

2014

Synopsis

GLOBAL HUNGER INDEX

THE CHALLENGE OF HIDDEN HUNGER

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The 2014 Global Hunger Index (GHI) report—the ninth in an annual series—presents a multidimensional measure of national, regional, and global hunger. It shows that the world has made progress in reducing hunger since 1990, but still has far to go, with levels of hunger remaining “alarming” or “extremely alarming” in 16 countries.

This year’s report focuses on a critical aspect of hunger that is often overlooked: hidden hunger. Also known as micronutrient deficiency, hidden hunger affects more than an estimated 2 billion people globally. The repercussions of these vitamin and mineral deficiencies are both serious and long-lasting. Where hidden hunger has taken root, it not only prevents people from surviving and thriving as productive members of society, it also holds countries back in a cycle of poor nutrition, poor health, lost productivity, persistent poverty, and reduced economic growth.

THE GLOBAL HUNGER INDEX

The GHI aggregates three equally weighted indicators:

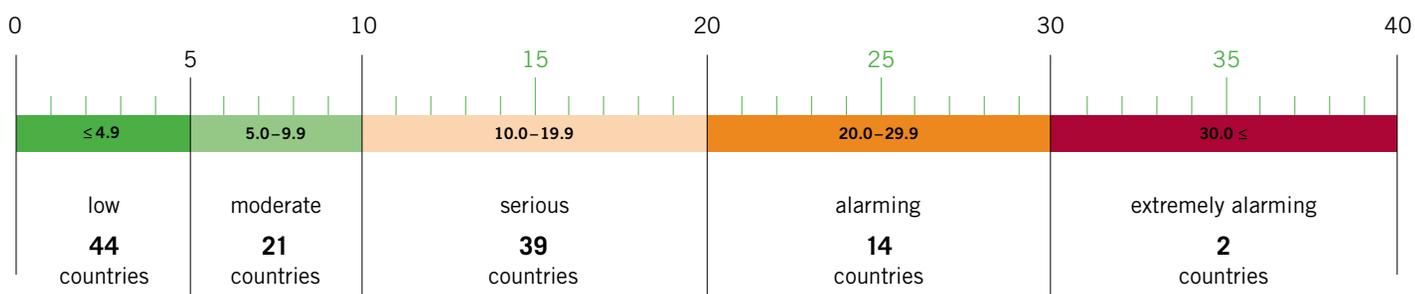
- the mortality rate of children under age five;
- the proportion of children under age five who are underweight; and
- the proportion of people who are undernourished.

Data on the indicators come from the Food and Agriculture Organization of the United Nations (FAO), the World Health Organization (WHO), the United Nations Children’s Fund (UNICEF), the World Bank, Demographic and Health Surveys, the

United Nations Inter-agency Group for Child Mortality Estimation, and IFPRI estimates. The 2014 GHI is calculated for 120 countries for which data are available and reflects data from 2009 to 2013—the most recent data available (Figure 1).

