

2019

Synopsis

GLOBAL HUNGER INDEX

THE CHALLENGE OF HUNGER AND CLIMATE CHANGE

October 2019



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ENDING
EXTREME POVERTY
WHATEVER
IT TAKES

The 2019 Global Hunger Index report (GHI)—the 14th in an annual series—presents a multidimensional measure of global, regional, and national hunger. The latest data available show that while we have made progress in reducing hunger on a global scale since 2000, we still have a long way to go. Of the 117 countries with GHI scores, levels of hunger are still *serious* or *alarming* in 47 countries and *extremely alarming* in one country. This year’s report focuses on climate change—an increasingly relevant threat to the world’s hungry and vulnerable people that requires immediate action.

THE GLOBAL HUNGER INDEX

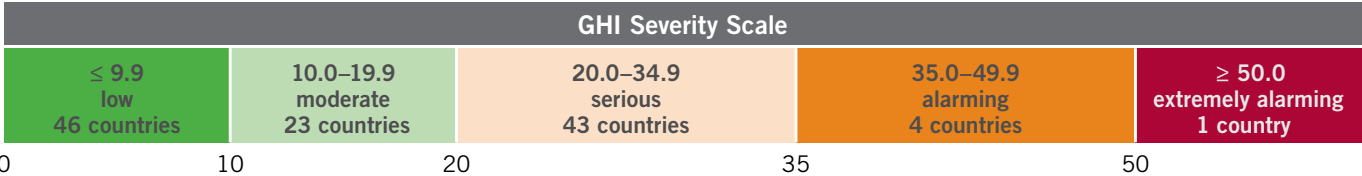
The GHI scores are based on a formula that captures three dimensions of hunger—insufficient caloric intake, child undernutrition, and child mortality—using four component indicators:

- **UNDERNOURISHMENT:** the share of the population that is undernourished, reflecting insufficient caloric intake
- **CHILD WASTING:** the share of children under the age of five who are wasted (low weight-for-height), reflecting acute undernutrition
- **CHILD STUNTING:** the share of children under the age of five who are stunted (low height-for-age), reflecting chronic undernutrition
- **CHILD MORTALITY:** the mortality rate of children under the age of five

Data on these indicators come from the Food and Agriculture Organization of the United Nations (FAO), the World Health Organization (WHO), UNICEF, the World Bank, Demographic and Health Surveys (DHS), and the United Nations Inter-agency Group for Child Mortality Estimation (UN IGME). The 2019 GHI is calculated for 117 countries for which data are available and reflects data from 2014 to 2018.

The GHI ranks countries on a 100-point scale, with 0 being the best score (no hunger) and 100 being the worst, although neither of these extremes is reached in actuality. Values less than 10.0 reflect *low* hunger; values from 10.0 to 19.9 reflect *moderate* hunger; values from 20.0 to 34.9 indicate *serious* hunger; values from 35.0 to 49.9 are *alarming*; and values of 50.0 or more are *extremely alarming* (Figure 1).

FIGURE 1 NUMBER OF COUNTRIES BY HUNGER LEVEL



Source: Authors.

RANKINGS AND TRENDS

The 2019 Global Hunger Index (GHI) indicates that the level of hunger and undernutrition worldwide, with a GHI score of 20.0, falls on the cusp of the *moderate* and *serious* categories. This value reflects a decline in the global GHI score in each period examined since 2000, when the global GHI score was 29.0 and fell into the *serious* category. This achievement coincides with a global decline in poverty and increased funding for nutrition initiatives worldwide. However, current action and spending are still insufficient to reach global goals such as the second Sustainable Development Goal—Zero Hunger—and the World Health Assembly global nutrition targets to which countries have declared their commitment. Furthermore, we need to strengthen our efforts to cope with extreme climatic events, violent conflicts, wars, and economic slowdowns and crises that continue to drive hunger in many parts of the world. Inequalities within country borders allow hunger and undernutrition to persist even in countries that appear to do well according to national averages. The number of people who are undernourished actually rose from 785 million in 2015 to 822 million in 2018.

