

# 2013 GLOBAL HUNGER INDEX

## THE CHALLENGE OF HUNGER Building Resilience to Achieve Food and Nutrition Security

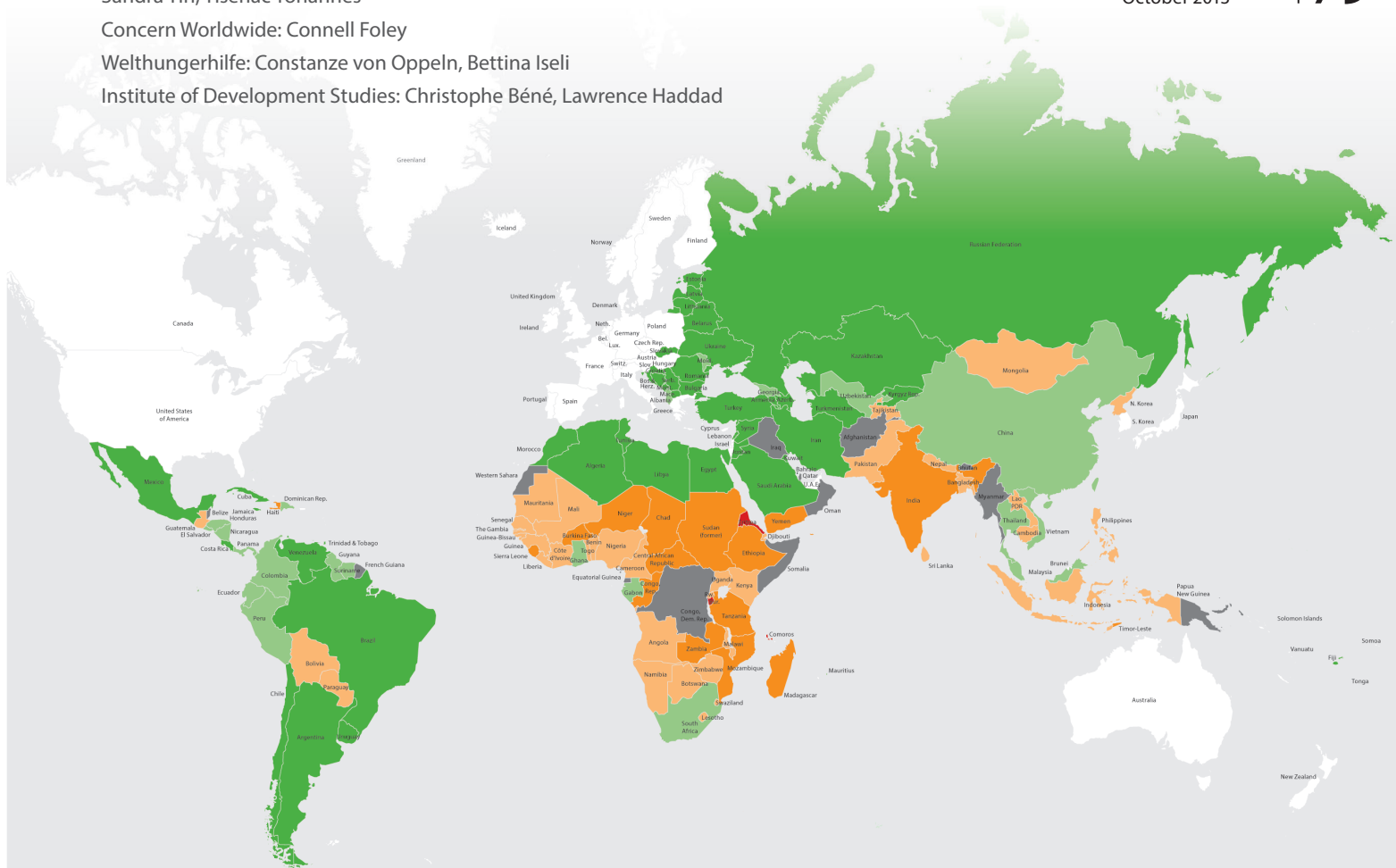
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IFPRI issue brief | **79**  
October 2013



### 2013 GLOBAL HUNGER INDEX SCORES BY SEVERITY

**Note:** For the 2013 GHI, data on the proportion of undernourished are for 2010–2012, data on child underweight are for the latest year in the period 2008–2012 for which data are available, and data on child mortality are for 2011. GHI scores were not calculated for countries for which data were not available and for certain countries with very small populations.