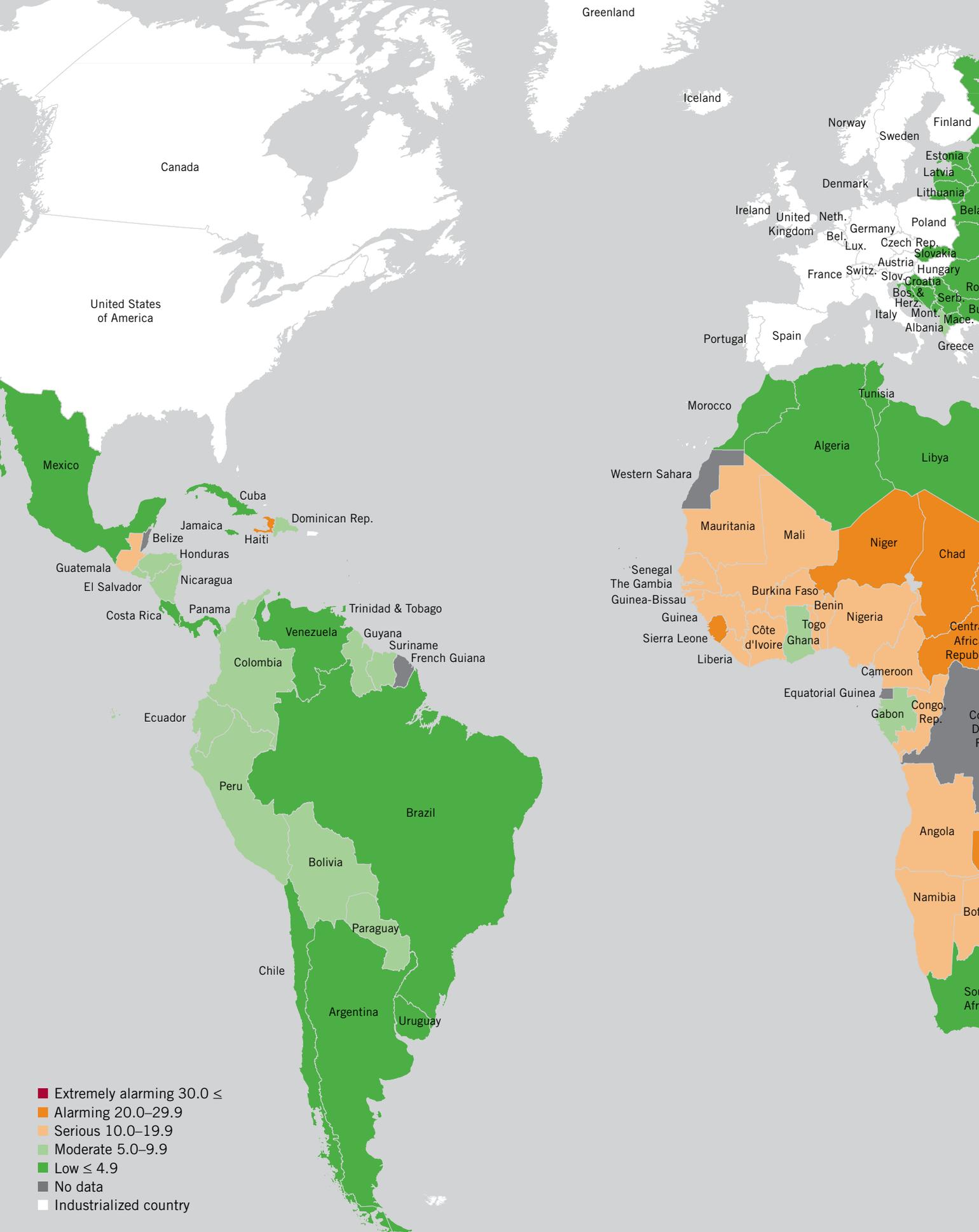
The GHI ranks countries on a 100-point scale, with 0 being the best score (no hunger) and 100 being the worst, although neither of these extremes is reached in practice. Values less than 5.0 reflect low hunger, values from 5.0 to 9.9 reflect “moderate” hunger, values from 10.0 to 19.9 indicate a “serious” level of hunger, values from 20.0 to 29.9 are “alarming,” and values of 30.0 or greater are “extremely alarming.”

