35	3.34	4.21	4.32
Finland	2.53	2.72	2.87	3.52	3.57
Iceland	2.37	2.52	2.77	3.21	3.29
Ireland	2.33	2.30	2.29	2.74	2.83
Latvia	3.04	3.19	3.55	4.51	4.72
Lithuania	2.85	3.04	3.12	3.97	4.03
Norway	3.32	3.53	3.63	4.33	4.55
Sweden	2.71	2.91	3.06	3.83	3.89
United Kingdom of Great Britain and Northern Ireland	1.70	1.83	1.90	2.50	2.56
Southern Europe	**3.11**	**3.35**	**3.53**	**4.49**	**4.63**
Albania	3.04	3.32	3.49	4.58	4.77
Andorra	n.a.	n.a.	n.a.	n.a.	n.a.
Bosnia and Herzegovina	4.07	4.34	4.54	5.95	6.15
Croatia	3.31	3.44	3.71	4.52	4.70[b]
Greece	2.93	3.10	3.25	4.16	4.31
Italy	2.74	3.01	3.17	3.96	4.14
Malta	3.35	3.75	3.79	4.66	4.89[b]
Montenegro	3.21	3.49	3.63	4.74	4.78
North Macedonia	3.29	3.48	3.84	4.74	4.85
Portugal	2.64	2.85	2.99	3.82	3.93
Serbia	3.56	3.84	4.01	5.19	5.28
Slovenia	2.60	2.85	3.01	3.72	3.81
Spain	2.53	2.70	2.94	3.83	3.98
Western Europe	**2.33**	**2.52**	**2.65**	**3.24**	**3.31**
Austria	2.06	2.19	2.42	2.91	2.99
Belgium	2.00	2.16	2.26	2.77	2.81
France	2.58	2.83	2.96	3.67	3.75
Germany	2.64	2.87	3.10	3.89	4.00
Luxembourg	2.46	2.62	2.65	3.27	3.37
Netherlands (Kingdom of the)	2.21	2.39	2.54	3.13	3.17
Switzerland	2.39	2.55	2.63	3.01	3.07

NOTES: PPP = purchasing power parity. n.a. = data not available; n.r. = data not reported because of insufficient or unreliable data. FAO, in collaboration with the World Bank, estimates the cost of a healthy diet for 2021 using detailed food price data from the International Comparison Program (ICP), coordinated by the World Bank; values for other years are derived by updating the 2021 estimate using food consumer price indices (CPI) from FAOSTAT and purchasing power parity (PPP) conversion factors from the World Development Indicators (WDI) of the World Bank. FAOSTAT data also show the cost of a healthy diet in local currency units. [a] PPP was imputed using FAO methods for countries with missing data for three years or more. [b] PPP for 2023 and 2024 was estimated using the World Bank's World Development Indicators extrapolation method. * Includes Zimbabwe. ** Includes Argentina.

SOURCE: FAO. 2025. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 28 July 2025]. www.fao.org/faostat/en/#data/CAHD.
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TABLE A1.6 AFFORDABILITY OF A HEALTHY DIET, 2017–2024

Regions/subregions/ countries/territories	Proportion of the population unable to afford a healthy diet					Number of people unable to afford a healthy diet				
	2017	2019	2021	2023	2024	2017	2019	2021	2023	2024
	(%)					(millions)				
WORLD	**38.4**	**35.4**	**34.5**	**32.8**	**31.9**	**2 934.2**	**2 762.1**	**2 746.7**	**2 653.4**	**2 604.6**
Low-income countries	**72.4**	**70.3**	**71.6**	**71.3**	**72.0**	**452.0**	**464.2**	**499.8**	**525.4**	**544.7**
Lower-middle-income countries	**56.2**	**51.7**	**51.9**	**48.2**	**46.6**	**1 601.0**	**1 514.4**	**1 560.6**	**1 485.5**	**1 452.9**
Upper-middle-income countries	**29.2**	**25.5**	**22.2**	**20.6**	**19.4**	**804.0**	**713.5**	**624.6**	**581.8**	**551.2**
High-income countries	**7.7**	**6.9**	**6.0**	**6.1**	**5.8**	**107.1**	**96.5**	**83.4**	**86.0**	**82.7**
AFRICA	**65.3**	**64.1**	**64.7**	**66.2**	**66.6**	**837.3**	**864.0**	**915.1**	**979.6**	**1 008.9**
Northern Africa	**37.3**	**37.6**	**32.6**	**39.4**	**41.3**	**90.5**	**94.6**	**84.9**	**105.9**	**112.4**
Algeria	18.8	17.5	19.6	21.1	20.2	7.8	7.6	8.8	9.7	9.4
Egypt	52.7	49.1	42.0	55.2	56.8	54.6	52.8	46.6	63.3	66.2
Libya	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Morocco	13.2	11.9	12.2	14.0	13.6	4.7	4.3	4.5	5.3	5.2
Sudan	46.4	57.8	45.2	47.0	54.2	19.8	26.3	21.7	23.5	27.4
Tunisia	7.7	6.9	7.3	8.1	8.2	0.9	0.8	0.9	1.0	1.0
Sub-Saharan Africa	**71.8**	**70.2**	**72.0**	**72.1**	**72.1**	**746.7**	**769.3**	**830.2**	**873.7**	**896.5**
Eastern Africa*	**73.9**	**72.4**	**73.8**	**73.2**	**73.0**	**307.7**	**318.0**	**341.9**	**357.1**	**365.5**
Burundi	90.0	87.7	88.9	91.1	90.9	10.4	10.7	11.5	12.5	12.8
Comoros	63.9	63.9	63.7	63.5	62.9	0.5	0.5	0.5	0.5	0.5
Djibouti	56.7	54.9	55.0	55.3	53.6	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.
Ethiopia	62.2	57.3	57.9	53.4	54.2	68.2	66.4	70.8	68.7	71.6
Kenya	69.3	71.7	77.6	77.6	77.0	34.1	36.7	41.3	42.9	43.5
Madagascar	93.0	92.9	93.8	93.9	93.6	24.9	26.2	27.9	29.3	29.9
Malawi	84.0	86.5	88.3	90.4	91.5	15.1	16.5	17.7	19.1	19.8
Mauritius	14.7	13.1	17.5	15.8	15.2	0.2	0.2	0.2	0.2	0.2
Mozambique	84.4	86.0	88.9	88.9	89.3	23.8	25.7	28.2	29.9	30.9
Rwanda	79.8	74.4	74.1	78.1	75.3	9.7	9.5	9.9	10.9	10.7
Seychelles	40.0	36.5	39.4	44.3	42.7	<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.
South Sudan	89.0	90.4	91.9	94.2	97.8	9.1	9.4	10.0	10.8	11.7
Uganda	74.4	72.2	71.5	73.8	71.3	29.9	31.1	32.8	35.9	35.6

TABLE A1.6 (Continued)

