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INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE
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CONCERN WORLDWIDE

THE CHALLENGE OF HUNGER

The 2008 Global Hunger Index

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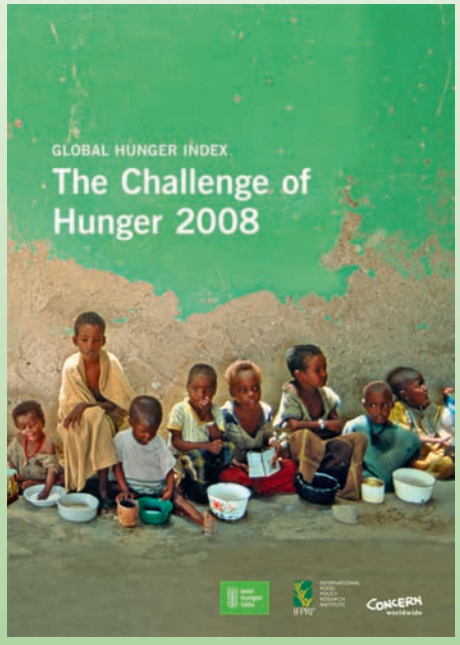
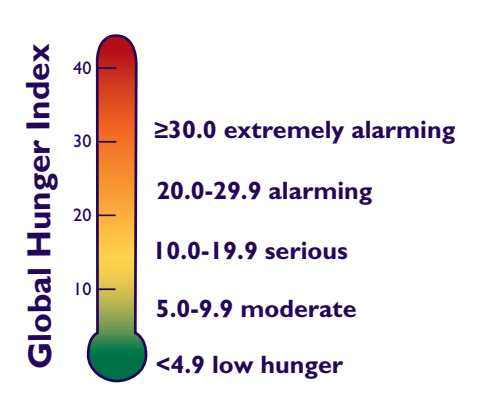
With high food prices threatening the food security of millions of vulnerable households around the world, hunger and malnutrition are back in the headlines. The world is making only slow progress in reducing food insecurity, according to the Global Hunger Index (GHI). Some regions—in particular South and Southeast Asia, the Near East and North Africa, and Latin America and the Caribbean—have made significant headway in combating hunger and malnutrition since 1990, but in South Asia and Sub-Saharan Africa, the GHI remains high. Moreover, progress in Sub-Saharan Africa since 1990 has been marginal.

The GHI is a tool developed by IFPRI for regularly tracking the state of global hunger and malnutrition. This year's index reflects data until 2006—the most recent available global data—and does not yet take account of the latest changes in the world food system, in which a number of factors are converging to raise prices for agricultural commodities to their highest levels in decades. Food prices appear likely to remain high in the near term, leading to food and nutrition insecurity for poor people around the globe. In this risky and changing environment, the GHI highlights key trends and the geographic areas of greatest vulnerability.



WHAT IS THE GLOBAL HUNGER INDEX?



The GHI is a multidimensional approach to measuring hunger and malnutrition that combines three equally weighted indicators:

1. **the proportion of undernourished as a percentage of the population (reflecting the share of the population with insufficient dietary energy intake);**
2. **the prevalence of underweight in children under the age of five (indicating the proportion of children suffering from weight loss and/or reduced growth); and**
3. **the mortality rate of children under the age of five (partially reflecting the fatal synergy between inadequate dietary intake and unhealthy environments).**

The index ranks countries on a 100-point scale, with 0 being the best score (no hunger) and 100 being the worst, though neither of these extremes is achieved in practice.

Data for the 2008 GHI are from 2001 to 2006. The 2008 GHI is calculated for 120 countries for which data on the three components are available and measuring hunger is considered most relevant.

GLOBAL AND REGIONAL TRENDS

At a global level, the 2008 GHI shows some improvement over the 1990 GHI, falling from 18.7 to 15.2 or by almost one fifth. The improvement was driven to a large extent by progress in children's nutrition. Nevertheless, the GHI level in the world as a whole remains serious. These global averages hide dramatic differences among regions and countries. In Sub-Saharan Africa the GHI decreased by less than 11 percent between 1990 and 2008, whereas the GHI decreased by about 25 percent in South Asia and about 30 percent in Southeast Asia, the Near East, and North Africa. Progress in Latin America was even greater, with the GHI decreasing by almost 40 percent, albeit from an already low level.

