

CHAPTER 1

The Road to Resilience Rethinking Responses to Food Crises

JOHAN SWINNEN AND KATRINA KOSEC

Johan Swinnen is managing director, Systems Transformation, CGIAR, and director general, International Food Policy Research Institute (IFPRI). **Katrina Kosec** is a senior research fellow, Development Strategies and Governance Unit, IFPRI.



KEY MESSAGES

Calls to rethink responses to food crises have arisen from recent overlapping shocks to food systems – including the COVID-19 pandemic, increased food prices, conflicts, and natural disasters – and from concerns that crises are becoming more frequent, complex, and protracted. Now is an opportune moment to develop more permanent responses to food crises, guided by strong evidence on the impact of policies, programming, tools, and governance approaches. Drawing on research from IFPRI and colleagues, this report provides a broad set of evidence-based recommendations for better predicting and preparing for crises, addressing crises when they occur, and building equity and the resilience of food systems.

- Early warning systems can facilitate preemptive, rapid, and context-appropriate responses, provided they are well coordinated and based on frequent monitoring of key indicators and understanding of how structural risks can aggravate shocks to food security.
- Anticipatory action frameworks, which help prepare and organize humanitarian aid before crises strike, show promise both for mitigating crises and supporting long-term development efforts.
- Agrifood value chains can support livelihoods and food security during crises when governments maintain a business environment that fosters flexibility and technical and financial innovation, and provide essential infrastructure and targeted assistance for at-risk value chain actors.
- Social protection systems are essential to reducing the impact of crises; they can build resilience prior to a crisis and facilitate recovery when they are flexible, shock-responsive, and carefully targeted. Integrating social protection with gender and climate goals can further empower women and promote sustainability.
- Improvements in collecting gender-disaggregated data, particularly amid crises, and tracking progress toward clear gender targets can promote gender equality. Likewise, including women's voices in policy-making and programming decisions can help ensure that crisis responses improve rather than erode gender equality.
- Forced migration can create both challenges and opportunities for development. Migrants can provide benefits for both the host and sending communities when policies facilitate their integration into host communities and support those who remain.
- The resilience of food systems depends critically on good governance; governance determines the ability to implement and sustain effective policies and programming to offset negative shocks, curb incentives for violent conflict, and support the functioning of markets and private sector investments.
- Recent events have highlighted the need for crisis response funding to be expanded and used more efficiently. Repurposing agricultural support funds and better leveraging private sector funds could bolster investment in long-term resilience.



In 2022, the world faced multiple crises. Globally, disruptions to food systems continued amid a protracted pandemic, major natural disasters, civil unrest and political instability, and the growing impacts of climate change, all while the war in Ukraine exacerbated a global food and fertilizer crisis. Yet some aspects of food systems have proved surprisingly resilient in the face of crisis. The International Food Policy Research Institute's (IFPRI's) *2021 Global Food Policy Report: Transforming Food Systems after COVID-19* showed, for example, that adopting new business models helped to keep food value chains functioning during the pandemic, and expanding social protection programs reduced negative impacts on food security.

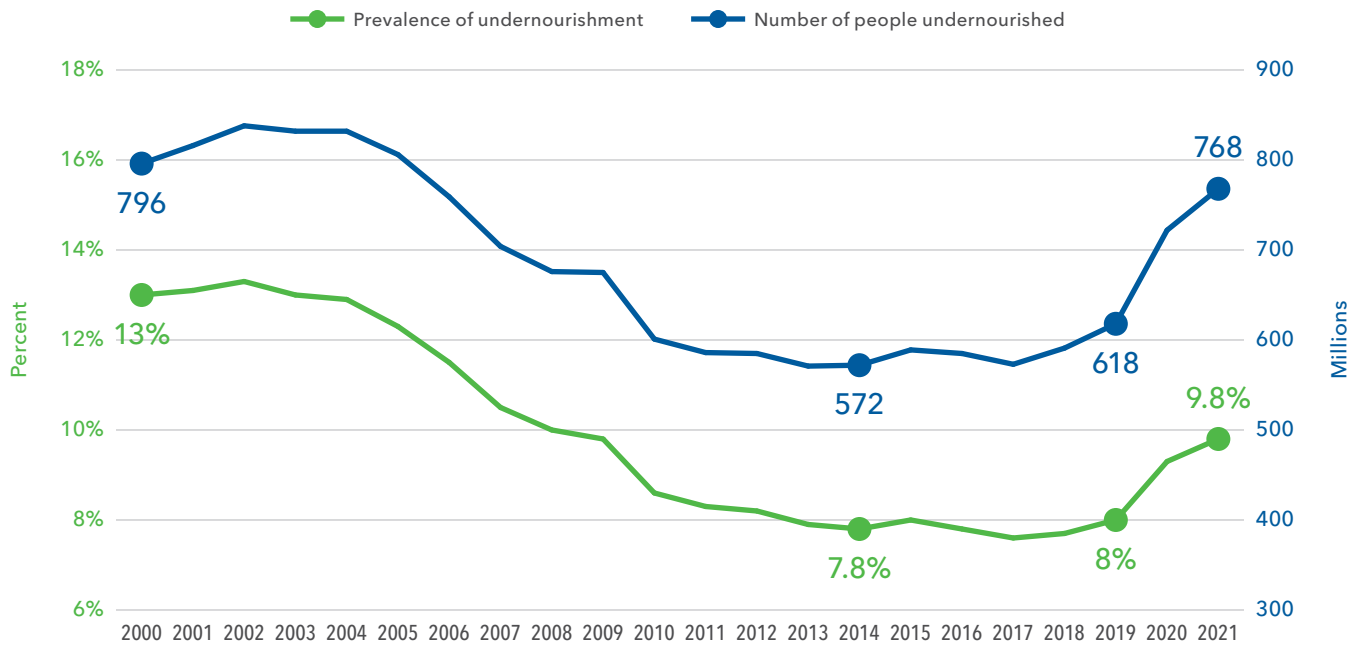
Moving forward, a range of promising approaches have already been identified to promote resilience along with other development goals. For example, IFPRI's *2022 Global Food Policy Report: Climate Change & Food Systems* outlines several policies, such as rural access to clean energy, trade reforms, and landscape governance, that address climate change while also supporting