- 30.0 ≤ Extremely alarming
- 20.0–29.9 Alarming
- 10.0–19.9 Serious
- 5.0–9.9 Moderate
- ≤ 4.9 Low
- No data
- Industrialized country

The 2013 Global Hunger Index (GHI) report—the eighth in an annual series—presents a multidimensional measure of national, regional, and global hunger. It shows that the world has made some progress in reducing hunger since 1990, but still has far to go.

The 2013 GHI report focuses on resilience in theory and in practice. The relief and development communities have long struggled to understand why some people fare better than others when confronting stresses or shocks. Given that world hunger remains “serious” according to the index, resilience-building efforts are much needed to help poor and vulnerable people cope with hunger seasons, droughts, and other natural and manmade disasters both short-term and long-term. Building resilience will involve boosting food and nutrition security. In order to achieve that goal, the humanitarian and development communities must work together.

## THE GLOBAL HUNGER INDEX

The GHI aggregates three equally weighted indicators:

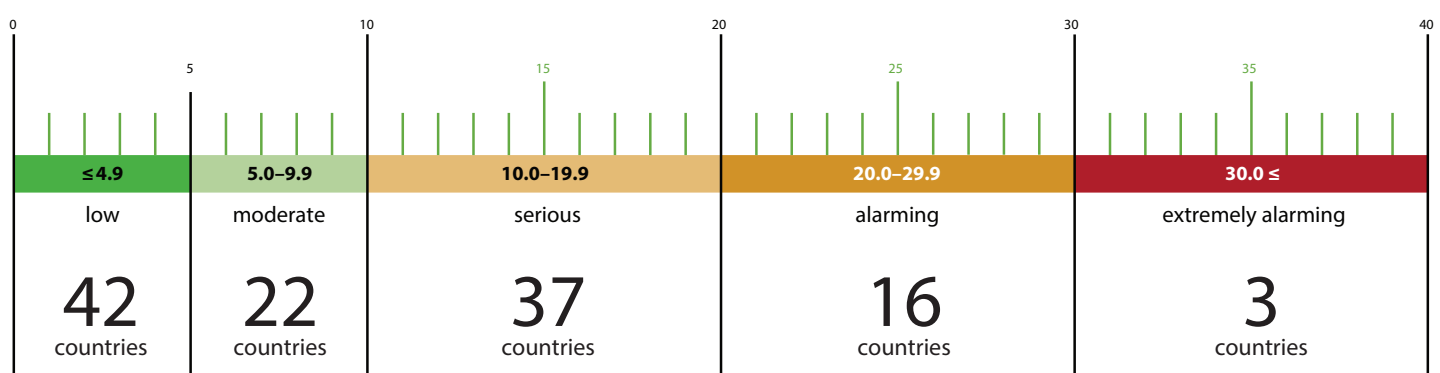
- ▶ the proportion of people who are undernourished,
- ▶ the proportion of children younger than age five who are underweight, and
- ▶ the mortality rate of children younger than age five.

Data on these 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), various national demographic

and health surveys, and IFPRI estimates. The 2013 GHI is calculated for 120 countries for which data on the three components are available and reflects data from 2008 to 2012—the most recent global data available on the three GHI components.