The Regions

South Asia and Africa South of the Sahara have the highest regional 2019 GHI scores in the world, at 29.3 and 28.4, respectively. These scores indicate *serious* levels of hunger according to the GHI Severity Scale. South Asia's high GHI score is driven by its high rates of child undernutrition: rates of child stunting and child wasting there are the highest levels of any region in the report. In Africa South of the Sahara, the region's high GHI score is driven up by its undernourishment and child mortality rates, which are the highest of any region, while its child stunting rate is nearly as high as that of South Asia. Troublingly, while the prevalence of undernourishment in Africa South

of the Sahara consistently declined from 1999–2001 to 2013–2015, it has since reversed course and begun to rise.

In contrast, the 2019 GHI scores for Eastern Europe and the Commonwealth of Independent States, Latin America and the Caribbean, East and Southeast Asia, and the Near East and North Africa range from 6.6 to 13.3, indicating *low* or *moderate* hunger levels. Yet even some countries in those regions have *serious* or *alarming* levels of hunger and undernutrition.

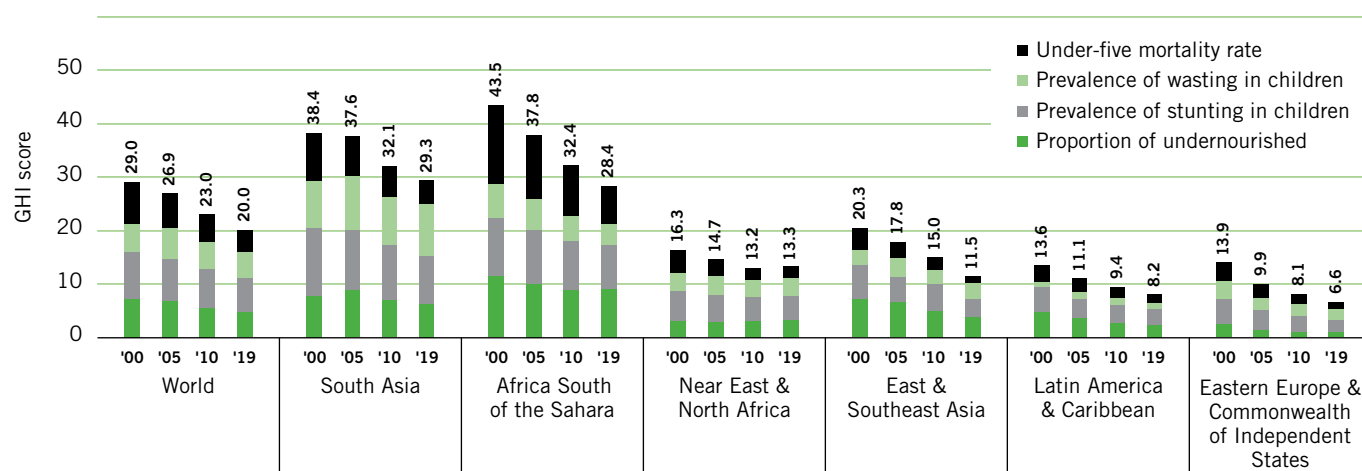
The Countries

According to the 2019 GHI, of the countries for which data are available, one country, the Central African Republic, suffers from a level that is *extremely alarming*, while four countries—Chad, Madagascar, Yemen, and Zambia—suffer from levels of hunger that are *alarming*. Out of 117 countries that were ranked, 43 countries have *serious* levels of hunger.

GHI scores for several countries could not be calculated because data were not available for all four GHI indicators. However, the hunger and undernutrition situations in nine of these countries—Burundi, Comoros, Democratic Republic of Congo, Eritrea, Libya, Papua New Guinea, Somalia, South Sudan, and Syria—are identified as cause for significant concern. In some cases, the hunger levels might be higher than in the countries for which GHI scores were calculated.

An examination of child stunting rates at subnational levels reveals substantial inequality of children's nutrition within country borders, even in countries that fare well on average. Also, the 2019 GHI report takes a closer look at the hunger and nutrition situations of two countries—Haiti and Niger—which have *serious* levels of hunger and are vulnerable to the effects of climate change.