poverty reduction and food security. While these advances hold potential, the global community still needs a better understanding of how food systems and their various actors respond to crises, and which policy interventions could successfully support households and food value chains in different countries and crisis contexts.

Over many years, IFPRI has built a wealth of evidence on policies, programming, tools, and approaches that reduce hunger and poverty and promote sustainable development and women's empowerment, including during crises. With this report, we present some of our most recent research in response to the growing call for a more holistic approach to preparing for, detecting, averting, mitigating, and responding to crises. Heeding this call will require a shift from simply responding to crises with humanitarian assistance to a concerted approach that strengthens the humanitarian-development-peace nexus, supports and empowers the most vulnerable, and builds more resilient food systems for the future.

In this first chapter, we highlight the vulnerability of food systems to frequent and damaging shocks

FIGURE 1 Prevalence and number of undernourished worldwide, 2000–2021



Source: FAO, IFAD, UNICEF, WFP, and WHO, *The State of Food Security and Nutrition in the World 2022* (Rome: FAO, 2022).

Note: Values for 2021 are projected; the figure shows the mid-point of the projected ranges. These figures reflect chronic hunger; see Chapter 2 on different measures of food insecurity.

that are affecting growing numbers of people. The chapter presents key recommendations from the report’s thematic chapters, which explore how governments and other key stakeholders can better prepare for and respond to shocks and crises. We also consider the cornerstones of a more effective response to crises: effective governance and sufficient and flexible funding. The regional section of the report reviews how crises have impacted six major world regions in recent years, and how these developments signal new challenges and opportunities. We hope this report helps to advance a new paradigm for crisis mitigation and response, one that facilitates robust recovery and improved stability for all.

VULNERABILITY OF FOOD SYSTEMS AND FOOD SECURITY

Food systems were facing threats well before the COVID-19 pandemic. In the years before the pandemic, global development progress had started stagnating and even reversing in some places – a

marked change following several decades of dramatic declines in hunger and poverty. In 2014, 572 million people were undernourished – a record low. But by 2019, this number had grown to 618 million, largely due to conflict, weather-related disasters, and economic downturns in many countries (Figure 1).¹

During the past few years, multiple shocks have worsened this reversal in progress. The pandemic triggered a global recession, widespread labor shortages, food losses, and transport bottlenecks, which affected both the quantity and quality of available food. This likely increased the number of undernourished by 196 million people, raising the total to 768 million by 2021.² In 2020, an astounding 3 billion people could not afford a healthy diet.³ This constellation of factors also set back achievement of gender equality by more than 30 years, as measured by changes in the World Economic Forum’s Global Gender Gap Index between 2020 and 2022.⁴

As the recovery from COVID-19 began, prices surged for food, fuel, and fertilizer, creating new

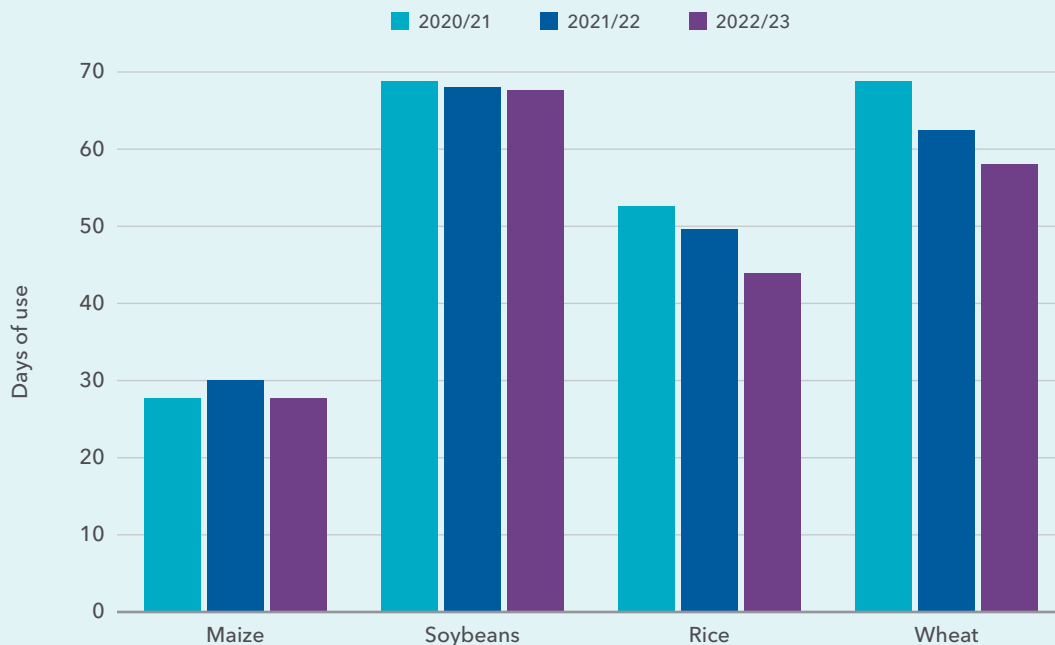
BOX 1 FOOD AND FERTILIZER CRISIS, 2021-2022