Regions/subregions/ countries/territories	Proportion of the population unable to afford a healthy diet					Number of people unable to afford a healthy diet				
	2017	2019	2021	2023	2024	2017	2019	2021	2023	2024
	(%)					(millions)				
United Republic of Tanzania	75.7	74.4	74.5	74.9	73.8	42.1	44.0	46.8	49.9	50.6
Zambia	77.8	78.9	81.3	81.8	82.1	13.6	14.6	15.9	17.0	17.5
Zimbabwe	75.5	n.r.	n.r.	n.r.	n.r.	11.2	n.r.	n.r.	n.r.	n.r.
Middle Africa	**78.2**	**76.6**	**78.2**	**78.1**	**78.0**	**133.8**	**139.6**	**151.6**	**161.0**	**166.1**
Angola	60.7	64.2	69.8	70.8	71.4	18.4	20.8	24.1	26.0	27.1
Cameroon	52.6	52.6	54.5	56.8	56.8	12.7	13.4	14.7	16.1	16.5
Central African Republic	86.9	85.6	86.4	86.9	87.2	4.2	4.2	4.4	4.5	4.6
Chad	64.2	58.2	60.2	63.4	64.1	10.0	9.7	10.7	12.2	13.0
Congo	74.3	74.9	78.4	78.8	78.4	4.0	4.2	4.6	4.9	5.0
Democratic Republic of the Congo	94.8	91.6	91.5	89.6	89.1	82.5	85.1	90.7	94.8	97.3
Equatorial Guinea	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Gabon	31.7	33.0	36.1	37.2	37.1	0.7	0.7	0.9	0.9	0.9
Sao Tome and Principe	48.9	48.5	49.0	52.7	53.3	0.1	0.1	0.1	0.1	0.1
Southern Africa	**61.2**	**60.7**	**61.6**	**62.0**	**62.0**	**40.2**	**41.2**	**43.2**	**44.8**	**45.3**
Botswana	62.8	60.7	60.7	60.1	59.9	1.4	1.4	1.5	1.5	1.5
Eswatini	68.9	67.0	65.3	64.7	63.8	0.8	0.8	0.8	0.8	0.8
Lesotho	70.7	72.6	76.8	77.2	77.5	1.5	1.6	1.7	1.8	1.8
Namibia	57.7	58.4	59.6	57.5	57.3	1.4	1.5	1.7	1.7	1.7
South Africa	60.8	60.2	61.1	61.7	61.7	35.0	35.9	37.6	39.0	39.5
Western Africa	**68.4**	**66.5**	**68.9**	**69.7**	**70.0**	**265.1**	**270.5**	**293.4**	**310.8**	**319.6**
Benin	78.5	63.3	60.3	54.7	53.4	9.5	8.1	8.1	7.7	7.7
Burkina Faso	66.2	60.2	60.7	63.0	63.4	13.2	12.6	13.3	14.5	14.9
Cabo Verde	29.6	26.8	33.0	30.5	29.4	0.2	0.1	0.2	0.2	0.2
Côte d'Ivoire	56.2	47.4	50.3	49.7	48.4	15.0	13.4	14.9	15.5	15.5
Gambia	43.0	41.3	44.6	45.9	46.7	1.0	1.0	1.1	1.2	1.3
Ghana	65.9	63.5	63.5	66.3	66.5	19.8	19.9	20.7	22.4	22.9
Guinea	44.4	43.4	43.9	47.2	50.0	5.5	5.7	6.0	6.8	7.4
Guinea-Bissau	63.8	60.1	65.0	65.3	64.0	1.2	1.2	1.3	1.4	1.4
Liberia	66.5	68.9	67.4	62.2	63.4	3.2	3.5	3.5	3.4	3.6
Mali	57.0	49.6	57.7	60.6	60.9	11.3	10.4	12.9	14.4	14.9

TABLE A1.6 (Continued)

Regions/subregions/ countries/territories	Proportion of the population unable to afford a healthy diet					Number of people unable to afford a healthy diet				
	2017	2019	2021	2023	2024	2017	2019	2021	2023	2024
	(%)					(millions)				
Mauritania	51.7	52.2	56.1	56.1	55.2	2.2	2.3	2.7	2.8	2.9
Niger	86.1	83.5	87.0	86.6	86.3	18.5	19.2	21.3	22.7	23.3
Nigeria	73.2	74.8	77.5	78.3	79.3	146.6	156.7	169.3	178.4	184.5
Senegal	54.1	47.4	47.6	49.4	46.8	8.4	7.7	8.2	8.9	8.7
Sierra Leone	61.3	57.2	60.9	64.1	62.9	4.5	4.4	4.9	5.4	5.4
Togo	63.6	51.6	55.1	54.0	53.8	5.1	4.4	4.9	5.0	5.1
ASIA	**39.9**	**35.3**	**33.2**	**29.8**	**28.1**	**1 825.7**	**1 640.2**	**1 568.4**	**1 423.5**	**1 348.6**
Central Asia	**21.0**	**17.6**	**16.9**	**15.6**	**14.0**	**15.2**	**13.2**	**13.2**	**12.6**	**11.5**
Kazakhstan	9.3	6.9	5.1	5.1	4.5	1.7	1.3	1.0	1.0	0.9
Kyrgyzstan	41.0	31.2	36.7	33.8	30.4	2.5	2.0	2.5	2.4	2.2
Tajikistan	36.0	32.3	29.8	25.9	24.3	3.3	3.1	3.0	2.7	2.6
Turkmenistan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Uzbekistan	19.7	16.9	16.1	15.0	13.2	6.3	5.6	5.5	5.4	4.8
Eastern Asia	**26.5**	**20.9**	**14.6**	**13.0**	**11.6**	**438.2**	**348.4**	**243.4**	**215.7**	**192.2**
China	28.8	22.6	15.4	13.6	12.1	415.7	329.1	224.1	198.5	175.7
China, mainland	29.2	22.9	15.5	13.8	12.2	412.0	325.9	221.4	196.0	173.4
Taiwan Province of China	5.7	n.a.	n.a.	n.a.	n.a.	1.4	n.a.	n.a.	n.a.	n.a.
China, Hong Kong SAR	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.
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.
Japan	7.2	7.2	8.0	7.5	7.2	9.1	9.1	10.0	9.3	8.9
Mongolia	28.6	23.4	22.5	19.1	18.3	0.9	0.8	0.8	0.7	0.6
Republic of Korea	10.2	6.7	5.2	4.5	4.2	5.3	3.5	2.7	2.3	2.2
South-eastern Asia	**37.5**	**35.0**	**36.9**	**34.5**	**32.7**	**246.0**	**234.3**	**250.8**	**238.2**	**227.6**
Brunei Darussalam	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cambodia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Indonesia	49.3	46.9	46.8	45.7	43.5	131.9	127.8	129.5	128.6	123.4
Lao People's Democratic Republic	58.5	56.2	57.3	57.6	56.2	4.1	4.1	4.3	4.4	4.4
Malaysia	4.2	2.8	2.9	1.9	1.6	1.4	0.9	1.0	0.7	0.6
Myanmar	45.4	41.1	52.1	43.2	38.0	23.6	21.6	27.8	23.4	20.7
Philippines	46.6	44.1	49.8	45.4	44.0	50.4	48.8	56.3	52.2	51.0

TABLE A1.6 (Continued)