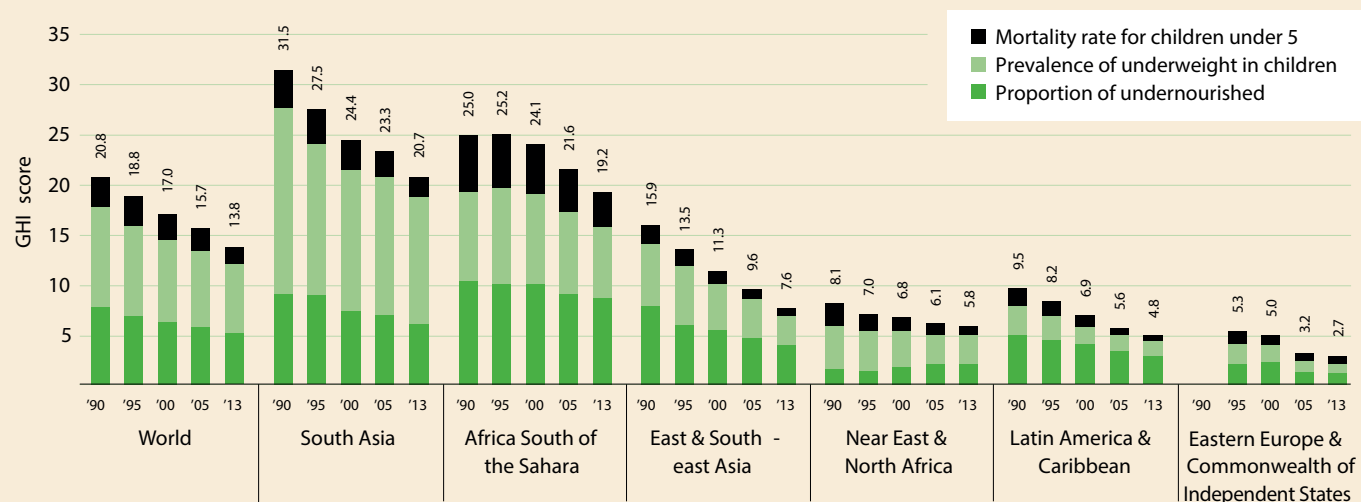
The GHI ranks countries on a 100-point scale, with 0 being the best score (no hunger) and 100 being the worst, although neither of these extremes is reached in practice. Values less than 5.0 reflect low hunger, values between 5.0 and 9.9 reflect moderate hunger, values between 10.0 and 19.9 indicate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

### GLOBAL HUNGER INDEX



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

**FIGURE 1** Contribution of components to 1990, 1995, 2000, 2005, and 2013 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 2013 GHI, data on the proportion of undernourished are for 2010–2012, data on child underweight are for the latest year in the period 2008–2012 for which data are available, and data on child mortality are for 2011.