In 2021, food prices rose to their highest levels in a decade as a result of weather shocks, strong demand associated with recovery from the COVID-19-induced recession, lingering supply chain disruptions, and record low inventories for wheat, corn, and soybeans. High natural gas and coal prices also pushed fertilizer prices to record highs. In the aftermath of the February 2022 invasion of Ukraine, food and fertilizer prices spiked even further, causing serious harm not only to wheat-importing countries, many in the Middle East and North Africa, but also to many other low- and middle-income countries. Even though many international commodity prices began to fall by mid-2022, they still remain above the historical pre-COVID-19 average, and domestic inflation remains rampant in many low-income countries.¹

The impacts on food and nutrition security and poverty are likely to be dire. Simulations run by IFPRI researchers show that the global price shocks may have caused national poverty headcount rates to rise by as much as 7.7 percentage points and undernourishment by up to 4.4 percentage points.² In Egypt, for example, 48 percent of households have already reported eating less food to reduce expenses, and 75 percent have reported eating less chicken and eggs, key sources of protein.³

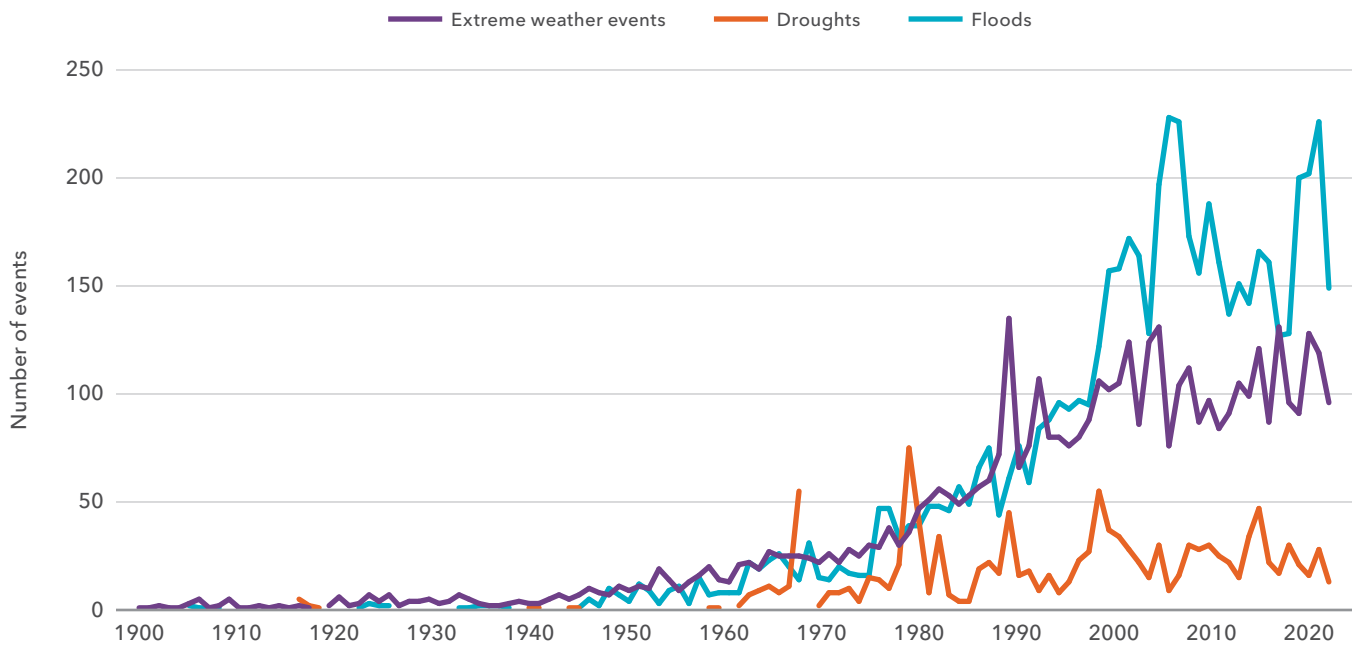
The outlook for 2023 remains critical.⁴ Global stock-to-use ratios for grains remain at or below the lows of recent years. These could reach critical levels if global staple food production falls due to greatly reduced harvests in Ukraine, projected drought conditions in the Southern Hemisphere, decreased fertilizer application resulting from relatively high fertilizer prices, new weather shocks, or other shocks caused by the war in Europe or elsewhere (Figure). Moreover, many low-income countries face significant macroeconomic problems, and the share of low-income countries in debt distress has increased by 60 percent since 2015. Efforts to respond to this crisis could be improved with robust early warning systems, donor transparency and coordination, and a shift toward crisis resilience.

Global ending stocks, excluding China



Source: Data from US Department of Agriculture, Foreign Agricultural Service, Production, Supply, and Distribution online, accessed January 2023.