Regions/subregions/ countries/territories	Proportion of the population unable to afford a healthy diet					Number of people unable to afford a healthy diet				
	2017	2019	2021	2023	2024	2017	2019	2021	2023	2024
	(%)					(millions)				
Singapore	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Thailand	22.8	21.4	19.9	17.4	16.8	16.3	15.3	14.3	12.5	12.0
Timor-Leste	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Viet Nam	12.1	9.3	10.5	9.5	8.8	11.5	9.0	10.4	9.5	8.9
Southern Asia	**56.7**	**51.1**	**50.4**	**44.2**	**41.7**	**1 086.7**	**1 002.9**	**1 009.1**	**903.6**	**861.5**
Afghanistan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Bangladesh	65.7	59.2	52.6	46.5	44.4	106.6	97.7	88.3	79.8	77.1
Bhutan	29.4	18.4	22.3	5.0	4.5	0.2	0.1	0.2	<0.1	<0.1
India	59.2	52.1	51.6	42.9	40.4	804.9	723.1	729.4	617.2	586.5
Iran (Islamic Republic of)	7.7	14.6	14.9	15.8	14.0	6.6	12.7	13.2	14.3	12.8
Maldives	4.7	2.0	2.7	1.3	1.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nepal	33.2	25.6	24.4	20.4	20.1	9.3	7.3	7.2	6.1	5.9
Pakistan	58.6	58.7	59.4	63.8	60.3	130.9	135.5	142.2	157.9	151.4
Sri Lanka	36.0	31.9	37.5	43.5	42.9	7.9	7.2	8.5	10.0	9.9
Western Asia	**14.4**	**14.6**	**17.7**	**17.5**	**18.0**	**39.5**	**41.5**	**51.8**	**53.3**	**55.7**
Armenia	49.4	53.3	54.4	50.3	65.1	1.4	1.5	1.6	1.5	1.9
Azerbaijan	0.8	0.7	0.8	0.7	0.6	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.
Cyprus	4.0	2.5	2.3	1.8	1.8	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.
Iraq	22.6	21.4	27.8	29.3	30.6	8.9	8.8	12.0	13.2	14.1
Israel	19.2	19.5	18.2	16.0	15.7	1.6	1.7	1.6	1.5	1.5
Jordan	12.5	12.5	13.2	11.5	10.7	1.3	1.3	1.5	1.3	1.2
Kuwait	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Lebanon	n.a.	n.a.	2.2	5.5	4.0	n.a.	n.a.	0.1	0.3	0.2
Oman	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Palestine	4.8	5.0	6.2	4.5	5.9	0.2	0.2	0.3	0.2	0.3
Qatar	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Saudi Arabia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Syrian Arab Republic	24.7	17.4	52.5	55.6	57.1	4.7	3.5	11.4	13.1	14.1
Türkiye	11.7	14.4	9.6	7.3	6.6	9.7	12.3	8.3	6.4	5.8

TABLE A1.6 (Continued)

Regions/subregions/ countries/territories	Proportion of the population unable to afford a healthy diet					Number of people unable to afford a healthy diet				
	2017	2019	2021	2023	2024	2017	2019	2021	2023	2024
	(%)					(millions)				
United Arab Emirates	3.2	2.1	2.6	2.3	2.2	0.3	0.2	0.3	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.
LATIN AMERICA AND THE CARIBBEAN	**29.2**	**28.1**	**30.3**	**27.7**	**27.4**	**184.5**	**180.3**	**197.3**	**182.4**	**181.9**
Caribbean	**47.3**	**46.1**	**50.1**	**50.1**	**50.7**	**20.4**	**20.1**	**22.0**	**22.2**	**22.5**
Antigua and Barbuda	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.
Bahamas	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.
British Virgin Islands	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.
Cayman Islands	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.
Dominica	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Dominican Republic	27.4	22.3	26.4	24.9	23.0	2.9	2.4	2.9	2.8	2.6
Grenada	19.4	18.8	22.0	21.0	20.0	<0.1	<0.1	<0.1	<0.1	<0.1
Haiti	77.4	79.3	82.4	84.1	87.2	8.4	8.8	9.4	9.8	10.3
Jamaica	19.0	18.0	22.9	22.1	21.4	0.5	0.5	0.6	0.6	0.6
Puerto Rico	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.
Saint Lucia	8.6	8.6	10.3	8.6	8.4	<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.
Sint Maarten (Dutch part)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Trinidad and Tobago	31.5	32.8	38.6	37.9	36.8	0.5	0.5	0.6	0.6	0.6
Turks and Caicos Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Central America	**31.2**	**28.7**	**28.5**	**26.2**	**25.9**	**53.5**	**50.2**	**50.8**	**47.5**	**47.5**
Belize	65.7	62.9	65.7	62.5	62.4	0.2	0.2	0.3	0.3	0.3
Costa Rica	14.3	15.0	16.1	15.2	14.2	0.7	0.7	0.8	0.8	0.7
El Salvador	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Guatemala	51.0	49.9	48.8	47.9	47.8	8.4	8.5	8.6	8.7	8.8
Honduras	40.3	39.0	39.3	39.9	39.3	3.9	3.9	4.0	4.2	4.2
Mexico	28.3	25.0	24.7	21.6	21.4	34.9	31.4	31.5	28.0	27.9

TABLE A1.6 (Continued)

Regions/subregions/ countries/territories	Proportion of the population unable to afford a healthy diet					Number of people unable to afford a healthy diet				
	2017	2019	2021	2023	2024	2017	2019	2021	2023	2024
	(%)					(millions)				
Nicaragua	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.	n.r.
Panama	42.9	39.9	45.7	44.5	43.7	1.8	1.7	2.0	2.0	2.0
South America**	**26.5**	**26.0**	**29.1**	**26.0**	**25.7**	**110.7**	**109.9**	**124.5**	**112.7**	**111.9**
Argentina	8.5	n.r.	n.r.	n.r.	n.r.	3.8	n.r.	n.r.	n.r.	n.r.
Bolivia (Plurinational State of)	14.7	9.9	9.1	9.0	9.3	1.7	1.2	1.1	1.1	1.1
Brazil	27.1	26.0	29.8	24.1	23.7	55.5	53.9	62.4	50.8	50.2
Chile	48.1	45.7	42.6	41.5	40.2	8.9	8.8	8.3	8.2	7.9
Colombia	31.7	32.6	38.3	37.2	36.1	15.3	16.2	19.6	19.4	19.1
Ecuador	23.1	24.8	27.2	26.2	26.4	3.9	4.3	4.8	4.7	4.8
Guyana	41.3	39.1	16.9	6.2	4.9	0.3	0.3	0.1	0.1	<0.1
Paraguay	24.3	22.3	24.8	23.3	23.0	1.5	1.5	1.7	1.6	1.6
Peru	33.3	28.7	33.6	34.4	33.0	10.4	9.3	11.1	11.6	11.3
Suriname	19.5	18.5	25.7	25.7	23.7	0.1	0.1	0.2	0.2	0.2
Uruguay	30.9	33.0	37.6	35.7	34.0	1.0	1.1	1.3	1.2	1.2
Venezuela (Bolivarian Republic of)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
OCEANIA	**15.5**	**17.8**	**22.4**	**19.7**	**19.6**	**6.5**	**7.8**	**10.0**	**9.0**	**9.0**
American Samoa	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Australia	2.9	3.2	3.2	3.2	3.2	0.7	0.8	0.8	0.9	0.9
Cook Islands	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Fiji	45.4	52.0	66.6	57.1	56.6	0.4	0.5	0.6	0.5	0.5
French Polynesia	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.
Marshall Islands	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.
Nauru	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
New Caledonia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
New Zealand	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.
Palau	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.
Samoa	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/ countries/territories	Proportion of the population unable to afford a healthy diet					Number of people unable to afford a healthy diet				
	2017	2019	2021	2023	2024	2017	2019	2021	2023	2024
	(%)					(millions)				
Solomon Islands	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.
Tonga	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.
Vanuatu	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
NORTHERN AMERICA AND EUROPE	**7.2**	**6.2**	**5.0**	**5.2**	**5.0**	**80.1**	**69.9**	**56.0**	**58.9**	**56.2**
Northern America	**4.8**	**4.1**	**2.5**	**4.6**	**4.3**	**17.8**	**15.4**	**9.7**	**17.5**	**16.7**
Bermuda	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Canada	3.2	2.7	3.0	3.0	3.0	1.2	1.0	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.
United States of America	5.0	4.2	2.5	4.7	4.5	16.6	14.4	8.5	16.3	15.5
Europe	**8.3**	**7.3**	**6.2**	**5.6**	**5.3**	**62.3**	**54.5**	**46.3**	**41.4**	**39.4**
Eastern Europe	**11.0**	**9.9**	**8.1**	**7.3**	**6.8**	**32.5**	**29.0**	**23.5**	**20.8**	**19.4**
Belarus	3.3	2.4	1.0	0.7	0.7	0.3	0.2	0.1	0.1	0.1
Bulgaria	10.3	7.8	6.1	5.7	5.5	0.7	0.5	0.4	0.4	0.4
Czechia	4.8	3.6	3.8	4.2	4.0	0.5	0.4	0.4	0.5	0.4
Hungary	32.0	26.5	13.5	11.4	9.4	3.1	2.6	1.3	1.1	0.9
Poland	17.2	10.3	8.0	6.4	5.6	6.6	3.9	3.0	2.5	2.1
Republic of Moldova	10.9	9.4	10.2	10.7	9.2	0.3	0.3	0.3	0.3	0.3
Romania	52.4	63.2	59.0	53.8	52.4	10.3	12.3	11.4	10.3	10.0
Russian Federation	3.1	2.4	1.4	1.4	1.3	4.5	3.5	2.0	2.0	1.8
Slovakia	19.7	15.3	18.7	16.9	15.7	1.1	0.8	1.0	0.9	0.9
Ukraine	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Northern Europe	**3.9**	**3.6**	**3.0**	**2.9**	**2.6**	**4.1**	**3.8**	**3.2**	**3.1**	**2.9**
Denmark	0.9	1.0	0.8	0.9	0.8	0.1	0.1	<0.1	0.1	<0.1
Estonia	10.9	8.2	5.2	5.4	5.2	0.1	0.1	0.1	0.1	0.1
Finland	1.0	0.7	0.8	0.9	0.8	0.1	<0.1	<0.1	0.1	<0.1
Iceland	0.6	0.6	0.6	0.4	0.4	<0.1	<0.1	<0.1	<0.1	<0.1
Ireland	2.3	1.6	1.1	1.0	1.0	0.1	0.1	0.1	0.1	0.1
Latvia	27.1	17.9	14.2	12.1	11.6	0.5	0.3	0.3	0.2	0.2
Lithuania	21.3	13.1	8.9	8.9	8.2	0.6	0.4	0.2	0.3	0.2