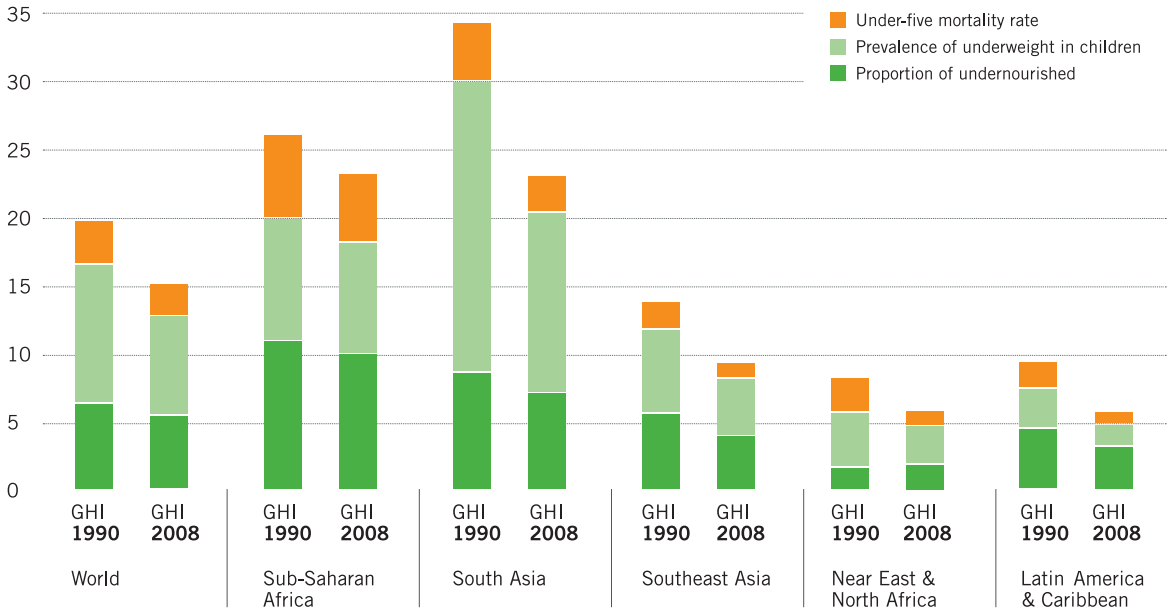
Although Sub-Saharan Africa and South Asia share the highest regional GHI scores (23.3 and 23.0 respectively), food insecurity in the two regions stems from different sources (Figure 1). In South Asia, the major problem is a high prevalence of underweight in children under five, which stems from the lower nutritional and educational status of women. In contrast, the high GHI in Sub-Saharan Africa is due to high child mortality and a high proportion of people who cannot meet their calorie requirements. Low government effectiveness, conflict, and political instability, as well as high rates of HIV/AIDS, have driven these two indicators.

From the 1990 GHI to the 2008 GHI, only a handful of countries made significant progress by reducing their GHI scores by half or more. At the same time, about one third of the countries made modest progress by reducing their GHI scores between 25 and 50 percent. Ghana was the only country in Sub-Saharan Africa that cut its GHI by more than 40 percent. The countries that cut their GHI the most were Kuwait (which reduced its GHI by 72 percent), Peru (71 percent), Syria (53 percent), Egypt (53 percent), and Turkey (51 percent). Kuwait's seemingly remarkable progress in reducing hunger is mainly due to its unusually high level in 1990, when Iraq invaded the country. Peru made rapid progress through strong agricultural growth and the lowering of inflation.

It is laudable that some countries were able to cut their GHI by more than half, but absolute progress in moving toward such a goal is also noteworthy. Between 1990 and 2008, Angola, Ethiopia, Ghana, Haiti, Malawi, Mozambique, Peru, and Vietnam saw the largest decreases—by more than 10 points—in their GHI scores. In 11 countries (all in Sub-Saharan Africa, except for North Korea), the GHI increased.