FIGURE 2 Trends in extreme weather events, droughts, and floods, 1900–2022



Source: Data from EM-DAT, accessed January 2023. <https://emdat.be/>

Note: Extreme weather includes severe storms, tornadoes, sandstorms, and extreme temperatures, among other events.

problems that were exacerbated when Russia invaded Ukraine in February 2022. International food prices subsequently rose another 32 percent,⁵ and fertilizer prices tripled (Box 1).⁶ Of the countries that were already in a food crisis in 2021, more than half depended on Russia and Ukraine for wheat imports, heightening risks for their populations.⁷ International food and fertilizer prices have since fallen but remain high by historical standards, and many low- and middle-income countries (LMICs) are plagued by rising domestic inflation and depreciating currencies. As a result of these compounding crises, as many as 205 million people in 45 countries experienced crisis-level acute food insecurity or worse by 2022, a number that has nearly doubled since 2016.⁸ Most recently, in early 2023, a severe earthquake killed tens of thousands across Syria and Turkey and left many homeless, further intensifying the level of crisis for these countries.

Shocks to food systems can take many different forms and vary dramatically in their impacts. When they lead to severe disruptions that cause a surge in acute food insecurity, these shocks are deemed a food crisis (see Chapter 2 for the technical definition

of a food crisis). Whether a community, country, or region is resilient to a shock – or is at risk of a food crisis – depends on many factors. Past experiences show that crises rarely arise from isolated shocks to food systems. They are often compounded, and their negative effects intensified, by long-term sources of fragility, including poverty, climate change, gender and social inequalities, poor governance and lack of trust in public sector institutions, and lack of social cohesion.

Threats from climate change loom especially large for many countries, especially those in Africa. Climate change is rapidly intensifying, increasing pressure on food systems, rural livelihoods, and ecosystems more broadly.⁹ While some places may benefit from a longer growing season amid rising temperatures, changing weather patterns and advancing desertification have reduced the average growth in agricultural productivity by as much as 21 percent since 1961. This decline in growth, which is expected to worsen, is most harmful to tropical agriculture.¹⁰

Climate change is also triggering more frequent and extreme weather events (Figure 2), with

devastating impacts on food systems and human lives, especially in more densely populated and water-scarce regions of LMICs. In 2022, flooding in Pakistan displaced more than 33 million people, and an ongoing drought in the Horn of Africa killed 7 million livestock.¹¹ Climate change, along with poor agricultural practices, can increase the risk of plant diseases, pests, and zoonotic diseases. Projections from IFPRI's IMPACT model find that 65 million more people will be undernourished by 2030 and as many as 72 million more by 2050 with climate change, as compared to a scenario without climate change.¹²

Climate change also affects conflict and displacement in multiple ways.¹³ In 2020, about three-quarters of internally displaced people (IDPs) were forced to relocate by disasters – mostly weather-related.¹⁴ Conflict accounts for the other quarter, including in Somalia and Yemen, where famine warnings have recently been issued. In many places, conflict and climate change both contribute to crisis situations, most notably in Syria, Afghanistan, and South Sudan, where numbers of IDPs and refugees are high. Countries enduring conflict are particularly vulnerable to climate-induced shocks,¹⁵ which can act as a threat multiplier that further increases insecurity, violence, and migration as resources become scarce. Recent events highlight this complex relationship: of the more than 200 million people facing acute food insecurity in 2022, most live in protracted crisis situations – that is, situations marked by prolonged civil strife and conflict, repeated weather shocks, and economic decline, or some combination thereof.¹⁶

UNEQUAL IMPACTS

ECONOMIC VULNERABILITY

Recent crises highlight the vast differences in how food system shocks affect the rich and the poor – both countries and their vulnerable populations. In general, LMICs have fared worse throughout many recent shocks, due to limited budgets to enact stimulus and social protection measures, reduced remittances from high-income countries, and rapidly rising import bills for food and agricultural inputs. Within these countries, vulnerable

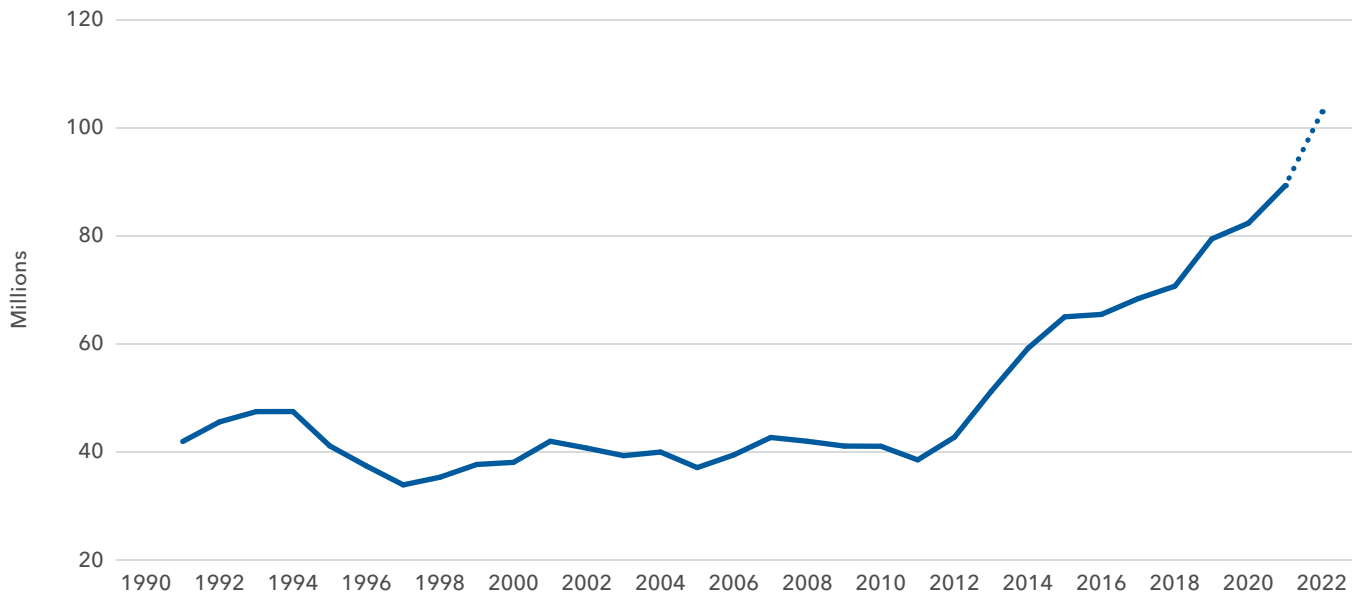
populations bear the brunt of crises. These groups – which include rural smallholders, the urban poor, the landless, IDPs, and refugees – can be made even more vulnerable by other compounding factors, such as gender, age, ethnicity, and social class.