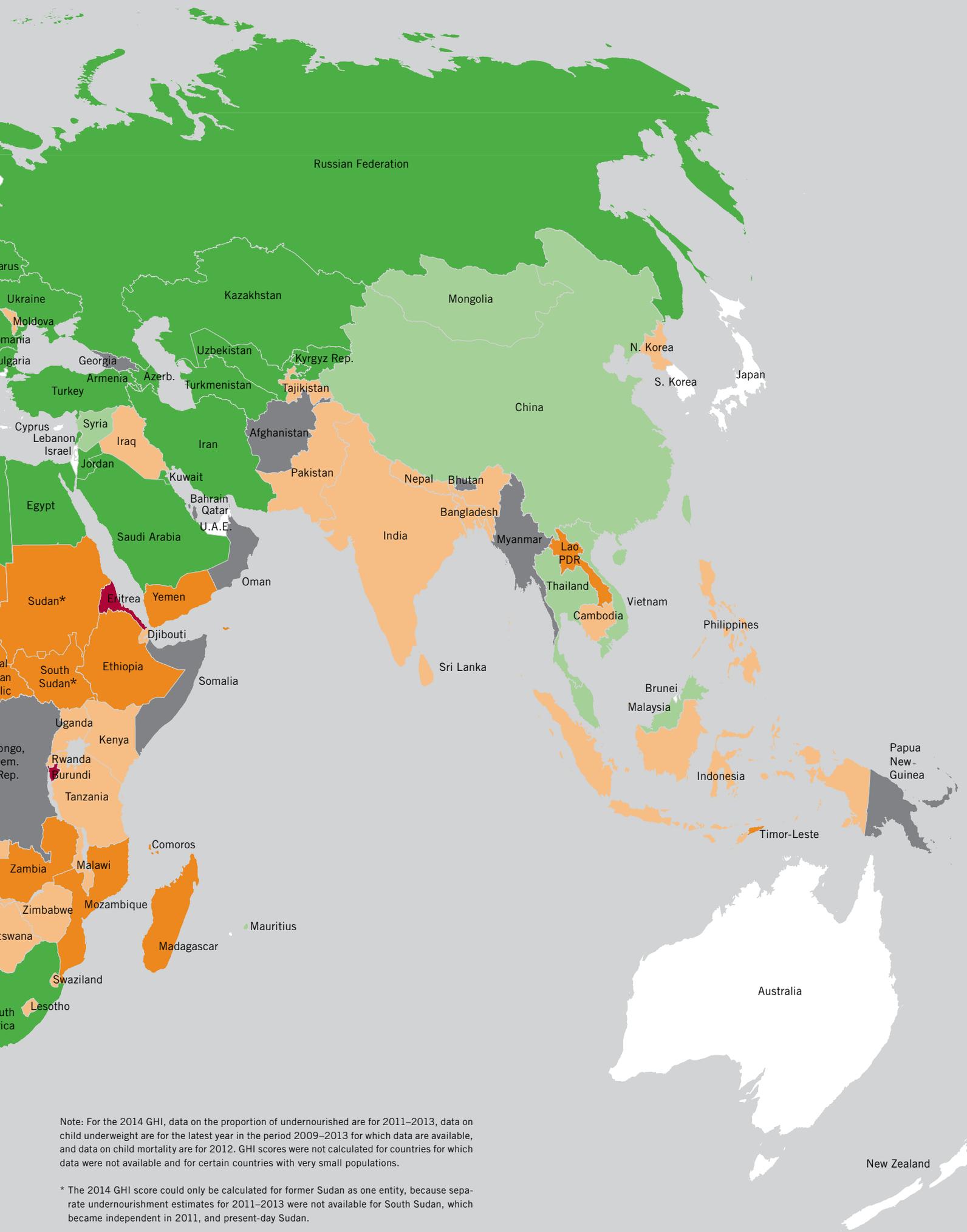
FIGURE 1 NUMBER OF COUNTRIES BY HUNGER LEVEL



Note: Data for some likely “hunger hot spots” are not available.