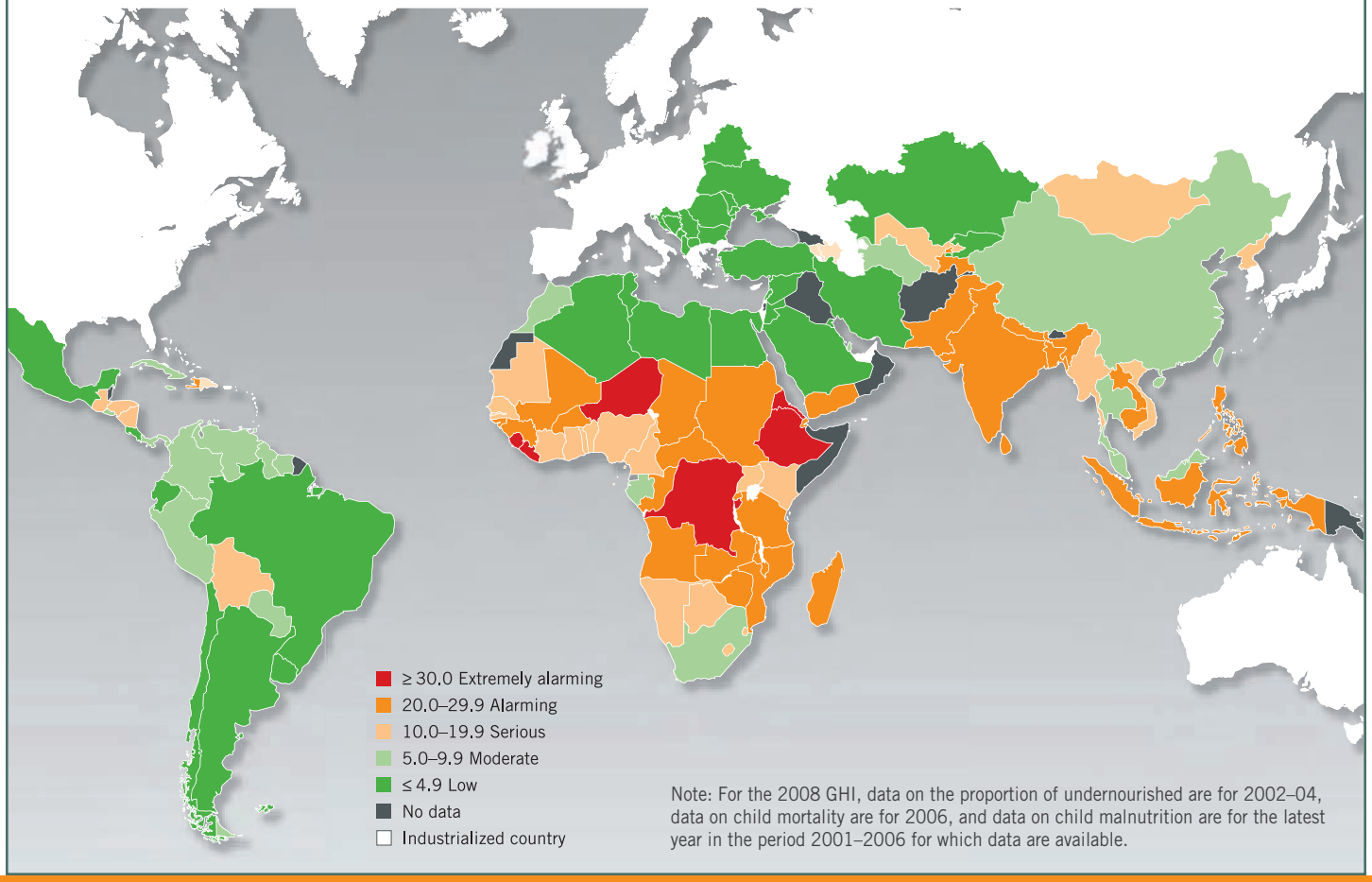
The countries with the most worrisome hunger status and the highest 2008 GHI scores are predominantly in Sub-Saharan Africa, with the Democratic Republic of Congo, Eritrea, Burundi, Niger, and Sierra Leone at the bottom of the list (see Figure 2). War and violent conflict have been major causes of widespread poverty and food insecurity in most of the countries with high GHI scores. The greatest increases in GHI occurred in the Democratic Republic of Congo (increase of 57 percent), North Korea (43 percent), Swaziland (32 percent), Burundi (17 percent), and Zimbabwe (17 percent).

Figure 1—Contribution of the Three Indicators to the 1990 GHI and 2008 GHI



Note: For the 1990 GHI, data on the proportion of undernourished are for 1990–92; data on the prevalence of underweight in children under five are for 1988–92; and data on child mortality are for 1990. For the 2008 GHI, data on the proportion of undernourished are for 2002–04, data on child mortality are for 2006, and data on child malnutrition are for the latest year in the period 2001–2006 for which data are available.

Figure 2—2008 GHI by Severity



Note: For the 2008 GHI, data on the proportion of undernourished are for 2002–04, data on child mortality are for 2006, and data on child malnutrition are for the latest year in the period 2001–2006 for which data are available.