Food system shocks are felt most severely in fragile and conflict-affected settings, where 1.5 billion people currently live. The 2021 UN Food Systems Summit (UNFSS) underscored this burden, noting, “most hungry people are in fragile and conflict-affected places...[where] it is especially difficult to transform food systems and to meet the needs of the most vulnerable and marginalized people.” On average, 30 percent of people in countries facing protracted crisis situations live in extreme poverty – a situation that can prevent them from adapting to and recovering from shocks.¹⁷

Coping strategies can affect food and nutrition security, as well as long-term well-being. Shifting to cheaper, less nutritious staple foods, for example, is a common coping response among the poor, a practice that has increased amid pandemic-related food shortages and rising prices driven by the Russia-Ukraine war. Other damaging strategies include selling off productive assets and reducing spending on education and health – particularly for girls. Earlier marriage of girls is another response that leads to lasting harm.¹⁸ Migration, either voluntary or forced, can have negative health implications and create challenges for livelihoods and access to productive resources, for both migrants and their host communities. However, migration can also help households escape crises, diversify risks, and expand income-generating activities.¹⁹

Forced migrants – including IDPs and refugees – are among the most vulnerable. By 2022, a projected 103 million people were forcibly displaced worldwide (Figure 3). Of this group, 80 percent experienced acute food insecurity and high levels of malnutrition.²⁰ Russia's invasion of Ukraine has triggered Europe's largest refugee crisis since World War II, with nearly 8 million people fleeing the war. Despite this, LMICs host 83 percent of the world's international refugees, many of whom have been displaced for years and even decades.²¹

FIGURE 3 Forcibly displaced people worldwide



Source: UNHCR, Refugee Data Finder, updated October 2022. <https://www.unhcr.org/refugee-statistics/>

Note: Includes internally displaced people as of end-2021, refugees as of mid-2022, asylum-seekers as of mid-2022, and other people in need of international protection as of mid-2022.

The number of IDPs is almost double that of international refugees, with about half living in Syria, Colombia, the Democratic Republic of the Congo, and Yemen.

GENDER AT THE CENTER OF FOOD CRISES

Women are disproportionately harmed by crises, given the structural and normative barriers that limit their resilience and ability to respond effectively. More so than for men, shocks reduce women's access to food and dietary diversity, decision-making power within their households, assets, services like healthcare, and physical safety, and also deepen their time poverty.²² These vulnerabilities stem from women's already limited access to resources, technologies, and services – which is intensified by shocks and crises – as well as to channels of power and influence that could help them benefit from crisis response policies and programming.²³

Rural women in LMICs face barriers not only to accessing land, water, and other productive resources,²⁴ but, just as importantly, to accessing and benefiting from complementary resources,

technologies, and services needed for agricultural production and participation in the food system.²⁵ For example, having less social capital can limit women's access to technology (such as modern agricultural inputs, mechanization, labor-saving technologies, and information and communications technology [ICT]), agricultural extension and advisory services, and financial services (credit, formal savings, and insurance). Crises can intensify these gender gaps – as resources become increasingly scarce, women's access is likely to decline further. Shocks can also intensify the burden of unpaid care work for women, such as providing food, collecting water, and caring for the sick, and increase gender-based violence.

Shocks and crises can also disrupt critical social protection structures and support. For example, extreme weather events or a pandemic like COVID-19 can prevent women from accessing government identification cards needed for relief programs, or make it difficult to collect payments. In times of crises, governance structures may also prove more dysfunctional or reduce funds for social protection.

Migration further complicates gender issues. Women and girls account for about 50 percent of IDPs and refugees, but in some places they make up a much larger share. In addition, children account for more than 40 percent of all displaced people.²⁶ However, when women remain at origin and men migrate – as often occurs with economic shocks – women may shift from contributing as family workers to become primary farmers.²⁷ Without access to key resources or greater decision-making power, this increase in responsibilities and workload can leave women worse off.²⁸

A WAY FORWARD: BUILDING ON WHAT WORKS

Although the rise in food insecurity and poverty is alarming, food systems showed major strengths during recent crises. Understanding these strengths can help stakeholders rethink the way forward and build on successes as they respond to new crises.

In recent decades, a range of transformational developments has increased the resilience of food systems. Trade has helped countries to secure alternative suppliers during supply shocks, though export restrictions during crises can still pose a threat.²⁹ Urbanization and rising incomes in LMICs have sparked demand for more diverse foods, including animal-source foods and fruits and vegetables. In response, value chains have expanded and diversified, potentially improving the ability to meet food and nutritional needs in the face of shocks, while creating new livelihood opportunities. Value chains also provide inputs and services to rural producers, which can increase resilience in the agriculture sector. In rural and urban areas, social safety nets have been more widely adopted, providing food security and better economic opportunities for women and men. In many places, the growing empowerment of women has strengthened their decision-making role in food systems, helping them to derive greater benefits from these systems.