## RANKING AND TRENDS

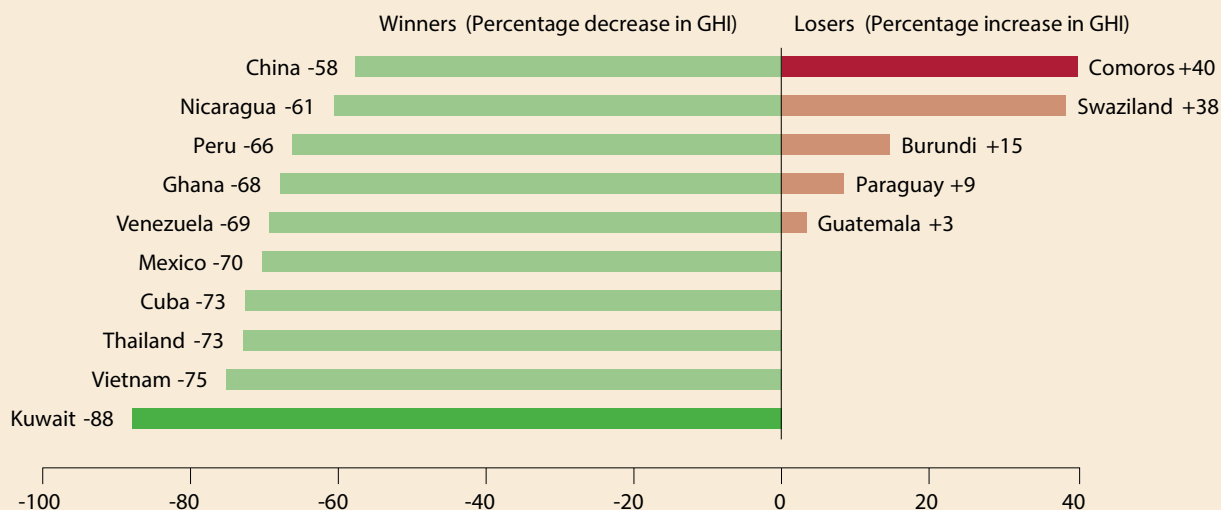
The number of hungry people in the world has remained unacceptably high: Today, about 870 million people are chronically undernourished. This sobering statistic is in no way diminished by FAO's improved undernourishment estimates released in 2012, which suggest that progress in reducing undernourishment was more marked than previously thought. The GHI also finds a declining hunger trend: The 2013 world GHI fell by close to 34 percent from the 1990 world GHI, from a score of 20.8 to 13.8 (Figure 1). This progress was due mainly to a decline in the share of children younger than age five who are underweight.

Global averages conceal dramatic differences among regions and countries. While the 2013 GHI score for South Asia remains alarming and Africa south of the Sahara's score is serious, the scores are moderate for the Near East and North Africa. Scores are low for Latin America and the Caribbean and for Eastern Europe and the Commonwealth of Independent States.

That said, all regions have made progress since 1990. The 2013 GHI score was 23 percent lower in Africa south of the Sahara, 34 percent lower in South Asia, and 28 percent lower in the Near East and North Africa. Progress was even more remarkable in East and Southeast Asia and Latin America and the Caribbean, with GHI scores falling by 52 percent and 50 percent respectively (although the score was already low in the latter region). In Eastern Europe and the Commonwealth of Independent States, the 2013 GHI score was 48 percent lower than the 1995 score.

The region with the highest 2013 GHI score is South Asia. South Asia reduced its GHI score by 4 points between 1990 and 1995—mainly through a 10-percentage-point decline in underweight in children—but this rapid progress did not persist. In the following five-year periods and after 2005, the decrease slowed down to 1–3 points despite strong economic growth. Social inequality and the low nutritional, educational, and social status of women are major causes of child undernutrition in this region and have impeded improvements in the GHI score.

**FIGURE 2** Winners and losers from 1990 GHI to 2013 GHI



**Note:** Countries with both 1990 and 2013 GHI scores of less than 5 are excluded.

After making less progress than South Asia in the 1990s, Africa south of the Sahara has caught up since the turn of the millennium and surpassed it. Now its 2013 GHI score is below South Asia's. Thanks to the end of large-scale civil wars of the 1990s and 2000s, countries earlier beset by conflict became more politically stable, and economic growth resumed on the African continent. Advances in the fight against HIV and AIDS helped reduce child mortality in the countries most affected by the epidemic.

Since 2000, mortality rates for children under age five have declined in Africa south of the Sahara. A key factor behind the improved rates seems to be the decrease in the prevalence of malaria, which coincided with the increased use of insecticide-treated bed nets and other antimalarial interventions. Other contributors may include higher immunization rates and more births in medical centers, improved antenatal care, better access to clean water and sanitation facilities, and rising incomes, leading to better nutrition and access to medical care.

The situation in the Sahel, however, remains fragile in 2013 despite a good harvest. Recurrent crises in recent years, including a combination of sporadic rainfall, locust infestation, crop shortages, and high and volatile food prices have negatively affected food and nutrition security in the region, eroding the coping capacity of already vulnerable groups and weakening their resilience to shocks. In addition, livestock—an important asset for

pastoralists—have become more vulnerable to diseases. The conflict in northern Mali, growing insecurity in northern Nigeria, and migration pressure have exacerbated the situation. Thousands of people have fled their homes in Mali for safer regions or neighboring countries.

