

GLOBAL HUNGER INDEX

The Challenge of Hunger 2008



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**“The right to adequate food
is realized when every man,
woman and child ... has
physical and economic access
at all times to adequate food
or means for its procurement.”**

General Comment 12 of UN Economic and Social Council

Hunger: Major Threat in 33 Countries

THE 2008 GLOBAL HUNGER INDEX (GHI) report comes at a time of dramatic changes in world food markets, with high food prices threatening the food security of millions of vulnerable households. Hunger and malnutrition are back in the headlines.

This is the third year that the International Food Policy Research Institute (IFPRI) has calculated this multidimensional measure of global hunger. The 2006 and 2007 GHI reports received a great deal of public attention and were the subject of extensive debate. By stimulating discussion, the GHI reports have served as an important tool to highlight the countries and regions where action is most needed. They are important ways of recording the state of hunger worldwide and country by country and of supporting lobby work and advocacy on both national and international platforms.

It is important to remember that this report offers a picture of the past, not the present. The calculation of the GHI is limited by the collection of data by various governments and international agencies. The 2008 GHI incorporates data only until 2006 – the most recent available. This GHI report therefore does not reflect recent increases in food and energy prices.

The report does, however, highlight the countries and regions facing the greatest risk in the current context of high food prices. 33 countries have levels of hunger that are alarming or extremely alarming. The index shows that South Asia and Sub-Saharan Africa continue to suffer from high levels of hunger, and whereas South Asia has made rapid progress in combating hunger, Sub-Saharan Africa has made only marginal progress. For hungry and malnourished people in these regions, rising food prices pose serious threats. People who already had too little food for a healthy life are now finding that they can afford even less.

Hunger is one of the most important problems the world faces, and rapid progress in overcoming it is long overdue. IFPRI is working to produce analysis of the status of hunger and policy options to combat it. Deutsche Welthungerhilfe and Concern offer direct support to undernourished people in hunger crisis zones and work with partners on short- and long-term solutions to chronic malnutrition. We hope that this report stimulates much-needed discussion among other actors over precisely what actions should be taken to overcome hunger worldwide, and who should take them, so that all people can live free of hunger and malnutrition.



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Summary

THE 2008 GLOBAL HUNGER INDEX (GHI) shows that the world has made slow progress in reducing food insecurity since 1990, with dramatic differences among regions and countries. In the nearly two decades since 1990, some regions – South and Southeast Asia, the Near East and North Africa, and Latin America and the Caribbean – have made significant headway in improving food security. Nevertheless, the GHI remains high in South Asia. The GHI is similarly high in Sub-Saharan Africa, where progress has been marginal since 1990.

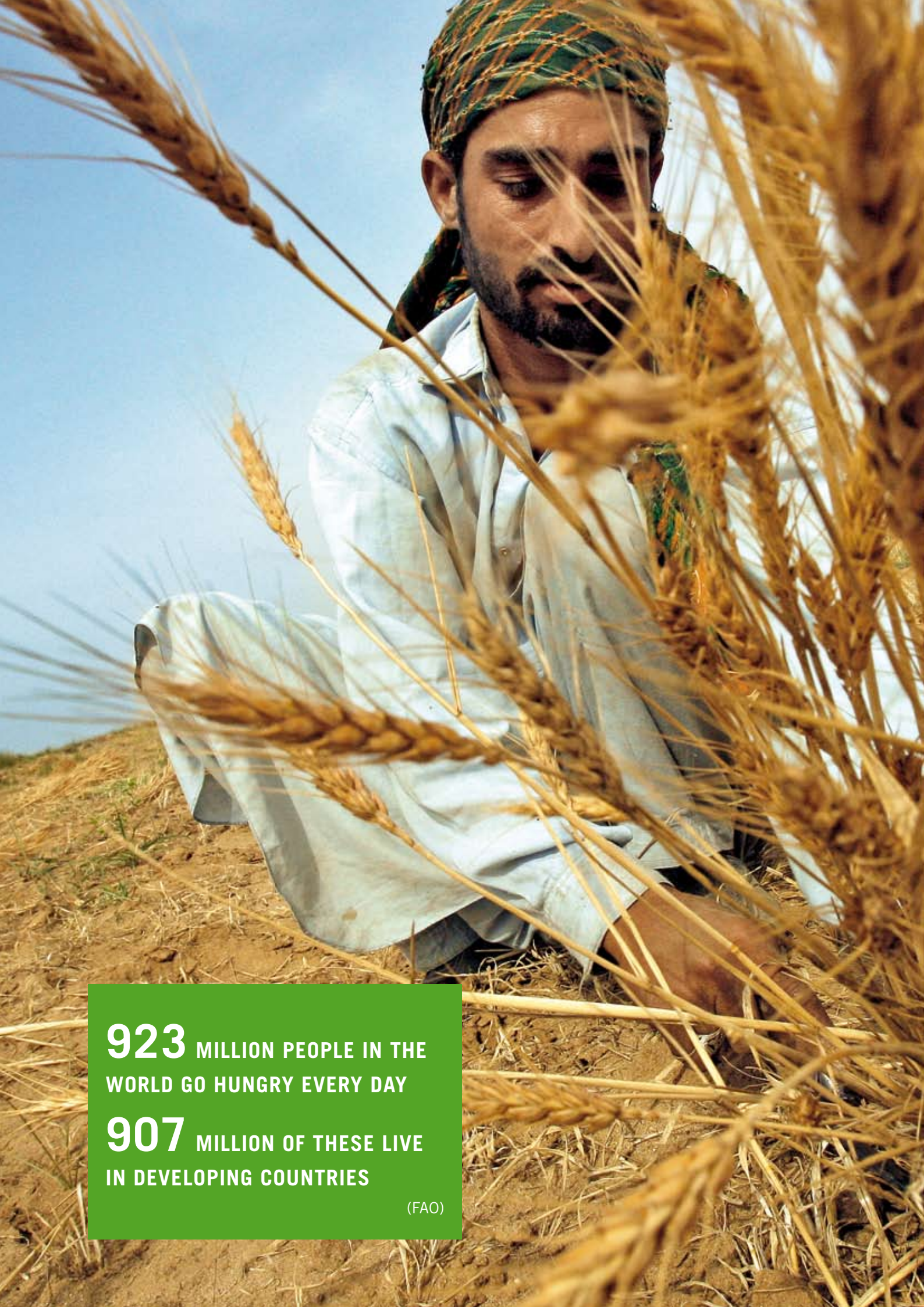
The GHI level in the world as a whole remains serious. The countries with the most worrisome hunger status and the highest 2008 GHI scores are predominantly in Sub-Saharan Africa, with the Democratic Republic of Congo, Eritrea, Burundi, Niger, and Sierra Leone at the bottom of the list. Several dozen countries in various regions have GHI scores categorized as low.