TABLE A1.6 (Continued)

Regions/subregions/ countries/territories	Proportion of the population unable to afford a healthy diet					Number of people unable to afford a healthy diet				
	2017	2019	2021	2023	2024	2017	2019	2021	2023	2024
	(%)					(millions)				
Norway	1.9	1.5	1.6	1.4	1.4	0.1	0.1	0.1	0.1	0.1
Sweden	3.5	3.5	3.6	3.9	3.9	0.4	0.4	0.4	0.4	0.4
United Kingdom of Great Britain and Northern Ireland	3.2	3.5	3.0	2.7	2.5	2.2	2.3	2.0	1.9	1.7
Southern Europe	**13.9**	**11.0**	**9.8**	**8.7**	**8.5**	**21.3**	**16.9**	**14.9**	**13.2**	**12.8**
Albania	24.3	14.6	12.6	11.4	10.7	0.7	0.4	0.4	0.3	0.3
Andorra	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Bosnia and Herzegovina	6.1	5.4	5.3	5.6	5.3	0.2	0.2	0.2	0.2	0.2
Croatia	27.9	19.0	15.4	12.6	11.3	1.1	0.8	0.6	0.5	0.4
Greece	30.8	24.5	21.1	17.6	17.0	3.3	2.6	2.2	1.8	1.7
Italy	10.3	8.5	7.6	6.7	6.7	6.2	5.1	4.6	4.0	4.0
Malta	4.5	3.3	2.6	2.3	2.3	<0.1	<0.1	<0.1	<0.1	<0.1
Montenegro	17.4	15.4	12.6	10.2	9.2	0.1	0.1	0.1	0.1	0.1
North Macedonia	23.9	19.6	18.1	17.6	16.5	0.5	0.4	0.3	0.3	0.3
Portugal	18.9	12.9	13.0	11.3	10.9	1.9	1.3	1.4	1.2	1.1
Serbia	24.2	12.9	8.8	8.1	7.4	1.7	0.9	0.6	0.6	0.5
Slovenia	3.7	2.2	1.6	1.4	1.2	0.1	<0.1	<0.1	<0.1	<0.1
Spain	10.9	10.2	9.3	8.6	8.4	5.1	4.8	4.4	4.1	4.0
Western Europe	**2.3**	**2.4**	**2.3**	**2.2**	**2.2**	**4.4**	**4.8**	**4.6**	**4.3**	**4.3**
Austria	2.5	2.5	2.9	2.9	2.9	0.2	0.2	0.3	0.3	0.3
Belgium	2.1	1.3	0.7	0.7	0.7	0.2	0.2	0.1	0.1	0.1
France	1.9	3.3	3.1	3.0	3.0	1.2	2.2	2.1	2.0	2.0
Germany	2.7	2.2	2.2	2.0	2.0	2.3	1.9	1.9	1.7	1.7
Luxembourg	2.6	1.2	1.9	2.3	2.3	<0.1	<0.1	<0.1	<0.1	<0.1
Netherlands (Kingdom of the)	1.8	1.6	1.1	1.1	1.0	0.3	0.3	0.2	0.2	0.2
Switzerland	1.3	1.4	1.2	1.2	1.2	0.1	0.1	0.1	0.1	0.1

NOTES: n.a. = data not available; n.r. = data not reported. FAO, in collaboration with the World Bank, estimates the prevalence of unaffordability (PUA) by contrasting country-specific income distributions from the World Bank's Poverty and Inequality (PIP) platform against a threshold obtained by summing the cost of a healthy diet with the cost of non-basic food needs. The number of people unable to afford a healthy diet (NUA) is then obtained by multiplying the PUA by the total population of each country, based on data from the World Population Prospects. The global NUA estimate is obtained by multiplying the PUA 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. * Includes Zimbabwe. ** Includes Argentina.

SOURCE: FAO. 2025. FAOSTAT: Cost and Affordability of a Healthy Diet (CoAHD). [Accessed on 28 July 2025]. 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 of the report, including for values in past years.

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).[1, 2] 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.[bb] 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 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

bb 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).[3]

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".[3]

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*.[4]

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.[5]

Since the last edition of this report, the FBS domain in FAOSTAT has been updated with new values of the series up to 2022 for all countries. In addition, at the time of closing this report, the FBS series were updated to 2023 for the following 72 countries, selected as a priority due to the high contribution they make to the total number of undernourished people in the world: Afghanistan, Albania, Angola, Argentina, Bangladesh, Benin, Bolivia (Plurinational State of), Brazil, Burkina Faso, Cameroon, Central African Republic, Chad, Colombia, Congo, Cuba, Côte d'Ivoire, Democratic People's Republic of Korea, Democratic Republic of the Congo, Ecuador, Egypt, Ethiopia, Ghana, Guatemala, Guinea, Guinea-Bissau, Haiti, Honduras, India, Indonesia, Iran (Islamic Republic of), Iraq, Japan, Jordan, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Malaysia, Mali, Morocco, Mozambique, Myanmar, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Papua New Guinea, Peru, Philippines, Rwanda, Saudi Arabia, Senegal, Sierra Leone, Somalia, South Africa, South Sudan, Sri Lanka, Sudan, Syrian Arab Republic, Thailand, Togo, Tunisia, Uganda, Ukraine, United Republic of Tanzania, Viet Nam, Yemen, Zambia and Zimbabwe.