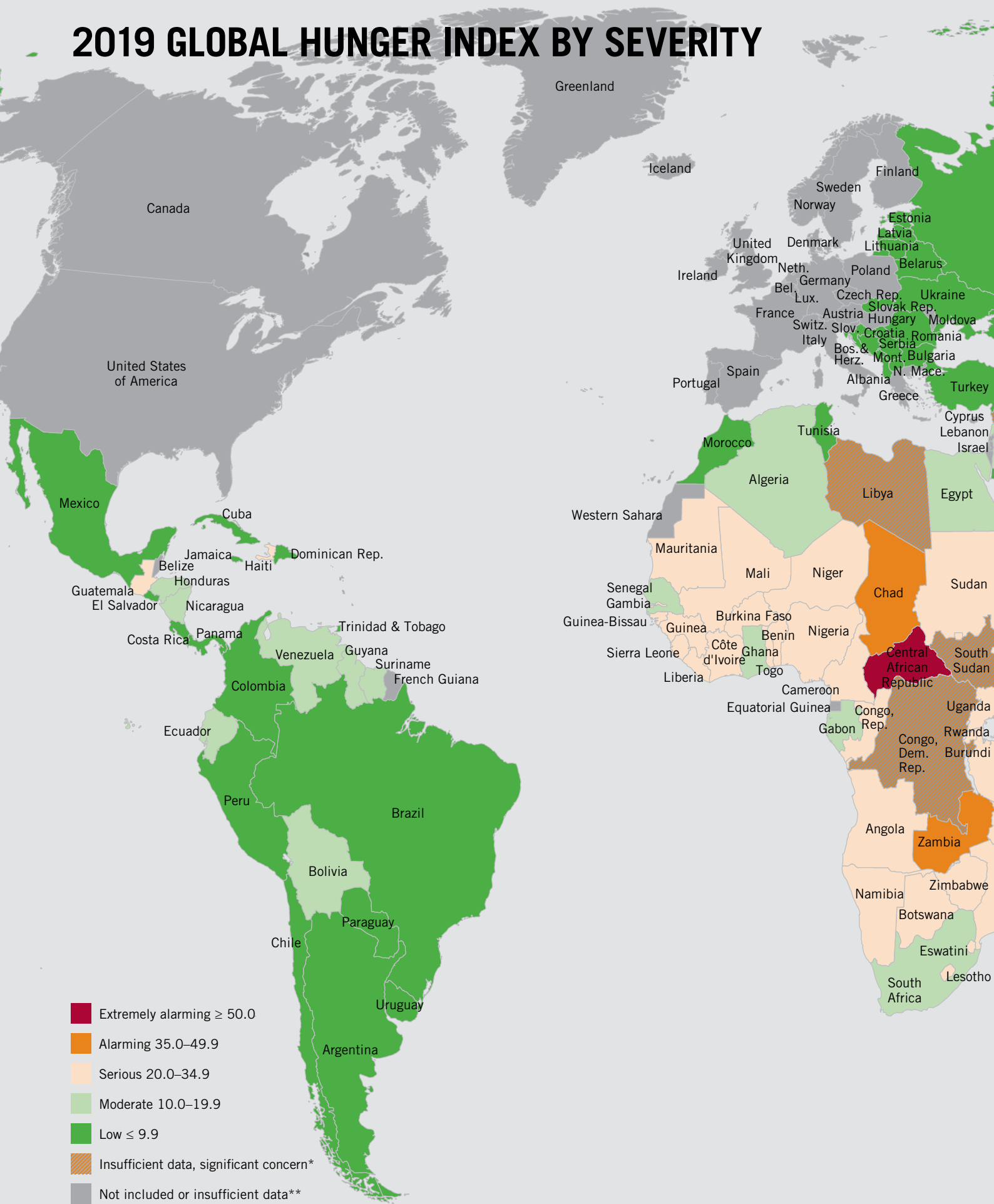
FIGURE 2 GLOBAL AND REGIONAL 2000, 2005, 2010, AND 2019 GLOBAL HUNGER INDEX SCORES, WITH CONTRIBUTION OF COMPONENTS



Source: Authors.