Hunger is closely tied to poverty, and countries with high levels of hunger are overwhelmingly low- or low-middle-income countries. Sub-Saharan Africa and South Asia are the regions with the highest GHI scores and the highest poverty rates.

The recent advent of higher food prices has uneven effects across countries, depending on a range of factors, including whether countries are net importers or exporters of food. Among the countries for which the GHI is calculated, net cereal importers, for example, greatly outnumber exporters, implying that many more countries combating hunger are likely to suffer from higher prices than benefit from them. Higher food prices have also caused violent and nonviolent protests in dozens of countries.

In this context of higher food prices, prospects for improving food and nutrition security do not appear favorable, given that at least 800 million people were food insecure even before the food price crisis hit. Higher food prices cut into poor households' food budgets, with particularly serious risks for undernourished infants and children. High prices also reduce the amount of food aid that donors can supply with a given amount of funds.

Combating the food crisis will require more food aid for poor people; much greater investments in agriculture, especially the small farm sector; more investment in social protection programs and social sectors like education and health; reforms to create a fair world trading system; changes to biofuel policies; measures to calm global food markets; better data collection and improved monitoring of the food and nutrition situation; and more support for non-governmental organizations that work on behalf of poor people in developing countries.



923 MILLION PEOPLE IN THE
WORLD GO HUNGRY EVERY DAY

907 MILLION OF THESE LIVE
IN DEVELOPING COUNTRIES

(FAO)

The Concept of the Global Hunger Index

The Global Hunger Index (GHI)¹ – a tool for regularly tracking the state of global hunger and malnutrition developed by IFPRI – shows that the world is making slow progress in reducing food insecurity. Given that the Millennium Development Goals are benchmarked against the year 1990, the GHI also tracks change since then. In the nearly two decades since 1990, some regions – South and Southeast Asia, the Near East and North Africa, and Latin America and the Caribbean – have made significant headway in improving food security. Nevertheless, the GHI remains high in South Asia. The GHI is at a similarly high level in Sub-Saharan Africa, where progress has been marginal since 1990.

FOOD PRICE CRISIS HITS CHILDREN

This year's index reflects data until 2006 – the most recent available global data – and thus does not yet take account of the latest changes in the world food system (see page 8 for information on how the GHI is calculated). This lag in the availability of data highlights the importance of food information systems. More complete and up-to-date monitoring of developments in developments related to agriculture, food, and nutrition at global, regional, and national levels would facilitate better responses. This need is especially great in a situation like the one the world is now facing; from 2006 to 2008 the global food and agricultural environment has been changing rapidly. A number of factors

are converging to raise prices for agricultural commodities to their highest levels in decades, and farmers find themselves operating in a context of high oil prices and increasingly extreme weather. Food prices appear likely to remain high in the near term, leading to food and nutrition insecurity for poor people around the globe (von Braun et al. 2008).