Per capita average DES in 2023 (for countries other than the ones listed above) and in 2024 (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[6] and used to calculate the 2023 and 2024 values of DEC for each country.

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*,[7] calorie 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 calorie waste is taken as a percentage of total calories for each year and country. The data are available up to the year 2022. For the years 2023 and 2024, the value of the year 2022 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, 25 new surveys from the following 14 countries have been processed to update the CV|y: Benin (2022), Burkina Faso (2022), Cambodia (2021 and 2023), Georgia (2022 and 2023), Guinea-Bissau (2022), India (2022 and 2024), Jordan (2022), Kazakhstan (2021 and 2023), Mongolia (2022 and 2023), Myanmar (2015), Peru (2023), Somalia (2022), Thailand (2016, 2017, 2018, 2019, 2020, 2021 and 2023) and Togo (2022). That makes for a total of 169 surveys from 71 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 2024, 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 four reports, the nowcast of the CV|y for 2020, 2021, 2022, 2023 and 2024 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.[8, 9] 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 2024 should not be interpreted as statistical confidence intervals. Rather, they represent different scenarios used to nowcast the values of CV|y, margin of uncertainty around waste factors from 2020 to 2024, and the margins of uncertainty around nowcasting of DES for 2023 and 2024 (see Supplementary material to Chapter 2).

Recommended readings

Cafiero, C. 2014. *Advances in hunger measurement: traditional FAO methods and recent innovations*. 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://www.fao.org/4/w0931e/w0931e16.pdf

FAO. 2003. *Summary of proceedings: Measurement and assessment of food deprivation and undernutrition*. International Scientific Symposium, 26–28 June 2002, Rome. https://www.fao.org/4/y4250e/y4250e00.pdf

FAO. 2025. Measuring hunger, food security and food consumption. In: *FAO*. [Cited 25 June 2025]. 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 Division Working Paper, 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 sophisticated statistical techniques based on the Rasch model, the information obtained in an FIES-SM survey is validated for internal consistency and converted into a quantitative measure along a scale of severity, ranging from low to high. Based on their responses to the survey items, 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, as defined by two globally set thresholds. Based on FIES data collected over three years from 2014 to 2016, FAO has established the FIES reference scale, which is used as the global standard for experience-based food insecurity measures, and to set the two reference thresholds of severity.

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 (FI_{sev}) 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 ($FI_{mod+sev}$), and severe food insecurity (FI_{sev}). 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.

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 2024, interviews were conducted in both telephone and face-to-face modality. Telephone interviews were maintained in some countries already covered with this modality in 2020 given the high risk of community transmission from conducting face-to-face data collection during the COVID-19 pandemic.

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 2024.

National government survey data were used to calculate the food insecurity prevalence estimates for at least one year for 82 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. For this reason, comparisons of assessments across different versions of this report should be avoided, and the current version should be considered as the reference.

In this edition of the report, national government survey data from the following 82 countries and territories were used: Afghanistan, Angola, Antigua and Barbuda, Armenia, Belarus, Belize, Benin, 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, Malawi, Mali, Mauritania, Mexico, Mongolia, Mozambique, Namibia, Nauru, Niger, Nigeria, Pakistan, Palau, Palestine, Papua New Guinea, Palau, Paraguay, 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, 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 2024, 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, *ai*, and that of the item, *bj*.

$$Prob(X_{i,j} = \text{Yes}) = \frac{\exp(a_i - b_j)}{1 + \exp(a_i - b_j)}$$

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:

$$FI_L = \sum p_{i,L} w_i$$

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:

$$FI_{L,r} = \frac{\sum_c FI_{L,c} \times N_c}{\sum_c N_c}$$

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. 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 could 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 25 June 2025]. 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, locally available foods that may compose a diet that meets requirements for energy and food-based dietary guidelines (FBDGs) for a reference person within an energy balance set at 2 330 kcal per day.

How it is reported

The indicator (denominated "cost of a healthy diet" [CoHD]) is an estimate of the average minimum cost that people must spend in a country to buy the least expensive, locally available foods needed to compose a healthy diet. For cross-country comparability, the cost of a healthy diet is converted from local currency units (LCU) to international dollars using purchasing power parity (PPP) exchange rates for private consumption. The CoHD indicator is thus reported as average PPP dollars per person per day.

Data source

The prices of items in each food group needed for a healthy diet are obtained using retail food price data from the International Comparison Program (ICP), coordinated by the World Bank, which estimates PPPs based on a range of internationally standardized items expressed in LCU.[10] For international comparisons, prices in LCU are converted into international dollars using PPP conversion factors for private consumption computed by the World Bank's Development Data Group and reported in the World Development Indicators (WDI) database.[11] To update the cost of a healthy diet in gap years where ICP rounds are not available, general and food consumer price index (CPI) data published by FAO are used.[12]

Methodology

Method for defining a healthy diet basket

Given that the foods selected for a healthy diet vary by local context, countries have developed national FBDGs to recommend healthy dietary habits that reflect their specific cultural context and locally available foods. However, not all countries have FBDGs, and those that do often lack quantifiable recommendations in terms of food quantities and kilocalories. To address this data limitation and create a global standard of a healthy diet that reflects the commonalities

in dietary guidelines worldwide, ten quantified FBDGs, representative of different world regions and compiled in recent years, have been selected. The Healthy Diet Basket (HDB) has been created to set this global standard. It is based on the average food group proportions across national FBDGs, using the median food group amounts recommended in the ten quantified FBDGs. The HDB is identified to meet a dietary energy intake of 2 330 kcal per day and consists of locally available items from six food groups: starchy staples; vegetables; fruits; animal source foods; legumes, nuts and seeds; and oils and fats. Specifically, it is designed to provide 1 160 kcal from starchy staples, 110 kcal from vegetables, 160 kcal from fruits, 300 kcal from animal source foods, 300 kcal from legumes, nuts and seeds, and 300 kcal from oils and fats. The cost of a healthy diet is estimated for 173 countries from 2017 to 2024.

Methods for benchmark cost calculation when ICP data are available

To calculate the least-cost healthy diet, at each time and place, each ICP food item is classified into its food group, and the cheapest items that reach HDB requirements are identified. For each country, a total of 11 least-cost food items are selected in the HDB: two for starchy staples, three for vegetables, two for fruits, two for animal source foods, one for legumes, nuts and seeds, and one for oils and fats. 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, by summing the cost of the six food groups, the cost of a healthy diet is determined in each country.

Methods for extrapolated cost calculation when ICP data are unavailable

The ICP is currently the only source of retail food price data for internationally standardized items, and these data are only made available once every three to four years, which does not allow for an annual updating of healthy diet costs. The last series of ICP data was released in 2024, and it refers to 2021 prices. For updating the cost indicator with reference to the years between the ICP publication cycles, food CPIs published by FAO are applied to the cost of a healthy diet in 2021 to estimate the cost in the years when ICP rounds are not available. This dataset tracks changes in monthly general and food CPIs at the national level with reference to a base year of 2015. The annual CPIs are computed as geometric averages of the 12 monthly CPIs within a year. The cost of a healthy diet, $c(PPP)_t$, is estimated for missing years by multiplying each country's 2021 actual cost, expressed in LCU, by the food consumer price index (FCPI) ratio, and finally dividing by PPPs:

$$c(PPP)_t = \frac{c(LCU)_{2021} \times FCPI\ ratio_t}{PPP_t}$$

where t = 2017 *to* 2024 excluding 2021, and $FCPI\ ratio_t = \left(\frac{FCPI_t}{FCPI_{2021}}\right)$.