Note: See Appendix B in the full report for data sources. The regional and global GHI scores are calculated using regional and global aggregates for each indicator and the formula described in Appendix A. The regional and global aggregates for each indicator are calculated as population-weighted averages, using the indicator values reported in Appendix C. For countries lacking undernourishment data, provisional estimates provided by the Food and Agriculture Organization of the United Nations (FAO) were used in the calculation of aggregates only, but are not reported in Appendix C.

2019 GLOBAL HUNGER INDEX BY SEVERITY



*See Box 2.1 in the GHI 2019 full report for details.

**See Chapter 1 in the GHI 2019 full report for details.

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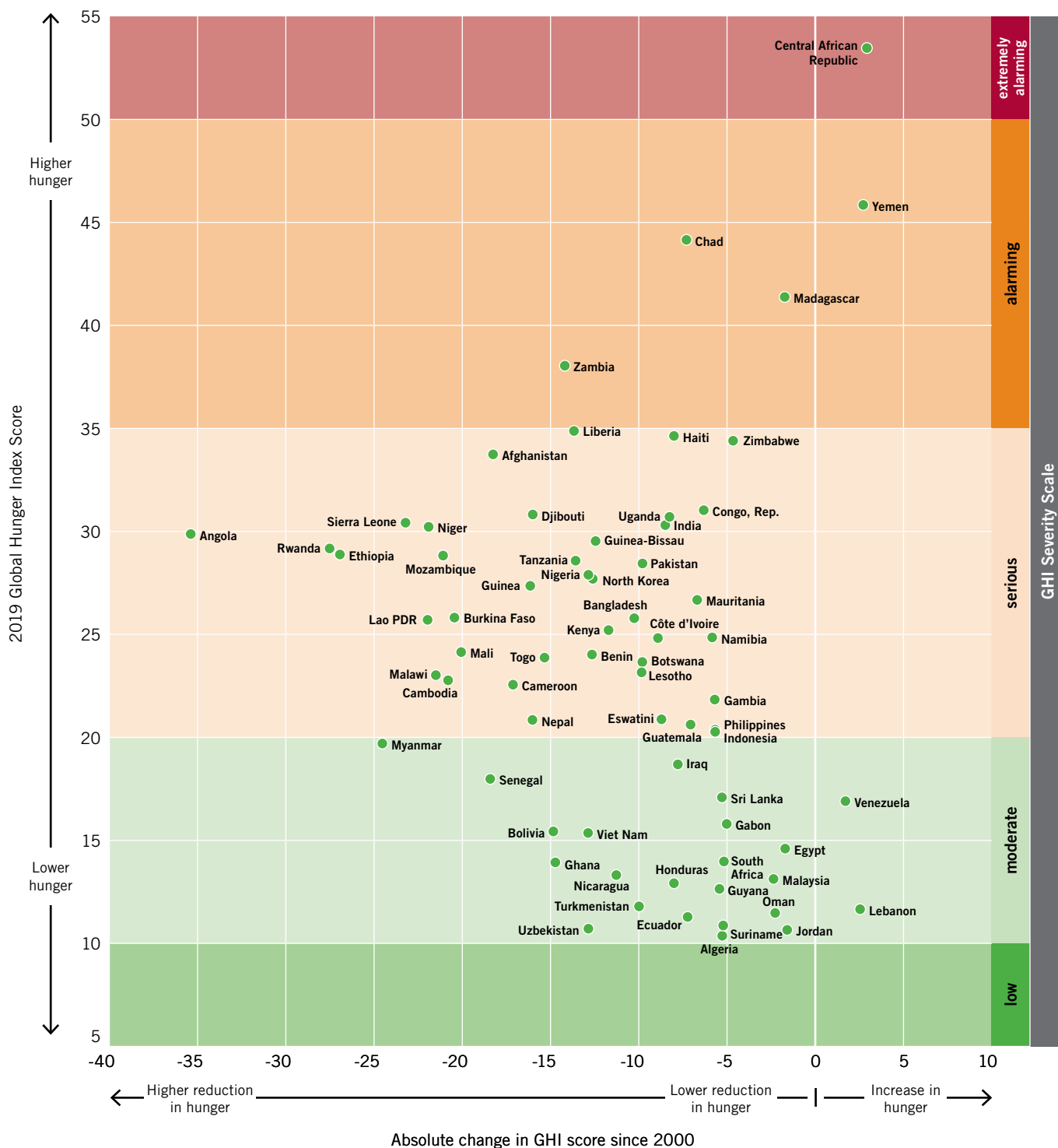
Source: Authors.