Regions and countries achieved varying results in their efforts to combat hunger. From the 1990 GHI to the 2013 GHI, 23 countries reduced their scores by 50 percent or more (Figure 2). Among the 10 best performers in terms of improved GHI scores since 1990, only one country—Ghana—is from Africa south of the Sahara.

That same region is also home to the three worst-scoring countries in 2013—Burundi, Comoros, and Eritrea. Increased hunger since 1990 in Burundi and Comoros can be attributed to prolonged conflict and political instability. Between 1990 and 2000, Burundi's GHI score rose and remained very high, close to 40, until 2005. It has dipped only slightly since. With the transition to peace and political stability that started in 2003, the country began a slow recovery from decades of economic decline. However, its high level of undernourishment remains a serious issue. The share of undernourished people has continued to rise since 1990. The prevalence of child underweight is one of the highest in Africa.

Haiti's 1990 GHI score placed the country in the "extremely alarming" category. Since then the country's GHI score has zigzagged. Overall Haiti's 2013 GHI score

of 23.3 was more than one-quarter lower than its 1990 score, although it is still considered “alarming.” Haiti’s 2010 under-five mortality rate more than doubled from its 2009 rate because of the 2010 earthquake and its aftermath, but it fell below predisaster levels in 2011. Data show that although undernourishment in Haiti is still high, it has fallen by almost one-third since 1990. Underweight in children also improved significantly during this period.

For some countries, such as the Democratic Republic of Congo—the worst performer in terms of its GHI score in many past reports—reliable data on undernourishment do not exist and the level of hunger cannot be assessed. Efforts to collect high-quality data for the Democratic Republic of Congo and other likely hunger hot spots, such as Afghanistan and Somalia, must be intensified.

### CONCEPTS OF HUNGER

The terminology that refers to different concepts of hunger can be confusing. “Hunger” is usually understood to refer to the discomfort associated with lack of food. FAO defines food deprivation, or “undernourishment,” as the consumption of fewer than about 1,800 kilocalories a day—the minimum that most people require to live a healthy and productive life.

“**Undernutrition**” goes beyond calories and signifies deficiencies in any or all of the following: energy, protein, and essential vitamins and minerals. Undernutrition is the result of inadequate intake of food (in terms of either quantity or quality), poor utilization of nutrients due to infections or other illnesses, or a combination of these factors. These in turn are caused by 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 consumption of too many calories in relation to requirements with or without low intake of micronutrient-rich foods).

“**Hunger**” in this brief refers to the index based on the three component indicators described on page 2.

## UNDERSTANDING RESILIENCE FOR FOOD AND NUTRITION SECURITY

The central reason it is so hard for people to escape poverty is their sheer inability to avoid or cope with shocks and stressors, such as floods, price hikes, or civil unrest. Yet relief efforts, though important, do not typically address the underlying structural vulnerabilities of a population. Given these realities, both the humanitarian and development communities have arrived at the same conclusion: In order for the long-term development of communities, regions, and countries to advance, poor and vulnerable people need greater resilience. Building their resilience will involve boosting food and nutrition security.

While there is no consensus yet on the best ingredients for resilience or even its definition, the development and relief communities are moving toward a loosely defined resilience framework that may make it possible to design and implement more effective and better-integrated interventions.

According to one framework, three different responses are linked to different intensities of shock or change. The lower the intensity of the shock, the more likely the household, community, or system will be able to resist it effectively, absorbing its impacts without major changes. But a somewhat larger shock or stressor may require incremental adaptive changes, such as new farming techniques or taking out loans. Much larger shocks may warrant even bigger changes that permanently alter the system or structure in question. For example, droughts in the Horn of Africa may push people out of pastoralism and into sedentary agriculture or urban occupations because they can no longer rebuild their herds.