This year, for the first time, the cost and affordability of a healthy diet indicators are reported up to the year preceding the report. This was made possible by the timely availability of 2024 data on detailed food CPIs, income distributions data used by the World Bank for nowcasting poverty and PPP conversion factors. However, regarding PPP factors, although the data are sourced from the WDI database, information is missing for 43 countries in 2024 and for 5 countries in 2023 (see **Annex 1A**, Table A1.5). Therefore, PPP values for these countries in 2023 to 2024 are estimated using the World Bank's WDI extrapolation method,[13] as follows:

$$PPP_t = PPP_{t-1} \times \frac{\left(\frac{CPI_t}{CPI_{t-1}}\right)}{\left(\frac{CPI\,US_t}{CPI\,US_{t-1}}\right)}$$

where *CPI* represents the general consumer price index (CPI), and *CPI US* is the general CPI for the base country (in this case, the United States of America).

For 15 countries with missing PPP data for three years or more, PPP imputations are applied using an Autoregressive Integrated Moving Average with External Explanatory Variable (ARIMAX) model (see **Annex 1A,** Table A1.5). In line with the World Bank's WDI methodology for PPP extrapolations, the ratio between a country's general CPI and the CPI for the United States of America is included in the model specification as a key predictor of PPP values. Furthermore, per capita GDP and per capita household consumption expenditure are also

added as external covariates, and the Holt-Winters smoothing methodology is applied to both series to fill the gaps, if needed. The ARIMAX approach allows to estimate, for each country, several model specifications that include an autoregressive component, an integration component, a moving average, and a combination of the three. The best specification is selected when at least the estimated coefficient of the CPI ratio is statistically significant, followed by the statistical significance of the ARIMAX parameters. For countries and territories showing abnormal PPP series over time, the CPI ratio is found to be the only statistically significant coefficient to affect the variability of the PPP values. On the contrary, for countries and territories with a less volatile PPP series, the historical PPP trend also plays a role in predicting PPP values, as well as the coefficient estimates of per capita GDP and/or per capita expenditure. The ARIMAX computes the predicted values on the best specification selected for each country/territory.

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 depend on food CPIs and do not reflect item-specific changes in food prices, nor any differential changes in the price of different food groups.[bc] FAO, in collaboration with the World Bank, is exploring how to expand reporting of item-level prices, or food group-level prices, to allow more frequent and robust monitoring of the cost of a healthy diet.

Regional and global aggregates of the cost of a healthy diet are computed using an arithmetic mean across the countries falling into each group.

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 22-03. Rome, FAO. https://doi.org/10.4060/cc1169en

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 pay 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 for acquiring all basic needs 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 basic non-food goods and services, is lower than the minimum cost of a healthy diet. National estimates are obtained by contrasting the country-specific income distributions against a threshold (r) obtained by summing the cost of a healthy diet with the relevant cost of basic non-food needs (n). Along with the PUA, the number of people unable to afford a healthy diet (NUA) is also computed by multiplying the PUA by the reference population size.

The entire series (2017–2024) 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

bc 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.

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.

Methodology

To estimate the PUA in a population, a daily per capita cost threshold is computed for each country. Due to the lack of information to determine the country-specific cost of basic non-food goods and services, differences in the non-food spending are based on the four World Bank country income classification groups. Therefore, the daily per capita cost threshold combines the cost of a healthy diet in a country *i* and the basic cost of non-food needs for the income group *j* to which country *i* belongs. The resulting cost threshold r_i is determined as follows:

$$r_i = c_i + n_j$$

where c_i is the cost of a healthy diet in a country, and n_j is the cost of basic non-foods for income group *j*. The final n_j is expressed in the currency value of the poverty line reference year – that is currently 2017 PPP dollars; n_j is calculated by multiplying World Bank international poverty lines by a share of total expenditure to be reserved for non-food basic goods and services and that is specific to each income group, as follows:

$$n_{Low-income} = 2.15 \times 0.37 = 0.80$$

$$n_{Lower-middle-income} = 3.65 \times 0.44 = 1.61$$

$$n_{Upper-middle-income} = 6.85 \times 0.54 = 3.70$$

$$n_{High-income} = 24.36 \times 0.54 = 13.20$$

The shares of income to be reserved for non-food goods and services are determined with reference to those reported by households that belong to 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. These shares are derived from recent household surveys compiled by the World Bank, including real consumption information by income quintile for 71 countries from different income groups.

While the cost of basic non-foods (n_j) is already expressed in 2017 PPP terms, the cost of a healthy diet is converted from its current values (c_t) to 2017 PPP values ($c_t^{2017\ PPP}$) using the following formula:

$$c_t^{2017\ PPP} = \frac{c(LCU)_t \times CPI\ ratio_t}{PPP_{2017}}$$

where t = 2017 *to* 2024, *excluding* 2021, and $CPI\ ratio_t = \left(\frac{CPI_{2017}}{CPI_t}\right)$ is calculated using general CPI.

Finally, the cost threshold r_i, expressed in 2017 PPP, is compared with the country-specific income distributions that reflect a household's disposable income to estimate the percentage of the population whose income falls below that threshold, as in the formula below:

$$PUA = \int_{x_i < r_i} f(x)dx \text{ where } r_i = c_i + n_j$$

Data source

Income distributions are sourced by the World Bank Poverty and Inequality Platform and are available for around 150 countries up to 2024.[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.

$$NUA_a = PUA_a \times N_a$$

The global NUA estimate is obtained by multiplying the PUA 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. Population data are taken from the 2024 revision of the *World Population Prospects*.[4]

Challenges and limitations

In this edition of the report, method refinements are made to recognize that the cost of non-food needs varies across countries. However, due to the lack of country-specific information, the difference in non-food spending is incorporated across income groups, not yet across countries. Furthermore, besides the need to apply a correction to account for differences *across* countries, another important aspect is to recognize that the cost of a minimally dignified standard of living ($r = c + n$) also varies *within* each country. Especially for large, and diverse countries, the failure to account for such differences, and the use of a cost threshold r set at the national average, may result in biased estimates of unaffordability. The direction and extent of the bias will depend on the direction and the magnitude of the possible correlation that exists between income levels and the correct, location-specific threshold.

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*.[43] 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 were 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*.[4]

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 national-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/bitstream/handle/10665/379080/9789240100190-eng.pdf?sequence=1

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

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*.[43] 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 were 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)[bd] and average health system access over the previous five years.

Annual country-level modelled estimates from 2000 to 2024 for stunting were disseminated by the JME in 2025 for 162 countries and areas. 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

Global and regional 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*,[4] using model-based estimates for 205 countries and areas. This includes 162 countries and areas 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 national-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*. 2021. 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.

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UNICEF, WHO & World Bank. 2024. *The UNICEF-WHO-World Bank Joint Child Malnutrition Estimates (JME) standard methodology*. New York, USA. https://iris.who.int/bitstream/handle/10665/379080/9789240100190-eng.pdf?sequence=1

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

bd The SDI is a summary measure that identifies where countries or other geographic 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.

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
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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*.[43] 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 were 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 areas. 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

Global and regional 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*,[4] using model-based estimates for 205 countries. This includes 163 countries and areas 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 national-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.

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.