THE VICIOUS CIRCLE OF HUNGER AND POVERTY

Poverty leads to undernutrition and food insecurity by limiting poor people's access to food. At the same time, because undernourished people are less productive and child malnutrition has severe, permanent consequences for physical and intellectual development, hunger can lead to or help entrench poverty. Thus poverty and hunger can become entwined in a vicious cycle, and levels and trends in these indicators can be expected to be similar. Indeed, countries with high levels of hunger are overwhelmingly low- or low-middle-income countries. All countries with extremely alarming levels of hunger are low-income countries.

Not surprisingly then, Sub-Saharan Africa and South Asia are not only the regions with the highest GHI scores, but also the ones with the highest poverty rates. The share of the total population living on less than US$1 a day in 2004 was 41 percent in Sub-Saharan Africa and 31 percent in South Asia, yet the GHI scores for the two regions are nearly equal. The trends in poverty and hunger reduction in the two regions, however, are different in magnitude. South Asia's GHI and poverty rate reflect rapid progress since 1990 from very high levels, whereas in Sub-Saharan Africa the GHI has decreased much more slowly and poverty has been persistent.

Why are hunger and poverty in Sub-Saharan Africa so entrenched? Of the 969 million poor people in the developing world in 2004, 162 million were ultra poor—that is, they were living on less than $0.50 a day. These ultra poor are overwhelmingly concentrated in Sub-Saharan Africa. Their extreme poverty makes it next to impossible for them to climb out of poverty: they find themselves unable to invest in assets and in educating their children; they have little access to credit; and hunger and malnutrition reduce their productivity. Extreme poverty thus becomes a trap in which poverty begets poverty and hunger begets hunger.

RISING FOOD PRICES INTENSIFY THE HUNGER CRISIS

Until recently, efforts to reduce hunger and malnutrition took place in an environment of gradually falling food prices. Between 1974 and 2005, real food prices declined by about 75 percent, according to the International Monetary Fund. Since 2005, however, real food prices have been on the rise. The Food and Agriculture Organization of the United Nations' food price index rose by 9 percent in 2006, 23 percent in 2007, and more than 50 percent between May 2007 and May 2008. Virtually every food commodity has been affected by rising prices. Prices of wheat and poultry have doubled since 2003, and prices of maize and butter have tripled, and the price of rice has more than quadrupled.

Higher food prices have uneven effects across countries, depending on a range of factors. One such factor is whether countries are net importers or exporters of cereals, an indicator that reveals their vulnerability to rising cereal prices. Net exporters, like Argentina and Kazakhstan, tend to benefit from improved terms of trade, whereas net importers, like Angola, Chad, Burundi, and Ethiopia, struggle to meet domestic food demand. Net cereal importers in the sample significantly outnumber exporters (97 net importers and 15 net exporters), implying that many more countries still combating hunger are likely to suffer from higher prices than benefit from them. In fact, higher food prices will probably hit countries with the highest rates of hunger hardest, given that none of the countries with extremely alarming GHI—Burundi, Democratic Republic of the Congo, Ethiopia, Liberia, Niger, and Sierra Leone—are net cereal exporters.

The rise in food prices also undermines political security, which has a strong two-way link with food security. From January 2007 to June 2008, one third of all countries for which 2008 GHI was calculated had a violent or nonviolent protest. Food protests have affected countries with both high and low GHI scores. Interestingly, however, none of the countries with an extremely alarming GHI had experienced violent protests. With increased food price inflation, urban dwellers are usually the group that responds with strikes, protests, or riots. The rural poor, however, usually suffer silently for a while, and a lack of protests may not correctly depict the severity of impact on the poorest of the poor.

PROSPECTS FOR FOOD AND NUTRITION SECURITY UNDER HIGH FOOD PRICES

Even though the GHI has been falling slowly since 1990, at least 800 million people were food insecure before the food price crisis hit. In other words, 800 million people could not afford an adequate diet even in the context of declining food prices. Some poor people in developing countries spend as much as 70 percent of their incomes on food. People who were already food insecure have little or no scope for achieving nutritious diets in the face

of rising food prices. Most of the world's poor people are net buyers of food, even in rural areas, where millions of people do not own land or do not produce enough food to feed their families. These net food buyers are likely to see the greatest impacts on their nutritional status, and news reports show that they are already spending more on food, cutting back on their consumption, and sometimes reducing the quality of the food they eat.

Farmers who are net food producers could benefit from the higher prices for their food commodities, but these farmers are often not the poorest. Well-off farmers in China and Kenya, for example, are moving into higher-value products to take advantage of rising prices. Still, according to the International Fund for Agricultural Development, in many countries consumer prices have risen more than producer prices. With producer price increases lagging behind consumer price increases, even net food producers may come out behind.