2014 GLOBAL HUNGER INDEX BY SEVERITY





RANKING AND TRENDS

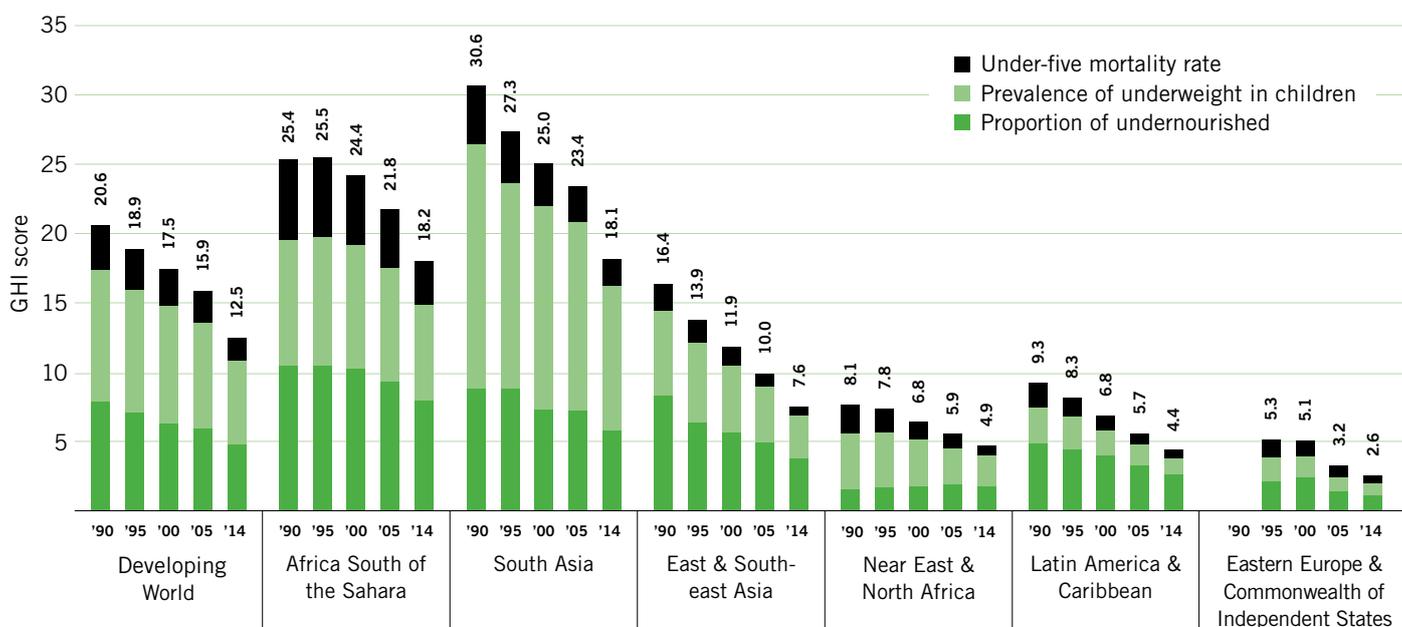
The number of hungry people in the world remains unacceptably high. About 805 million people are chronically undernourished. That said, the GHI finds a declining hunger trend (Figure 2). The 2014 GHI for the developing world fell by 39 percent from the 1990 GHI, from a score of 20.6 to 12.5. This progress was due mainly to a decline in the share of children younger than five who are underweight and the proportion of undernourished people in the population.

Global averages mask differences among regions and countries, however. South Asia and Africa south of the Sahara have the highest 2014 GHI scores, at 18.1 and 18.2, respectively. But those scores reflect different rates of progress. Compared with the 1990 score, the 2014 GHI score is 28 percent lower in Africa south of the Sahara and 41 percent lower in South Asia. Progress was even more remarkable in East and Southeast Asia, where the GHI score fell by 54 percent, and Latin America and the Caribbean, where the GHI score fell by 53 percent. In Eastern Europe and the Commonwealth of Inde-

pendent States, the 2014 GHI score was 51 percent lower than the 1995 score.

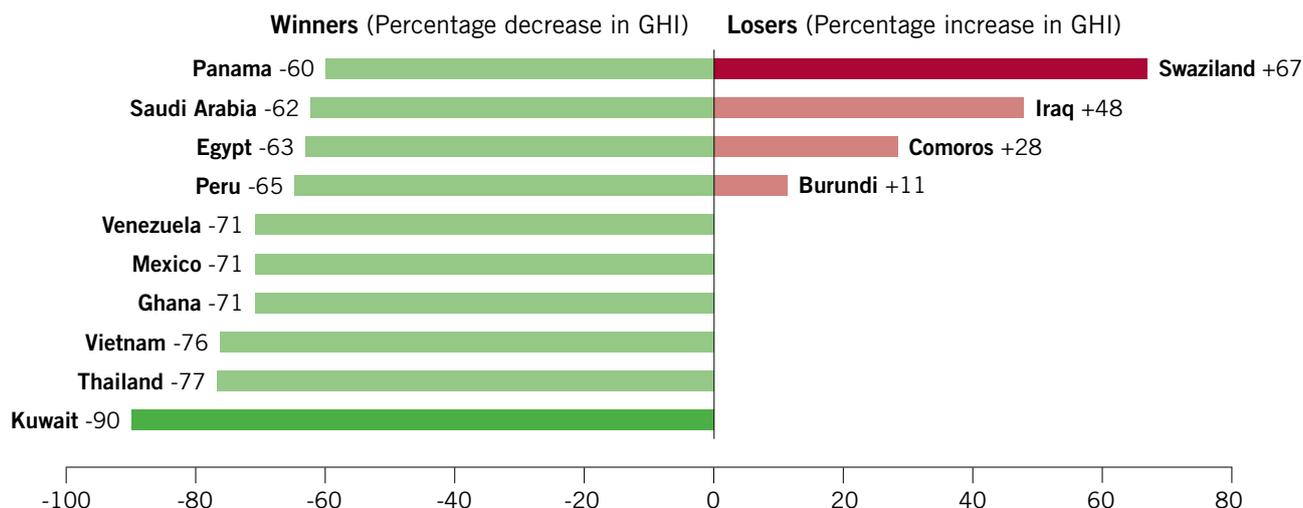
In absolute terms, South Asia saw the largest drop in GHI scores since 1990. A decrease of more than 5 points in South Asia's GHI score since 2005 can be largely attributed to successes in the fight against child undernutrition. Recent survey data from India, where the majority of South Asia's population live, show that underweight in children fell by almost 13 percentage points between 2005–2006 and 2013–2014. A range of programs and initiatives launched by India's central and state governments in the past decade seem to finally have made a difference for child nutrition. Nutrition-specific interventions scaled up after 2006 include 1) the Integrated Child Development Services program, which aims to improve health, nutrition, and development of children; and 2) the National Rural Health Mission, a community-based outreach and facility-based health initiative that brings essential health services to rural India.