Note: For the 2019 GHI, data on the proportion of undernourished are for 2016–2018; data on child stunting and wasting are for the latest year in the period 2014–2018 for which data are available; and data on child mortality are for 2017. GHI scores were not calculated for countries for which data were not available and for certain high-income countries, countries with small populations, and non-independent territories; see Chapter 1 for details.

The boundaries and names shown on this map do not imply official endorsement or acceptance by Welthungerhilfe (WHH) or Concern Worldwide.

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FIGURE 3 2019 GHI SCORES AND PROGRESS SINCE 2000



Source: Authors.

Note: This figure illustrates the change in GHI scores since 2000 in absolute values. This figure features countries where data were available to calculate 2000 and 2019 GHI scores and where 2019 GHI scores show moderate, serious, alarming, or extremely alarming hunger levels. Some likely poor performers may not appear due to missing data.

It is reasonable to view the progress made globally in reducing hunger and undernutrition over almost 20 years and find grounds to believe that the world can and will continue to make progress in the quest to eliminate these maladies. At the same time, there are many reasons for concern. The number of undernourished people in the world is increasing. Too many countries are in the midst of violent conflicts that have precipitously increased their hunger levels.

Extreme weather events are jeopardizing food production and food security and are only expected to increase in number and severity in conjunction with global climate change. It will take humanity's ingenuity, dedication, and perseverance to ensure that we collectively achieve Zero Hunger while tackling the unprecedented challenge of climate change.

CLIMATE CHANGE AND HUNGER

Rupa Mukerji

Helvetas

Human actions have created a world in which it is becoming ever more difficult to adequately and sustainably feed and nourish the human population. A 150-year run of rapid economic growth and a consequent rise in greenhouse gas emissions have pushed average global temperatures to 1°C above preindustrial levels. With the current rate of emissions, the increase in average global temperatures is likely to reach 1.5°C between 2030 and 2052. Climate models project higher average temperatures in most land and ocean regions, hot extremes in the majority of inhabited regions, and heavy precipitation and an ever-greater probability of drought in some areas. These changes will increasingly affect human systems—including food systems—across the world on a large scale.

Understanding the Impacts of Climate Change

Climate change has direct and indirect negative impacts on food security and hunger through changes in food production and availability, access, quality, utilization, and stability of food systems. Food production is likely to fall in response to higher temperatures, water scarcity, greater CO₂ concentrations in the atmosphere, and extreme events such as heat waves, droughts, and floods. Already, yields of major food crops such as maize and wheat are declining owing to extreme events, epidemics of plant diseases, and declining water resources.

Weather anomalies and climate change, particularly extreme events, can contribute to rising food prices and thereby jeopardize people's access to food. They can also threaten people's nutrition. Recent studies show that higher CO₂ concentrations reduce the protein, zinc, and iron content of crops. Moreover, climate change may make the lean seasons before harvests longer and more severe.

A changing climate may worsen food losses in a global food system in which massive amounts of food are already lost or wasted. Given that the current food system contributes between 21 and 37 percent of total net anthropogenic emissions, these losses exacerbate climate change without contributing to improved food security or nutrition.

In addition, climate change can contribute to conflict, especially in vulnerable and food-insecure regions, creating a double vulnerability for communities, which are pushed beyond their ability to cope. The combined impact of conflict and climate change destroys livelihoods, drives displacement, widens economic and gender inequalities, and undermines long-term recovery and sustainable development.

Addressing the Impacts of Climate Change

Current actions are inadequate for the scale of the threat that climate change poses to food security. Countries' existing mitigation efforts—as defined by their own pledges, which extend only to 2030—are collectively projected to result in a warming of 3–4°C over preindustrial averages by 2100. This is a massive overshoot of both the 1.5°C and 2°C targets that have been set and will lead to substantial impacts on food and nutrition security.