High prices also reduce the amount of food aid that assistance agencies can buy with fixed budgets, and reduced food aid flows threaten people who are in crisis or disaster and depend on food aid for their survival. Largely because of rising food prices, food aid flows from the World Food Programme declined by 15 percent in 2007, reaching their lowest level since 1961.

The greatest long-term damage from higher food prices may come from impacts on poor infants and children. Children have specific nutritional needs for macro- and micronutrients to ensure optimal physical and cognitive development, especially from conception to age two. Failure to meet these needs—for instance, if food price increases lead to diminished food quantity or quality—may have permanent consequences that include stunting, reduced cognition, and increased susceptibility to infectious disease and mortality.

NEW POLICIES NEEDED

This is a period of great risk for the nutrition and health of millions of poor people, and policymakers need to act carefully (IFPRI, Welthungerhilfe, and Concern Worldwide have all proposed complementary policy responses; see the boxes for details). It is crucial that responses to the crisis go beyond good intentions and lofty declarations to include actions, even in politically challenging policy areas like trade and biofuels. Much discussion of the crisis so far has failed to assign specific responsibilities for implementation to specific actors, and this omission needs to be corrected so that governments and international institutions can be held accountable for their actions.

Governments and nongovernmental organizations must of course address the urgent and immediate needs for food among poor people, but if they ignore long-term solutions, such as boosting agricultural production, strengthening social protection, and reforming trade rules and biofuel policies, they risk ensuring that hunger and malnutrition will recur. By highlighting the weaknesses of the current world food system, the food price crisis could serve as a catalyst for building a more effective and resilient food system that meets the food and nutrition needs of all people. The Global Hunger Indexes of the next several years—and decades—will reveal whether the world's decisionmakers have seized this opportunity.

IFPRI'S TWO-PRONGED POLICY PACKAGE

IFPRI has proposed two sets of policy actions—an emergency package and a resilience package.

The **emergency package** of actions to take immediately consists of the following:

1. Expand emergency responses and humanitarian assistance to food-insecure people.
2. Eliminate agricultural export bans and export restrictions.
3. Undertake fast-impact food production programs in key areas.
4. Change biofuel policies.

The **resilience package** of actions to phase in now, but whose impact will take longer to be felt, consists of the following:

5. Calm markets with the use of market-oriented regulation of speculation, shared public grain stocks, strengthened food-import financing, and reliable food aid.
6. Invest in social protection.
7. Scale up investments for sustained agricultural growth.
8. Complete the Doha Round of World Trade Organization negotiations.

WELTHUNGERHILFE'S 10-POINT PLAN FOR ACTION

1. Food aid needs to be linked to development measures ensuring food security.
2. Rural development must again become a focal point of development cooperation, and more money must be provided for agriculture.
3. Governments of developing countries need to invest in rural infrastructure, promote farmers' organizations, allow access to land and agricultural inputs, improve processing, and promote transportation and store keeping.
4. More emphasis must be put on rural research and technical advice to increase worldwide production and productivity.
5. Investment is needed in education and health.
6. Fair trade is a must for developing countries; the European Union and the industrialized countries must cancel their import restrictions and abolish agricultural export subsidies.
7. Social security systems have to be established to protect the needy in times of crisis.
8. Biofuel production in the industrialized countries based on imports from developing countries should be deferred and reconsidered.
9. Consumers in industrialized countries have to get used to higher food prices, and farming must pay for itself without subsidies.
10. Nongovernmental organizations, which help organize farmers and highlight rural people's concerns, must be strengthened.

CONCERN'S CALL FOR IMMEDIATE ACTION

1. In the short term, the poor need access to emergency supplies of food or cash with which to buy food, and donors should thus provide increased funding to the World Food Programme (WFP) to provide food aid to those who need it.
2. Support should be provided to governments of developing countries so they can establish cash-based social protection systems to ensure that the very poorest people can meet their basic needs.
3. Nutritional surveillance in developing countries by Ministries of Health and other institutions needs to be supported and scaled up so that policymakers and others can identify the local impacts of the crisis.
4. Low-cost inputs or stronger credit programs should be provided to small and marginal farmers to give them better access to seeds, tools, and fertilizers.
5. In the short term, the United States and the European Union should review their biofuel policies, including the impact of inappropriate targets for biofuel production.
6. In the longer term, governments in the poorest countries, with the support of the international community, must reinvest in agriculture, and in particular in the food security of the most vulnerable populations and the productivity of marginal farmers.

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