FIGURE 2 CONTRIBUTION OF COMPONENT INDICATORS TO 1990, 1995, 2000, 2005, AND 2014 GLOBAL HUNGER INDEX SCORES, BY REGION



Note: For the 1990 GHI, data on the proportion of undernourished are for 1990–1992; data on child underweight are for the year closest to 1990 in the period 1988–1992 for which data are available; and data on child mortality are for 1990. For the 1995 GHI, data on the proportion of undernourished are for 1994–1996; data on child underweight are for the year closest to 1995 in the period 1993–1997 for which data are available; and data on child mortality are for 1995. For the 2000 GHI, data on the proportion of undernourished are for 1999–2001; data on child underweight are for the year closest to 2000 in the period 1998–2002 for which data are available; and data on child mortality are for 2000. For the 2005 GHI, data on the proportion of undernourished are for 2004–2006; data on child underweight are for the year closest to 2005 in the period 2003–2007 for which data are available; and data on child mortality are for 2005. For the 2014 GHI, data on the proportion of undernourished are for 2011–2013, data on child underweight are for the latest year in the period 2009–2013 for which data are available, and data on child mortality are for 2012.

FIGURE 3 GHI WINNERS AND LOSERS FROM 1990 GHI TO 2014 GHI



Note: Countries with both 1990 and 2014 GHI scores of less than 5 are excluded.

Regions and countries have achieved varying results in their efforts to combat hunger. In contrast to South Asia, Africa south of the Sahara began with a lower GHI score in 1990 and has since experienced less improvement overall. Between 1990 and 1995, the GHI score for Africa south of the Sahara increased a little, then fell slightly until 2000, and declined more rapidly thereafter, by more than 6 points.

From the 1990 GHI to the 2014 GHI, 26 countries reduced their scores by 50 percent or more. Thirty-nine countries made modest progress with scores that dropped between 25.0 and 49.9 percent, and 17 countries decreased their GHI scores by less than 25 percent. In Africa south of the Sahara, only Ghana is among the 10 top performers in terms of its improved GHI score since 1990.

Comparing the 1990 GHI to the 2014 GHI, Angola, Bangladesh, Cambodia, Chad, Ghana, Malawi, Niger, Rwanda, Thailand, and Vietnam saw the largest improvements—with decreases in their scores ranging between 14 and 24 points. Angola and Cambodia have been recovering from devastating conflicts. Bangladesh has experienced broad-based progress in social indicators, and its active nongovernmental sector and public transfer programs helped reduce child undernutrition among the poorest. Between 1990 and 2011, the country reduced underweight in children from 62 percent to 37 percent.

Since 2000, a decline in mortality rates for children under age five has contributed to lower hunger levels in Africa south of the Sahara. Progress in the fight against malaria, a greater share of births at medical centers, better antenatal care, improved access to clean water and sanitation facilities, and rising levels of income have led to better nutrition and access to medical care—and likely lowered mortality rates.

Africa south of the Sahara was home to three of the four worst performers since 1990—Swaziland, Comoros, and Burundi.