In addition, efforts have been expanded to predict crises and proactively reduce their impacts through programming and effective governance and institutions. Several new approaches have been tested around the world, including

anticipatory action programs, forecast-based financing, and the scaling-up of innovative social safety nets. The upward trend in migration has, when managed well, expanded job opportunities (particularly for youth) and helped households support their livelihoods, make investments, and build resilience.³⁰ Taken together, these developments warrant policies that capitalize on their capacity to support resilience.

A NEW, MORE PERMANENT RESPONSE

As the world reflects on lessons learned from recent food system shocks, now is an opportune moment to rethink our approach to food crisis response by building on existing innovations and exploring new solutions. Traditional crisis response has focused on humanitarian and emergency food aid, but a more systematic and sustainable approach is needed to address protracted crises, which are likely rising.³¹ Research tools are already available to the international community and national governments to help them not only predict, monitor, and respond to crises, but also to govern for resilience and equity. Shifting toward longer-term and more permanent “crisis resilience” is critical.

The thematic chapters in this report explore some of the promising policies, programming, and tools for developing a strong response to increasing and intensifying shocks. These can help us better predict and prepare for crises, address crises when they occur, and build more resilient and equitable food systems.

PREPARING FOR CRISES

Early warning systems, especially in combination with anticipatory action efforts, can facilitate both immediate humanitarian responses and the integration of aid with longer-term development strategies. Existing systems must be improved to better address the growing complexity of crises, including climate-related events and conflict situations.

Early-warning, early-action (EWEA) systems alert policymakers and international humanitarian agencies to sudden and significant increases in acute food insecurity, signaling food crises, and provide guidance on where and when to

target humanitarian efforts. A timely and effective response depends on accurately identifying and tracking different food crisis situations; understanding how they affect different populations, sectors, and places; and addressing the pressures exerted on people and food systems.

Multiple systems are already monitoring chronic and acute food insecurity as well as trends in agri-food markets, such as sudden changes in the prices of international agricultural commodities and fertilizers. This information is extremely useful, but ideally it should be consolidated and improved to shape responses more precisely. This will require filling gaps in monitoring and analysis, particularly to understand and track the drivers of crises in diverse contexts, including compound crises. It will also require better integration of existing systems to ensure that policymakers and others receive clear, timely warning signals of potential crises and guidance on priority setting. Finally, new processes are needed that allow for faster classification and response to crises, especially to identify famine, where immediate response is most crucial. Chapter 2 considers the role of early warning systems in crisis response and suggests ways to assist policymakers with defining and prioritizing responses.

The vast majority of humanitarian response is activated after a crisis occurs, delivering life-saving aid but at relatively high costs. During crises, rapid response is critical to reach households before they deplete savings or engage in damaging coping strategies, and before widespread repercussions occur, such as increased fragility. Anticipatory action frameworks help prepare and organize humanitarian aid before crises strike by allocating funds, responsibilities, and supplies in advance. These frameworks, along with innovative forms of humanitarian assistance, show promise for mitigating crises at lower costs and supporting longer-term development efforts. Once triggered by an early warning system, the anticipatory action plan can be implemented smoothly and without lengthy delays.

Anticipatory action requires monitoring data that illuminate risks, exposure, and vulnerability; information services that can reach vulnerable people and advise them on how to respond;

and a clear decision support system, especially in fragile settings where government authority may be weak. Its effective delivery also depends on robust governance arrangements, which can ensure appropriate targeting and deployment. When more broadly conceived, anticipatory action can help shift the focus of crisis response toward longer-term resilience and development by incorporating nutrition-sensitive programming, making use of local procurement, and supporting local institutions and more permanent safety nets. This approach could play a crucial role in mitigating food system shocks, but currently makes up only a small percentage of humanitarian aid.

To increase adoption of these programs, more data and research are needed on the effectiveness of different humanitarian assistance approaches and anticipatory action programs for protecting food and nutrition security – particularly in fragile and conflict-affected settings. Chapter 3 discusses the potential of anticipatory action and innovative types of humanitarian assistance, how these can align with development strategies, and how further data collection and analysis can support them.

CREATING RESILIENT FOOD SYSTEMS

Social protection systems, including safety net programs that provide food or cash transfers, can both build resilience prior to a crisis and facilitate crisis recovery. They are most effective when they are flexible, shock-responsive, and well targeted. Before a crisis, safety nets help households and communities build assets, increase productive investments, and diversify income sources. During crises, social safety nets can prevent negative coping strategies that pose risks to long-term health and livelihoods. Many LMICs have dramatically expanded their social safety nets in recent years, but as the COVID-19 pandemic and recent food price spikes showed, coverage is low in the poorest countries, and many cannot access these safety nets – particularly the urban poor.

A proactive approach is needed to develop social protection systems that are highly adaptive, flexible, and inclusive, and can be quickly expanded when crises strike. Support can be scaled up more quickly and effectively by integrating these “shock-responsive” social protection

systems with EWEA systems and humanitarian aid, and creating unified and digitized targeting systems. In addition, integrating social protection with gender and climate goals can further empower women and promote environmental sustainability. Given the great need to expand safety net programs, new ways to cover costs should be explored, such as integration with green financing schemes, as well as ways to reduce implementation costs, including cash transfers and mobile payments. Chapter 5 considers the role of social protection in both resilience building and crisis response, exploring how these programs have evolved over time and how best to ensure their longevity by examining financial realities, new modalities, and a greater focus on inclusion.