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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.[15]

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.

$$\frac{\textit{Infants 0–5 months of age who were fed only breastmilk during the previous day}}{\textit{Infants 0–5 months of age}}$$

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, 2023 estimates were developed using the most recent estimate available for each country between 2017 and 2023 (except for five countries where data are from 2024). Global and regional 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* (2012 for the baseline and 2023 for the current) as weights.[4] 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

UNICEF. 2024. Infant and young child feeding. In: *UNICEF*. [Cited 30 April 2025]. https://data.unicef.org/topic/nutrition/infant-and-young-child-feeding

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

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WHO & UNICEF. 2021. *Indicators for assessing infant and young child feeding practices: definitions and measurement methods*. Geneva, Switzerland and New York, USA. https://www.who.int/publications/i/item/9789240018389

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*.[16] 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[17] 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;
- a minimum of 200 birthweights in the dataset;
- 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 ends of <500 g or >5 000 g; and
- 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,[be] 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".[18, 19]

The model included all 2040 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 areas with either low birthweight input data or covariate data. Only estimates for countries and areas 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 areas weighted by estimated live births for that year from the 2022 revision of the *World Population Prospects*.[17]

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.

be Measured in constant 2017 international dollars.

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

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UNICEF & WHO. 2023. Low birthweight. In: *UNICEF*. [Cited 28 April 2025]. https://data.unicef.org/topic/nutrition/low-birthweight

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ADULT OBESITY

Definition

Adult obesity is defined as body mass index ≥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 (2024).[44] 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

1990 to 2022. 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.[20]

Regional and global aggregates

Global and regional prevalence estimates are calculated as population-weighted averages of the constituent countries.

Data sources

Population-based studies with measurements of height and weight such as nationally representative household surveys constitute most of the data sources for monitoring adult obesity.

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. 2024. Global Health Observatory data repository: Prevalence of obesity among adults, BMI ≥ 30, age-standardized – Estimates by country. [Accessed on 24 July 2024]. 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).[45] 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*.[21]

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).[22] Although the latest criteria from 2024 were not used due to limited individual-level data available to perform reanalysis,[23] updates are ongoing for the next round which will include the updated cut-offs.

Regional and global aggregates

Global and regional 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[24] 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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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 at the humanitarian–development–peace nexus, to provide humanitarian assistance to the population involved and to prevent or decrease the impact of food crises.[25]

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.[bf]

Agricultural commodity price
The price at which raw agricultural products – such as wheat, maize, rice or soybean – are traded on global or local markets. These prices reflect both supply and demand dynamics and are influenced by factors such as weather, input costs, trade policies, and geopolitical events.

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.[26, 27]

Basic starchy staples
Include major cereals and potatoes that are unprocessed or minimally processed (defined using NOVA 1), including rice, wheat or maize flour, fresh potatoes, millet, bulgur, and similar products that provide a high proportion of dietary energy intake for many population groups. For the purpose of the analysis in Chapter 3 of this report, products made from these same foods when they are processed or ultra-processed (as defined by NOVA 3 and 4) are excluded.

Buffer stock
Large supply of a commodity that is bought and stored when available in abundance, and sold when in short supply, in order to control its price and quantity in the economy. The report makes reference to food grain reserves maintained by governments to stabilize prices and ensure food security during periods of scarcity or high prices. This involves buying up excess supplies during times of abundance and releasing them when prices rise or supplies are low.

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.[28]

Core inflation
A measure of inflation that excludes volatile items such as food and energy, aiming to reflect the underlying trend in price changes.

Cost of a healthy diet
The amount of money needed to purchase the least expensive combination of locally available foods that satisfy the recommendations provided in food-based dietary guidelines.[bg]

Currency appreciation
An increase in the value of a country's currency relative to other currencies. When a currency appreciates, fewer units of the local currency are needed to buy a given amount of foreign currency or imported goods. When a currency appreciates, imports become cheaper.

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,

bf See **Annex 1B** for the full description of the methodology.

bg See **Annex 1B** for the full description of the methodology.

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.

Demand-side shock
A sudden and unexpected change in consumer demand for goods and services that disrupts the normal functioning of the economy and can cause significant price changes. Shock can be driven by different factors such as economic recovery or recession, sudden increases in household income or government spending, and changes in consumer behaviour (e.g. panic buying during a crisis).

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.

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 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.

Economic downturn
A period of decline in economic activity or negative growth as measured by the growth rate in real gross domestic product (GDP). It is a synonym for economic recession, a temporary or short-term downturn in economic growth

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.

Economic slowdown
Economic activity that is growing at a slower pace compared to the previous period. An economic slowdown occurs when real GDP growth declines from one period to another, but it is still positive.

Emergency stock
Food reserves specifically maintained by governments to ensure access to essential food supplies for vulnerable populations during emergencies such as natural disasters, conflicts, or sudden supply disruptions.

Energy commodity prices
The market prices of basic energy sources that are traded globally, such as crude oil, natural gas, coal and electricity. These commodities serve as essential inputs for transportation, manufacturing, heating and agricultural production. Energy commodity prices are highly volatile and influenced by geopolitical events, market speculation, supply–demand dynamics, and climate conditions.

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 food
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 2.15 a day (2017 PPP prices)[bh] in a country in a given year.[29]

Fiscal policy
The use of government spending and taxation to influence the economy. This involves changing the levels and types of taxes and the composition and extent of spending.[30]

bh Please note that the previous poverty line of USD 1.90 (2011 PPP prices) has been cited in one analysis of **Chapter 3**.

Food Insecurity Experience Scale
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.

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.[31]

Health taxes
Excise taxes levied on products that have a negative public health impact. These are taxes targeting specific products, such as foods of high energy density and minimal nutritional value, to increase their relative cost compared to nutritious foods, thus reducing their consumption and preventing or mitigating these negative health outcomes while generating resources for government budgets.[32]

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.

Inequality
Economic inequality refers to the unequal distribution of income and opportunities between different groups in a society.[33]

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.[34]

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.

Minimally processed foods (NOVA 1)
Unprocessed foods altered in ways that do not add or introduce any substance, but that may involve subtracting parts of the food. Minimal processes include cleaning, scrubbing, washing;

winnowing, hulling, peeling, grinding, grating, squeezing, flaking; skinning, boning, carving, portioning, scaling, filleting; pressing; drying, skimming, fat reduction; pasteurizing, sterilizing; chilling, refrigerating, freezing; sealing, bottling (as such); simple wrapping, vacuum- and gas-packing. Malting, which adds water, is a minimal process, as is fermenting, which adds living organisms, when it does not generate alcohol. The main aim of these processes is to extend the life of unprocessed foods, enabling their storage for longer use, or to make them edible, and, often, to make their preparation easier or more diverse.

Minimum dietary diversity
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, minimum dietary diversity 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, minimum dietary diversity is achieved when they consumed at least five out of ten defined food groups the previous day. Achieving minimum diet diversity indicates a greater likelihood that the diet is sufficient in essential nutrients, such as vitamins and minerals.

Minimum support price
Subsidy scheme that provides farmers with a government-set floor price at which select crops are purchased from farmers. It aims to safeguard farmers' incomes from market price fluctuations.

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.

Monetary policy
Set of actions and strategies implemented by Central Banks (or monetary authorities) to manage the overall money supply and the cost of borrowing to achieve key objectives such as price stability (low inflation), economic growth, and full employment.

Money supply
Also known as money stock, it refers to the total value of money (cash, coins, and balances in bank accounts) in circulation held by the public in an economy at a particular point in time.