In Swaziland, the worst performer (Figure 3), the HIV/AIDS epidemic has severely undermined food security along with high income inequality, high unemployment, and consecutive droughts. Swaziland's adult HIV prevalence in 2012 was estimated at 26.5 percent—the highest in the world. Since 2004-2006, the share of people who are undernourished more than doubled. Since 1990, life expectancy fell by ten years, to only 49 years in 2012, despite a slight recovery in recent years. Increased hunger since 1990 in Comoros is due to prolonged conflict and political instability. Hunger rose steadily in Burundi until 2005 and fell afterward. With the shift to peace and political stability that began in 2003, it has been slowly recovering from decades of economic decline. Persistent food insecurity, a high poverty rate, and high inflation are factors that pose challenges for Burundi's future development.

In Iraq, the second worst performer, GHI scores have increased considerably since 1990. Decades of deteriorating accessibility and quality of basic services, as well as years of instability, ongoing violence, large numbers of internally displaced people, and an influx of refugees from Syria have added to the burden. Under-five mortality has declined since 1990, but less than in most other countries in the Near East and North Africa. Progress in reducing child undernutrition has also been slow. The prevalence of underweight in children fell slightly after peaking in 2000. The share of undernourished in the population more than doubled since 1990.

The Democratic Republic of the Congo still appears as a gray area on the map, because reliable data on undernourishment are lacking and the level of hunger cannot be assessed. High-quality data for the Democratic Republic of the Congo and other likely hunger hotspots, such as Afghanistan and Somalia, are badly needed.

ADDRESSING THE CHALLENGE OF HIDDEN HUNGER

Hidden hunger is a form of undernutrition that occurs when intake or absorption of vitamins and minerals (such as zinc, iodine, and iron) are too low to sustain good health and development. Contributing factors include poor diet; increased micronutrient needs during certain life stages, including pregnancy; and health problems such as diseases, infections, or parasites that can spread in unhealthy environments with poor water, sanitation, and hygiene conditions. In nonemergency situations, poverty is a major factor that limits access to adequate, nutritious foods. Moreover, developing countries are moving from traditional diets based on minimally processed foods to highly processed, energy-dense, but micronutrient-poor foods and drinks.

Hidden hunger afflicts more than 2 billion people globally. Its effects can be devastating, leading to mental impairment, poor health, low productivity, and even death. Its adverse effects are particularly acute within the first 1,000 days of a child's life, from conception to the age of two, resulting in serious physical and cognitive consequences. In addition to impairing human health, hidden hunger can curtail socioeconomic development, particularly in low- and middle-income countries.

While signs of hidden hunger, such as goiter from inadequate iodine intake, become visible once deficiencies become severe, the health and development of a much larger share of the population are affected by “invisible” effects, which is why micronutrient deficiencies are often referred to as hidden hunger.

Much of Africa south of the Sahara and the South Asian subcontinent are hotspots where the prevalence of hidden hunger is high. The rates are lower in Latin America and the Caribbean, in part because their diets are more diverse, relying less on single staples.

Economic Toll

Vitamin and mineral deficiencies impose not only health costs, but also economic costs in terms of lost human capital and reduced economic productivity. Hidden hunger impairs physical growth and learning, limits productivity, and ultimately perpetuates poverty in a continuous cycle. The global cost of lost economic productivity due to macronutrient and micronutrient deficiencies reaches up to US\$2 trillion per year. The return on investment in nutrition, however, measured in increased economic development can be high. In 2008, the Copenhagen Consensus Expert Panel ranked supplements for children (Vitamin A and zinc), fortification (iron and iodine), and biofortification, a relatively new intervention that involves breeding food crops to increase their micronutrient content, among the top five investments.

Solutions to Hidden Hunger

Increasing dietary diversity is one of the best ways to sustainably prevent hidden hunger. A healthy diet contains a balanced and adequate combination of macronutrients (carbohydrates, fats, and protein); essential micronutrients; and other food-based substances such as dietary fiber. Effective ways to increase dietary diversity include promoting home gardening and changing behaviors related to infant and young child feeding practices. Other ways to reduce hidden hunger include commercial food fortification, which adds trace amounts of micronutrients to staple foods or condiments during processing; supplements; and biofortification.

To sustainably tackle hidden hunger, a multisectoral approach is needed. It must include action on agriculture, health, water and sanitation, social protection, education, and empowering women.

CONCEPTS OF HUNGER

The words used to explain hunger can be confusing.

“**Hunger**” refers to distress associated with lack of food. In this report, “hunger” refers to the index based on the three component indicators described on page 2.