By giving greater weight to the significance of negative shocks than earlier development frameworks have, this concept of resilience highlights how an inability to cope with shocks makes it hard for the poor to escape poverty and explains why others fall into it in the first place.

Better measurement and more frequently collected data will help uncover the causes and consequences of a wide range of shocks and will help the development and humanitarian communities assess the effectiveness of their programs.

## BUILDING COMMUNITY RESILIENCE TO UNDERNUTRITION

With nearly 100 years of combined experience tackling hunger and poverty around the world, Concern Worldwide and Welthungerhilfe have long known that poor and vulnerable people cannot cope with all the stressors they face in chronically food-insecure regions or areas in crisis. To explore the concept of community resilience to undernutrition, they offer lessons learned from resilience programming in different contexts.

### *Learning from Niger*

In Niger, where Concern has been working for over a decade, each year more than 300,000 children are treated for malnutrition and between 1 million and 3 million people suffer from food insecurity on average. The livelihoods of the poorest are under enormous pressure from constant environmental degradation, advanced desertification, regular pest invasions, and inadequate response to shorter recurrent drought cycles. Repetitive shocks have impoverished rural households. Chronic malnutrition is endemic and has increased over the last 20 years. One in three harvests is generally poor. Farmers and agropastoralists are the most affected as they often cannot meet their food needs for the five-month hunger period between May and September.

Between April 2010 and September 2012, Concern responded to several nutrition crises in the Tahoua region while conducting three research projects over the course of three hunger seasons: April–December 2010, May–December 2011, and July–September 2012. These interventions and research studies focused on the impact of cash transfers on both nutritional and wider poverty outcomes. A deeper inquiry into the link between cash transfers and nutritional outcomes led to the following insights from Niger:

1. Cash transfers seem to improve nutritional outcomes in the short term because they lead to more frequent meals for children and more legume consumption. A large portion of cash transfers are spent on household food. Clearly, food expenditures depend on the availability of food. Therefore, whether food or cash is needed depends on local conditions.
2. If the goal of a program is to improve or maintain nutritional status, cash transfers should be integrated with other interventions that address the causes of malnutrition and food insecurity.
3. Nutrition and food security indicators—such as the number of hunger days, dietary diversity scores, or global acute malnutrition rate—should be developed and monitored to track cash transfers' many uses and to measure the success of the program.

These insights in turn led to the realization that both cash transfers and nutrition treatment programs that focus on seasonal hunger needs are not enough to create resilience to periodic hunger crises and that longer-term development interventions focused on building absorptive and adaptive coping strategies would be required. This learning continues to inform programming and practice in Niger and beyond.

These findings and others from Concern's programs in Ethiopia and Kenya have informed the design of a new three-year resilience program in Chad, which seeks to address evidence gaps and generate insights that will contribute to global discussions on the concept of resilience.

### *Learning from Haiti*

Haiti has suffered from widespread poverty and chronic food and nutrition insecurity for decades. More than half of the country's households are trapped in absolute poverty and live on less than a dollar a day. Haiti is not only highly exposed to natural disasters, it faces risks that are as much political as they are environmental. Weak governance and an "emergency economy" undermine the legitimacy of the state and lock the country into dependency on aid.

Most of Haiti's poor and food-insecure people live in rural areas. Given that agriculture-based livelihoods are common, agricultural policies could play a major role in strengthening community resilience to undernutrition. But so far, structural constraints have not been sufficiently addressed and policies do not benefit small-scale producers. Because of continuing land fragmentation, weak tenure, low levels of agricultural technology, inadequate infrastructure, and difficulties in accessing markets, their productivity and income remain low. Demographic pressure and poverty force the rural population to engage in activities, such as deforestation, that further increase their vulnerability to risks. The government continues to favor large-scale agribusiness development and harmful policies, such as low import tariffs for rice that make it difficult for local farmers to compete.