The successful functioning of food systems relies on agrifood value chains, including the production, processing, transport, and marketing of food. These value chains differ greatly in their structure and local contexts, which in turn affects the impact of shocks and value chain responses. Given these differences, crisis responses are likely to be more effective when tailored to the type of shock, the particular context and value chain, and if possible, the size of the affected enterprises.

The experience of the COVID-19 pandemic highlights the importance of flexibility for all types of value chains and their actors. Almost everywhere, food-related businesses that were able to digitize and develop new marketing mechanisms amid pandemic-related restrictions proved harder than those that were not.³² Private sector actors can increase their businesses' resilience by investing in improved and innovative tools, such as climate-smart agriculture and new forms of insurance. Governments can provide support by creating a regulatory and business environment that fosters value chain innovations and ensures that women-owned enterprises can take advantage of them. Governments can also support an open trade policy to facilitate the diversification of value chains. Before and during crises, government monitoring can help to ensure the continuation of private trading and guide it where needed.

Chapter 4 explores the strengths and vulnerabilities of value chains, with a close look at the

differences in how crises affect various actors, including small and large enterprises and those owned by women and men. It shows how the capacity to innovate and policies that allow trade and innovation to continue are critical to both quick recovery and long-term resilience.

SUPPORTING AND EMPOWERING THE MOST VULNERABLE

Building resilience among the most vulnerable populations, particularly women and forced migrants, can reduce the impact of crises when they occur and speed recovery. Food system resilience must therefore include a strong focus on enhancing livelihoods and inclusion. These efforts must prioritize the needs of the most vulnerable in the short term, ensuring access to food and vital services, but also build their resilience and capacity for the longer term.

Empowering women amid crisis situations is particularly important, given that they shoulder a disproportionate share of negative impacts and often deplete their assets or compromise their diets as a coping mechanism. A first step to increase equity involves improving the quality of gender-disaggregated data collected before and during crisis situations, including on women's access to programs meant to support them. Innovative methods, such as phone surveys, can facilitate data collection in fragile and conflict-affected settings. When decision-makers have more specific information about the different women who are enduring various negative effects, policies and programming can be tailored to better support them. Effective policy responses along with legal protections will also need to account for the barriers that women face to participating in food systems, their domestic work burdens, and the likelihood of gender-based violence, all of which are likely to increase amid crises.

Efforts must also be made to increase women's political participation and amplify their voice and agency in their communities. In particular, women's voices must be included in peace processes and high-level positions where policymaking and programming decisions are made, so that crisis responses improve rather than erode gender equality. Such policy responses can empower

and create opportunities for women while also addressing the adverse impacts of crises. Finally, supporting women's access to resources and technologies, including mobile phones, can help them better weather crises.

Being explicit about gender targets and tracking progress is central to promoting gender equality amid crises. For the long term, effective gender-focused interventions including cash transfers, self-help groups and other civil society organizations, and/or technical and vocational training, among others, can help women in diverse settings build resilience to shocks and crises. Chapter 6 explores what we know about the gendered impacts of crises, reviews the most important data gaps, and provides recommendations for ensuring that crisis responses address inequities.

Conflict and climatic and economic crises often trigger forced migration (Chapter 7), creating challenges and opportunities for migrants and their sending and host communities. Although people forced to migrate often face high risks and food insecurity, migration can play an important role in improving individual livelihoods and economic development. Forced migrants and refugees have been shown to make positive contributions to their host communities' economies, and remittances to sending communities can provide substantial benefits as well.³³ Thus, all stand to benefit from policies that facilitate economic and social integration, including cash transfers, training programs, and the right to work and choose a place of residence. However, forced migration can strain host communities when resources and opportunities are limited, requiring efforts to limit migration from sending communities while strengthening the absorptive capacity of host communities.

Governments, NGOs, and development organizations can better address the root causes of forced migration through innovative data collection and research, especially on irregular migration and the needs of women. They can build the capacity of host communities by investing in infrastructure and services and designing policies that expand the benefits of migration and limit harms. Innovative approaches hold great potential to accelerate the transition from humanitarian action to longer-term

development, such as by aligning social protection and climate action objectives to mutually support peace, security, and sustainability. Attention must also be paid to those who remain behind, because they often lack the resources or social networks needed for migration, and are least capable of recovering from a crisis. Chapter 7 reviews key facts about forced migration and provides recommendations to ensure that policies increase the benefits of migration and reduce detrimental impacts on migrants, host communities, and sending communities.

FOUNDATIONS FOR BETTER CRISIS RESPONSE

Improving international and national responses to food crises cannot be done without accountable governance and effective institutions, policies, and programming, as well as reliable funding and oversight to ensure that responses address immediate needs and long-term resilience.