More ambitious actions are required to reduce the risks of climate change (mitigation) and to cope with its impacts (adaptation) on food and nutrition security. Small or incremental changes will not deliver the scale or pace of change needed to remain within the 2°C warming threshold as defined by the Paris Agreement. Transformation—a fundamental change in the attributes of human and natural systems—is now recognized as central to climate-resilient development pathways that address the goals of Agenda 2030, particularly the Sustainable Development Goal 2 of Zero Hunger, and the Paris Agreement. These pathways must include actions for mitigation, adaptation, and sustainable development. More broadly, they demand a profound and deliberate shift toward sustainability, facilitated by changes in individual and collective values and behaviors and a fairer balance of political, cultural, and institutional power in society.

Both mitigation and adaptation measures need to be combined with safety net policies that protect the most vulnerable people from hunger, food insecurity, and other adverse impacts of these measures. Furthermore, good governance, capacity building, participatory planning, and downward accountability are essential to help people and institutions negotiate and define measures that are fair and sustainable for the benefit of the food security and nutrition of all people.

POLICY RECOMMENDATIONS

Prioritize resilience and adaptation among the most vulnerable groups and regions

- Governments and donors must invest in vulnerable communities in the Global South, such as small-scale farmers, to develop and carry out context-specific adaptation strategies that will strengthen food and nutrition security and food sovereignty. Actions can include supporting and diversifying agricultural production; improving farmers' access to extension services, resources, and markets; and creating non-agricultural jobs in rural areas.
- Governments must facilitate public participation in climate decision making. Adaptation strategies should be developed together with affected communities based on local needs. These strategies should integrate indigenous and traditional knowledge—particularly of women—and be supported with access to additional research, technologies, and agricultural and meteorological data.

Better prepare for and respond to disasters

- Donors and governments must increase investments in disaster prevention and disaster risk reduction, especially in vulnerable regions prone to extreme weather events. This includes investing in early warning and response systems, forecast-based financing mechanisms, and adapted infrastructure. Donors must make rapidly dispersible and flexible funding available to tackle food crises and respond to disasters when they occur.
- Because climate change poses risks to peace and stability, governments and donors must invest in resilience building to prevent conflicts related to the use of natural resources, such as water and land, in fragile contexts.

Transform food systems and address inequalities

- A radical transformation of production and consumption patterns, especially in high-income countries, is crucial to reduce emissions and ensure people's access to healthy and sustainable diets. Governments must promote sustainable production systems, consumption of nutritious foods, and reduction of food loss and waste.
- Measures to reduce poverty and existing inequalities are key to building resilience to the effects of climate change among the

most vulnerable people. Therefore, governments and donors must significantly increase investments in rural development, social protection, health services, and education.

- As climate change increases competition for natural resources, governments must secure the land and water rights, including customary rights, of indigenous peoples and rural communities—for example, by following frameworks such as the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (VGGT).
- Governments must enact and enforce regulatory frameworks to ensure that production of globally traded agricultural commodities does not impede the right to food or infringe on land rights in areas where those commodities are produced. Private companies must act in compliance with these regulations and guidelines such as the UN Guiding Principles on Business and Human Rights.

Take action to mitigate climate change without compromising food and nutrition security

- All countries, particularly high-income countries, must urgently meet their commitments to Agenda 2030 and the Paris Agreement. They must implement more ambitious measures, such as decarbonizing their energy sector, building green infrastructure, and boosting carbon sequestration.
- Countries must harmonize climate policy with food and trade policies to prevent mitigation and CO₂ removal measures—such as the use of scarce agricultural land for bioenergy production—from harming people's food and nutrition security.

Commit to fair financing

- Governments must increase their financial support to the most vulnerable people and regions. Financing for climate change adaptation needs to receive the same importance as mitigation.
- Financing for climate change mitigation and adaptation must especially support least-developed countries (LDCs) and must be in addition to official development assistance (ODA) to ensure that resources for sustainable development are not reduced.

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