The North-West Department is one of the regions most affected by structural food insecurity. More than 90 percent of the inhabitants depend on subsistence agriculture for their livelihoods. Since 1993, Welthungerhilfe has been working in the region, concentrating on improving food availability and access. In total, 21 projects financed by a variety of donors were implemented between 2000 and 2011 reaching 37,000 households. The program was not specifically designed to strengthen community resilience to undernutrition. However, looking at the program through a resilience lens makes it possible to identify key resilience factors for future programming:

- By addressing several underlying, structural causes of vulnerability, the program contributed to positive long-term prospects of moving people out of hunger and poverty.
- Though sustainable food and nutrition security was the main goal, interventions were also designed to mitigate disaster risks and to anticipate, respond to, and cope with shocks and stresses such as landslides, flooding, and earthquakes.
- The long time horizon and continuity of the program, notably in strategies and staffing, permitted a development-oriented response to acute crisis. One key to success was an in-depth analysis of local self-help capacities after each emergency and support to fill gaps in capacity only. Flexible, accurately targeted emergency transfers supported communities pursuing long-term development goals.
- The program fostered the emergence of local committees, such as water management groups, which can, in the medium to long term, become the nucleus of an organized rural civil society that is better equipped to collectively mitigate risks.
- The program was aligned with national policies and closely cooperated with state structures and community administrations, strengthening their capacity for contingency planning and effective action.

# POLICY RECOMMENDATIONS

These recommendations address three categories of players with direct influence on policies and programs related to resilience: the international development, humanitarian, and donor communities; country-level policymakers in food-insecure countries; and development and humanitarian practitioners.

## Recommendations for the International Development, Humanitarian, and Donor Communities

Resilience is not a panacea. Its definition and application will involve choices. While most such choices should work for the poorest and most vulnerable, some may not. The international development and donor communities need to be clear about definitions, strive to find a consensus with others, and spell out why a resilience approach will allow them to advance their respective development and humanitarian goals. Once they have agreed upon a joint vision for resilient policy and programming in a specific context, donors should align with it.

1. A resilience lens shines a bright light on the missed opportunities and the sometimes counterproductive separation of the worlds of development and humanitarian assistance. The institutional, financial, and conceptual walls separating the worlds of development and humanitarian assistance within donor and UN agencies need to be broken down to achieve greater synergies in strategies and implementation plans.
2. Broader policy coherence for development is needed for efforts to strengthen resilience. Policies that undermine resilience must be revised. To foster resilience to undernutrition, policies should be designed to improve nutrition outcomes and realize the right to adequate food.
3. To support a pro-poor resilience approach, create multiannual, flexible mechanisms and funding that facilitate multisectoral approaches to tackling chronic food and nutrition crises and addressing the structural causes of food and nutrition insecurity at the regional and country levels.
4. Communicate to key stakeholders and to the wider public the potential cost-effectiveness of building resilience and improving food and nutrition security, particularly in fragile contexts.
5. Support a coordinated approach to monitoring resilience-building measures in different contexts and building an evidence base on the impact and effectiveness of such measures. As part of this effort, indicators of

resilience need to capture adequate information at appropriate times and frequencies.

- Invest in real-time, high-frequency data collection at different levels (individual, household, community, environment) and among different socioeconomic and ethnic groups.
  - Establish sentinel sites in the countries that are most shock-prone, poor, and dependent on humanitarian assistance, where data on nutrition, food security, and coping behaviors could be collected every one to three months.
6. Review the effectiveness of early warning systems in order to identify and address the key institutional, especially political, obstacles to early action. Put in place policy responses to the lessons learned from such a review or reviews.
  7. Donors should direct more development funding to disaster risk reduction and resilience-building interventions, including better-targeted productive safety nets, with either clear percentage targets or other funding weighting criteria applied. Capacity-building interventions and costs in fragile and conflict-affected states need to be factored in.