GOVERNANCE

Effective governance at all levels is critical to advancing early warning, anticipatory action, and policy responses that are sustainable and responsive to the compounding drivers of crisis. Institutions and public sector incentives must support government accountability (that is, responsiveness to citizens' needs and preferences), as well as the equitable, reliable, and cost-effective provision of infrastructure and services. This requires making the best use of government investments (rather than wasting or squandering them), and ensuring the effective deployment, communication, and continuity of anticipatory action, humanitarian assistance, social protection, and other programs that are critical to averting and addressing shocks and crises.³⁴ Effective governance can also minimize market disruptions and incentivize private sector investments to promote resilience. Finally, it can more broadly contribute to trust and social cohesion to help avoid internal conflicts and future crises.³⁵ The pillars of the UN's far-reaching Sendai Framework for Disaster Risk Reduction integrate good governance structures, and many measures of crisis preparedness include some version of governance, whether

viewed as the provision of planning services or effective communication between leaders and their citizens.³⁶ In many instances, good governance mechanisms have been shown to improve disaster preparedness.³⁷

Many promising approaches exist to build effective governance. For example, transparency and the free flow of information, including through ICT that connects government with citizens, can help make governments more accountable.³⁸ Improving the incentive environment for bureaucrats and frontline service providers can ensure that they are hired and promoted for delivering what matters to citizens. Education, training, and transparent policymaking can help guarantee that the voices of women and other vulnerable groups are included in crisis responses to broadly support gender equality and social inclusion. To hold governments accountable, international and local actors can use research tools to track social, economic, and environmental risks and to monitor and evaluate policy responses to crises.

FINANCING MECHANISMS FOR CRISIS PREVENTION, PREPAREDNESS, AND RESPONSE

The developments of the past few years have dramatically increased the need for better crisis response funding. In 2023, the UN Office for the Coordination of Humanitarian Affairs appealed for US\$52 billion in funding for humanitarian assistance and protection, a 461 percent increase since 2012. Funding received in 2022 amounted to \$24 billion, or only 47 percent of the need.³⁹ Governments were forced to spend record amounts on social protection in response to compound crises, even as programs faced disruptions due to these very shocks. In 2022, 170 economies announced, implemented, or enhanced more than 1,000 social protection and associated programs to mitigate the impacts of inflation, a fourfold increase from April 2022 to December 2022. About \$711 billion, equivalent to 0.7 percent of global GDP, was invested in social protection in 2022.⁴⁰

This funding must be increased to meet growing needs. Although some crisis funding increased in 2022 – such as the International Monetary Fund's (IMF's) opening of a temporary food shock window to quickly channel funds to countries impacted by

the global food crisis – far more is needed, especially for crisis preparedness, resilience building, and support for humanitarian-development-peace approaches. Smart investments to build resilient food systems, while costly, are far more cost-efficient and effective than reacting to crises after they occur.

The finance lever of the UNFSS estimates that it would cost between US\$300 billion and \$400 billion per year through 2030 to transform food systems for sustainability and resilience.⁴¹ Some of this investment can be used to expand credit market access to smallholders and small and medium enterprises in LMICs. Credit can provide these businesses with a short-term financial cushion during shocks and an opportunity for long-term investment in resilience-enhancing technology and practices. For example, producers can use credit to invest in solar power, cold storage, or drought-resistant crop varieties that will help address climate threats. At the national and international levels, financial flows should be redirected toward more crisis-resilient technology, practices, and infrastructure. Forecast-based finance schemes, currently being implemented by some agencies, could be expanded and deployed in fragile settings for beneficiaries and locations that have been identified ahead of time.

A key strategy to redirect these funds involves repurposing the more than \$600 billion in global spending that goes for agricultural support. Currently, much of this financing supports activities that are inefficient and unsustainable. Some funds could be reallocated to incentivize the adoption of more sustainable practices such as no-till farming, and invested in agricultural research and development aimed at traditional targets such as productivity gains, as well as new targets such as improved resilience.⁴²

Policymakers can also do more to shift private investment toward crisis prevention and resilience, given that private sector investment in food systems far outweighs that of governments. Both the quantity and quality of private sector funding for resilience can be improved by creating an enabling environment for private sector actors to invest, and incentivizing investments that support livelihoods and sustainability. Business opportunities

to implement Sustainable Development Goal actions related to food and agriculture could garner \$2.3 trillion annually for the private sector by 2030, while requiring an annual investment of only \$320 billion.⁴³ Conversely, enacting rules for private investors, such as requiring publicly traded companies to disclose environmental and climate-related risks, could more closely align financial incentives with the SDGs and the Paris Climate Agreement.⁴⁴ Development banks could also use their funds to de-risk and crowd-in private investment through blended finance or food systems bonds. For example, the Bridgetown Agenda, promoted at the recent climate COP27, called for \$500 billion in IMF Special Drawing Rights to be used to attract private investment in resilience for low-income countries at the frontlines of the climate crisis.⁴⁵ Ultimately, all such changes to current financial flows would prevent even greater future costs in the form of crisis response, economic disruption, and loss of life.

CONCLUSION

The first years of this decade exposed the many vulnerabilities of our food systems, which employ 2 billion people and sustain and nourish all of the world's 8 billion people.⁴⁶ Food systems are not only susceptible to increasingly complex and compounding shocks, but are also closely intertwined with other essential systems – climate and environmental services, trade and the economy, infrastructure, governance, healthcare, and social protection. Failures within these systems can cause crises in our food systems, and in turn, weaknesses in our food systems can drive environmental degradation, conflict, economic disruptions, and poverty and inequity.

Using food systems to build a more proactive response to disaster – one that is anticipatory, flexible, and inclusive – can produce multiple benefits for food and nutrition security, poverty, livelihoods, equality, and political stability. The process of building and improving crisis responses should be rooted in high-quality evidence: robust data, state-of-the-art tools, and policy analyses and scenarios developed by research organizations and networks like IFPRI and CGIAR. This evidence can help policymakers, donors, the international

development community, and the private sector to move quickly in times of need. Increasing crises in human systems and the natural world will not abate in coming years – the time to step up our efforts to develop a more permanent, sustainable response is now.

Now is an opportune moment to rethink our approach to food crisis responses by building on existing innovations and exploring new solutions.