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.[35]

Prevalence of undernourishment
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.

Price controls
Government-mandated minimum or maximum prices set for selected goods and services within a market. They may involve price ceilings or price floors to promote social and economic objectives. For example, they may be part of a government's efforts to protect vulnerable consumers (from increases in the cost of essential goods) or maintain the incomes of producers (as part of price-support programmes).[36]

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.

Processed foods (NOVA 3)
Foods manufactured by adding salt or sugars (or other substances of culinary use such as oils or vinegar) to whole foods, to make them more durable and sometimes also to modify their palatability. They are directly derived from foods and recognizable as versions of the original foods. They are generally produced to be consumed as part of meals or dishes, or may be used, together with highly processed products, to replace food-based freshly prepared dishes and meals. Processes include canning and bottling using oils, sugars or salt, and methods of preservation such as salting, salt pickling, smoking and curing. Processes and ingredients are designed to increase the durability of group 1 foods and make them more enjoyable by modifying or enhancing their sensory qualities. Processed foods may contain additives that prolong product duration, protect original properties, or prevent proliferation of microorganisms. When alcoholic drinks are identified as foods, those produced by fermentation of group 1 foods, such as beer, cider and wine, are classified herein as group 3 foods.

Purchasing power parity
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.[46]

Real food wage
Wage adjusted for food price inflation.
See **Real wage** definition.

Real income
The total income of an individual or household adjusted for changes in the price level, reflecting purchasing power. Real income includes wages, benefits and other sources.

Real wage
Wage adjusted for inflation, used to assess purchasing power. Real wage indicates the true value of earnings from work and how many goods and services a worker can buy with their earnings. When food prices rise faster than wages, real wages fall, reducing the ability to afford basic needs.

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.[37]

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.

Social protection
"Social Protection as public intervention consists 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 enhance equal access to essential services and opportunities on a rights base/needs base".[38]

Staple foods
Foods eaten regularly, and in such quantities as to constitute the dominant part of the diet and supply a major proportion of total dietary energy. The main kinds of staple foods are cereals (e.g. rice, maize, wheat, rye, barley, oats, millet, sorghum), roots and tubers (e.g. potatoes, cassava, yams) and legumes (e.g. beans, lentils, soybean).[27]

Strategic food reserves
Publicly owned inventories of food held in anticipation of events of acute food insecurity. In such episodes, governments or designated agencies release these reserves into markets or distribute them as emergency food assistance. Thus, they serve as a precautionary source of food during market disruptions. Strategic food reserves usually involve staple foods and, in particular, grains.[39]

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.

Subsidies
Government actions that provide an advantage to consumers or producers in order to supplement their income or lower their costs.[40]

Supply-side shock
A sudden and unexpected disruption in the production, availability or delivery of goods and services, often leading to increased prices and reduced supply. In food systems, supply-side shocks can result from events affecting any part of the supply chain. Typical causes include weather extremes (e.g. droughts, floods, hurricanes), geopolitical conflicts (e.g. the war in Ukraine), trade restrictions, rising costs of inputs (e.g. energy, fertilizers), and pest outbreaks or animal diseases (e.g. African swine fever). The second wave of global food price inflation (2022 onwards) was driven largely by supply-side shocks such as the war in Ukraine, fertilizer shortages and energy price spikes.

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.

Trade restrictions
Trade restrictions are government-imposed measures or policies that limit, control, or influence the international exchange of goods and services across national borders. They include tariffs and non-tariff barriers to international trade.

Ultra-processed foods (NOVA 4)
Products formulated mostly or entirely from substances derived from foods or other organic sources, typically containing few or no whole foods. They are durable, convenient, accessible, highly or ultra-palatable, and often habit-forming. Ultra-processed foods are typically not recognizable as versions of foods, although they may imitate the appearance, shape and sensory qualities of foods. Many ingredients are not available in retail outlets. Some ingredients are directly derived from foods, such as oils, fats, flours, starches and sugars; others are obtained by further processing of food constituents or synthesized from other organic sources. Numerically, the majority of ingredients are preservatives; stabilizers, emulsifiers, solvents, binders, bulkers; sweeteners, sensory enhancers, colourings, flavourings; processing aids; other additives. Bulk may come from added air or water. Micronutrients may "fortify" the products. Most are designed to be consumed by themselves or in combination as snacks. Processes include

hydrogenation, hydrolysis; extruding, moulding, reshaping; preprocessing by frying, baking. Processes and ingredients used to manufacture ultra-processed foods are designed to create highly profitable products (low-cost ingredients, long shelf-life, emphatic branding), convenience foods (ready-to-consume), hyper-palatable products liable to displace freshly prepared dishes and meals made from all other NOVA food groups. When alcoholic drinks are identified as foods, those produced by fermentation of group 1 foods followed by distillation of the resulting alcohol, such as whisky, gin, rum and vodka, are classified herein as group 4 foods.

Unaffordability

See **Affordability of a healthy diet** definition.

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).

Unprocessed foods (NOVA 1)

Foods of plant origin (leaves, stems, roots, tubers, fruits, nuts, seeds) or animal origin (meat, other flesh, tissue and organs, eggs, milk), consumed shortly after harvesting, gathering, slaughter or husbanding.

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.[41] 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.

NOTES

CHAPTER 2

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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 2024/25 fiscal year (https://datahelpdesk.worldbank.org/knowledgebase/articles/906519).

Low-income food-deficit countries (2023): 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, Nicaragua, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, South Sudan, Sudan, Syrian Arab Republic, Tajikistan, Togo, Uganda, United Republic of Tanzania, Uzbekistan, Yemen and Zimbabwe.

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), Nauru 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.

2025 THE STATE OF FOOD SECURITY AND NUTRITION IN THE WORLD

ADDRESSING HIGH FOOD PRICE INFLATION FOR FOOD SECURITY AND NUTRITION

While some progress and recovery have been made in recent years, reflected in the decreasing trends of the prevalence of undernourishment and the prevalence of moderate or severe food insecurity, the world is still above pre-COVID-19 pandemic levels and far from eradicating hunger and food insecurity by 2030 (SDG Target 2.1). Similarly, despite some progress in the global nutrition targets, the world is not on track to achieve SDG Target 2.2. Among other factors, persistent food price inflation has slowed this momentum.

The State of Food Security and Nutrition in the World 2025 highlights how elevated inflation in many countries has undermined purchasing power and, especially among low-income populations, access to healthy diets. Prolonged inflationary pressure hindered the post-pandemic economic recovery and significantly increased food costs. The surge in food prices was driven by a combination of global shocks, including the pandemic and the war in Ukraine, and was further intensified by policy responses such as expansive fiscal stimuli and accommodative monetary policies that amplified inflationary pressures. Although food price inflation eased back to pre-2021 levels by 2024, its effects on vulnerable populations and overall food security continue to be deeply felt.

The report documents how high food price inflation is associated with increases in food insecurity and child malnutrition. Vulnerable groups, including low-income households, women, and rural communities, can be particularly affected by food price inflation, risking setbacks in the fight against hunger and malnutrition.

In response to these challenges and to prevent future price shocks, the report examines policy measures adopted by countries, and outlines what is necessary going forwards. It stresses the importance of coherent implementation of fiscal and monetary policies to stabilize markets, promote open and resilient trade, and protect vulnerable populations. Additionally, it calls for better data systems and sustained investment in resilient agrifood systems to build long-term food security and nutrition. These coordinated actions are vital to reignite progress towards ending hunger and malnutrition by 2030.

The State of Food Security and Nutrition in the World 2025
(supplementary material)

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