## Recommendations for Country-Level Policymakers in Food-Insecure Countries

8. Develop national approaches to food and nutrition security that are resilient to shocks and other stresses. Ensure that external and international actors buy into and support those approaches. External actors should work with national actors to develop context-specific tools for analyzing, measuring, and assessing resilience.
9. Encourage and facilitate a multisectoral approach to resilience (as the Scaling Up Nutrition movement encourages a multisectoral approach to nutrition, for example), coordinating plans and programs across line ministries. Evaluate national sectoral strategies and action plans using disaster-proofing and resilience-building lenses.
10. Put in place policies that strengthen resilience to undernutrition, such as tenure security for smallholder farmers, and adjust policies and strategies that undermine the resilience of poor and vulnerable groups, such as the low import tariffs or the structural neglect of smallholder agriculture in Haiti.
11. Ensure that policies and programs draw on a wide range of expertise such as collaborative, multiagency, and multisectoral problem analysis. National governments should support the emergence of multistakeholder platforms and make active use of such forums. In particular,

people suffering from a lack of resilience to shocks and stresses that affect their food and nutrition security should be consulted. It is essential that wherever possible, efforts to strengthen resilience should build on the empowering mechanisms and institutions they suggest.

### Recommendations for Development and Humanitarian Practitioners

- 12.** A resilience perspective can encourage development programming that factors in uncertainty and volatility as well as humanitarian programming that works toward sustainable development. Some programs can incorporate both objectives by (1) providing relief and then seeking to gradually build individual, household, and community assets or by (2) building assets in normal times but incorporating financial and operational flexibility into programs to allow them to switch quickly to relief operations when shocks hit.
- 13.** Development programs aiming to enhance resilience should build local capacities and strengthen local structures. Such structures can provide the most effective and timely support when shocks and stresses strike. Emergency programs should not work in parallel with these structures, but rather work with and build on them to avoid locking communities and countries into a humanitarian approach.
- 14.** Support positive coping mechanisms that people already use. For example, strengthen community-level savings networks or banks that play a large role in promoting development and providing relief from shocks.
- 15.** Nongovernmental organizations and their national partners should use their long-term experience in development programming more proactively to lobby for resilience-enhancing policy change.
- 16.** Poor nutrition in early childhood (especially during the 1,000 days from conception through age two) reduces resilience because it can have long-term and irreversible effects on the cognitive and physical development of

children and their future earning capacity as adults. The humanitarian and development communities should thus focus on improving maternal and child nutrition in developing regions, with both nutrition-specific interventions to address the immediate causes of undernutrition and nutrition-sensitive interventions to address the underlying causes. Nutrition indicators as specified by the World Health Assembly targets should be used to assess nutrition-specific and nutrition-sensitive programs and funding schemes.

## CONCLUSION

As long as people face shocks or stresses, such as natural disasters or manmade crises, and suffer from food or nutrition insecurity, it will be important to identify the building blocks of resilience. Understanding why some people fare better than others when confronting stresses or shocks can inform resilience-building programs. While the underlying rationale for focusing on resilience building is strong, adopting a resilience framework will be challenging. Conceptually, consensus is needed on what resilience is and what it is not. It will also be important to determine the best way to measure and monitor resilience. More efforts are still needed to improve poor and vulnerable people's ability to achieve food and nutrition security.

### For more information, see the full report:

von Grebmer, K., D. Headey, C. Béné, L. Haddad, T. Olofinbiyi, D. Wiesmann, H. Fritschel, S. Yin, Y. Yohannes, C. Foley, C. von Oppeln, and B. Iseli. 2013. *2013 Global Hunger Index: The Challenge of Hunger: Building Resilience to Achieve Food and Nutrition Security*. Bonn, Washington, DC, and Dublin: Welthungerhilfe, International Food Policy Research Institute, and Concern Worldwide. Also available at [www.ifpri.org/publication/2013-global-hunger-index](http://www.ifpri.org/publication/2013-global-hunger-index).

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