“**Undernutrition**” signifies deficiencies in any or all of the following: energy, protein, and/or essential vitamins and minerals. Undernutrition results from inadequate intake of food—in either quantity or quality, poor use of nutrients due to infections or other illnesses, or

a combination of factors. These in turn are caused by other factors including household food insecurity; inadequate maternal health or child care practices; or inadequate access to health services, safe water, and sanitation.

“**Malnutrition**” refers more broadly to both undernutrition (problems of deficiencies) and overnutrition (problems of unbalanced diets, such as consuming too many calories with or without low intake of micronutrient-rich foods).

INTEGRATED APPROACHES TOWARD IMPROVED NUTRITION OUTCOMES

In their projects, Concern Worldwide and Welthungerhilfe are committed to eliminating global food and nutrition insecurity. They tackle the problem with interventions that support dietary diversity and strengthen local food systems. To address undernourishment in developing country communities, their programs aim to empower women, ensure agricultural diversification, introduce public health interventions, and change household practices to maximize micronutrient intake.

REALIGNING AGRICULTURE TO IMPROVE NUTRITION (RAIN) PROJECT IN ZAMBIA

In 2010, Concern Worldwide Zambia and IFPRI began to collaborate on a research project designed to address chronic undernutrition by delivering sustainable and scalable cross-sectoral solutions to transform the lives of the poorest and most vulnerable in Zambia, where the level of hunger is ranked as “alarming” in the GHI.

The RAIN project aims to realign agriculture to improve nutrition. To increase household consumption of crops produced based on nutritional value, agricultural activities focus on homestead gardening and small-scale animal husbandry. Women learn better ways to prepare and preserve food to minimize micronutrient losses as well as how to rear small livestock. Key social and behavior change messages aim to change both infant and young child feeding behaviors by focusing on the importance of diversifying diets, nutrition during pregnancy, and early and exclusive breastfeeding, among others. Gender-focused messages promote more female decisionmaking and a more equitable division of farming and childcare duties.

Because malnutrition is a multidimensional problem with many direct and underlying causes, solutions must be multisectoral. Increased coordination and alignment between sectors and ministries is vital for sustained improved nutrition outcomes. In Mumbwa, a District Nutrition Coordination Committee was established to bring together representatives from the ministries of agriculture and livestock, health, community development, and maternal and child health, as well as representatives from civil society. This model of coordination will be replicated across 14 districts receiving support from Scaling Up Nutrition (SUN).

Before joining the RAIN project in 2011, Esnart Shibleki, a single mother, and her family of five ate only two meals a day. They grew two crops: maize and cotton. RAIN provided seeds for micronutrient-dense crops, such as amaranth, carrots, cow peas, groundnuts, soybeans, and tomatoes. Now Esnart grows 14 crops and uses a solar dryer to dry the vegetables for consumption later. “These new crops mean I can better feed my family,” she said. “Now

they can eat five times a day—three main meals and two snacks. They drink goat milk and enjoy a more varied and nutritious diet.”

LINKING AGRICULTURE, NATURAL RESOURCE MANAGEMENT, AND NUTRITION IN ASIA

Research literature notes that traditional agricultural and income generation programs are not enough to improve nutrition and that potential synergies between the sectors have been underused. In 2009, Welthungerhilfe jointly developed an integrated food-based training approach with an NGO network to reduce high levels of undernutrition in tribal communities with low access to public health services, high levels of illiteracy, and a high dependency on wild food. The approach, called LANN, promotes linkages between small-scale agriculture, income-generating activities, natural resource management, and nutrition. It has been applied to Welthungerhilfe’s programs throughout Southeast and South Asia benefitting 26,000 households.

To improve knowledge and practices related to good nutrition, the LANN approach uses participatory learning. Women, for example, learn how to break the cycle of malnutrition through training that highlights the elements of a healthy diet and appropriate maternal and childcare practices. Families learn to prioritize spending on nutrient-rich foods. Role playing and cooking demonstrations help the villagers realize the importance of good nutrition and validate traditional knowledge on preparing highly nutritious, locally available food.

Romas Phas, 30, her husband, and four children live in Dal Veal Leng village in Ratanakiri province in northeastern Cambodia, an area inhabited mostly by indigenous groups. With support from one of Welthungerhilfe’s local partners, Centre d’Etude et de Développement Agricole Cambodgien (CEDAC), Romas was among 20 women in her village who took part in nutrition training.

Over the past few years, Romas has planted various fruit trees close to her house. She now grows different kinds of green leafy vegetables, papayas, sweet potatoes, and tomatoes. Raising chickens helps her add nutrients to her family’s diet and earn more. However, the government has awarded parts of the land her family has been tilling for years to a private investor. To compensate for a dramatically reduced supply of wild meat and homegrown vegetables, Romas must now buy more food to supplement her family’s needs. Her story shows how progress in tackling hidden hunger is at serious risk of being reversed when the main sources of peoples’ livelihood—the land and forests—face threats.

POLICY RECOMMENDATIONS

While the international community has long recognized the importance of food security, it has not always accorded nutrition security the attention it deserves. As a result, hidden hunger continues to exact a devastating human, societal, and economic toll. Every man, woman, and child has the right to adequate food in a quantity and quality sufficient to satisfy their dietary needs. One of the key challenges going forward is to shine a light on food quality—to address hidden hunger so that it is eliminated. To make this happen, a wide range of stakeholders at many levels must take action.

Make it a priority to eliminate hidden hunger

Micronutrient deficiencies cannot stay in the shadows. The international community must ensure that hidden hunger is not overlooked and the post-2015 framework includes a universal goal to end hunger and malnutrition in all its forms.

- Targets and indicators within and beyond this goal must build on existing national and international nutrition commitments, including the World Health Assembly targets for 2025.
- Regional, national, and community-based agendas and action plans must reflect these commitments.

Policies must be appropriate, adequate, and connected to each other

- Integrate approaches across relevant ministries and stakeholders. National governments should engage health, agriculture, and education ministries, as well as ministries of planning, finance, and water and sanitation, to reach a shared understanding of how national policies will work to reduce undernutrition, including micronutrient deficiencies.
- Recognize the critical link between a woman's level of schooling and her family's nutritional status, removing gender barriers to learning and literacy to help girls become more empowered as women.
- Increase access to nutritious food by endorsing targeted social safety nets, and increase support for the poorest, particularly focusing on pregnant and lactating women, infants under two years, and adolescents.
- Define the best set of interventions by country, considering options such as dietary diversification, fortification, supplementation, biofortification, nutrition education/behavior change, improving access to water and sanitation, and promoting good hygiene practices. Interventions should support dietary diversity and strengthen local food systems.
- Create an enabling environment to improve access to and local availability of micronutrient-rich foods. Develop long-term strategies that ensure nutritious foods are available locally.
- Increase support for improved access to local markets and the development of local foodprocessing facilities.

Invest in human capacity building and allocate the necessary funds to build expertise and capacity in nutrition at all levels

- Invest in increasing the number and building the capacity of nutrition and health experts at national and subnational levels, supporting greater coordination and joint interventions across the range of ministries and at lower levels, including between health workers and agriculture extension services.
- Expand coordination within and across multilateral institutions, including CGIAR, FAO, WFP, WHO, UNICEF, and civil society organizations.

Enhance accountability: Governments and international institutions must create a regulatory environment that promotes adequate nutrition

- National governments must translate voluntary codes of conduct, such as the International Code of Marketing of Breastmilk Substitutes and the WHO recommendations on the marketing of foods and nonalcoholic beverages to children, into national legislation to ensure that the marketing does not undermine efforts to promote healthy diets and recommended caring practices. Governments should enforce rules.
- International organizations and national governments must educate consumers about the nutritional value of foods in order to stimulate demand. As consumer demand grows, private sector suppliers will respond.
- Governments must incentivize private sector entities, such as seed and food companies, to develop more nutritious seeds and foods. Transparent accountability systems should be installed to control conflicts of interest more systematically and ensure that investments contribute to public health interests.
- Governments must require companies to communicate nutrition-related information, practices, and performance in a transparent way.

Expand monitoring, research, and evidence base

- Standardize, regularize, and disaggregate data collection on micronutrient deficiencies to quantify and track the prevalence of micronutrient deficiencies through time and space. Good policies must be backed by reliable data.
- Build further evidence of efficacy, cost-effectiveness, and scalability of food-based solutions for fighting hidden hunger. Research must explore the impact of food-based interventions on the micronutrient status of target populations, as well as the cost-effectiveness and sustainability of the interventions. Scalability must be assessed.

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