Particularly worrisome is the potential effect of the food price crisis on poor children. Rising food prices may prevent even more poor households from providing pregnant mothers and infants and young children with adequate nutrition, an outcome that can have irreversible long-term consequences for children's future health and productivity.

Overcoming these challenges to food security and nutrition will require actions to address emergency food needs as well as steps to improve longer-term agricultural productivity and strengthen safety nets. In this risky and changing environment, the GHI can be useful in highlighting key trends and the geographic areas of greatest vulnerability.

¹ For background information on the concept, see Wiesmann (2004).

WHAT IS THE GLOBAL HUNGER INDEX?

The GHI is a multidimensional approach to measuring hunger and malnutrition. It 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).

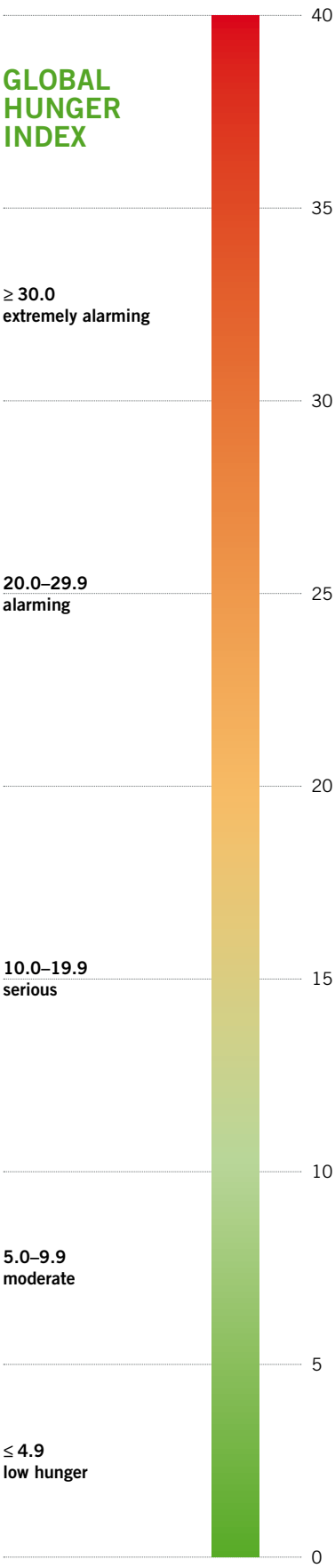
This multidimensional approach to calculating the GHI offers several advantages. It captures various aspects of hunger and undernutrition in one index number, thereby presenting a quick overview of a complex issue. It takes account of the nutrition situation not only of the population as a whole, but also of a physiologically vulnerable group – children – for whom a lack of nutrients creates a high risk of illness and death. In addition, by combining independently measured indicators, it reduces the effects of random measurement errors.

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. Values less than 4.9 reflect low hunger, values between 5 and 9.9 reflect moderate hunger, values between 10 and 19.9 indicate a serious problem, values between 20 and 29.9 are alarming, and values exceeding 30 are extremely alarming.

The prevalence of underweight component in the 2008 GHI is based on the World Health Organization (WHO) Child Growth Standards used for the calculation of child malnutrition, which were revised in 2006 (for more information, see WHO 2006). The prevalence of underweight for the 1990 GHI has also been recalculated to reflect the newly introduced WHO reference standards. Consequently, countries' 2008 GHI values and revised 1990 values are not directly comparable to previously calculated GHI values (for more information on previous GHI calculations, see Wiesmann 2006a, b).

Data for the 2008 GHI are from 2001 to 2006. Specifically, the data on the proportion of undernourished are for 2002–2004 (FAO 2006b); data on child mortality are for 2006 (UNICEF 2008); and data on child malnutrition are for the latest year of the period 2001–2006 for which data are available (WHO 2008). Data for the 1990 GHI are for 1988–1992. Specifically, the data on the proportion of undernourished are for 1990–1992 (FAO 2006a); data on child mortality are for 1990 (UNICEF 2006); and data on child malnutrition are for 1988–1992 (WHO 2008). See appendix table for background data on 1990 GHI and 2008.

The 2008 GHI is calculated for 120 countries for which data on the three components are available and measuring hunger is considered most relevant (some higher-income countries are excluded from the GHI calculation because hunger has been largely overcome).





Darfur has experienced civil war for years. About three million people are currently refugees. Because they cannot work on their fields anymore, they have to be supplied with food in refugee camps.



In addition to food price increases, climate change – while not addressed in this report – is yet another factor that will exacerbate global poverty and further impede endeavours to overcome it.



PLUS: SINCE 1990 PERU
AND KUWAIT HAVE REDUCED THE
GHI BY MORE THAN 70%

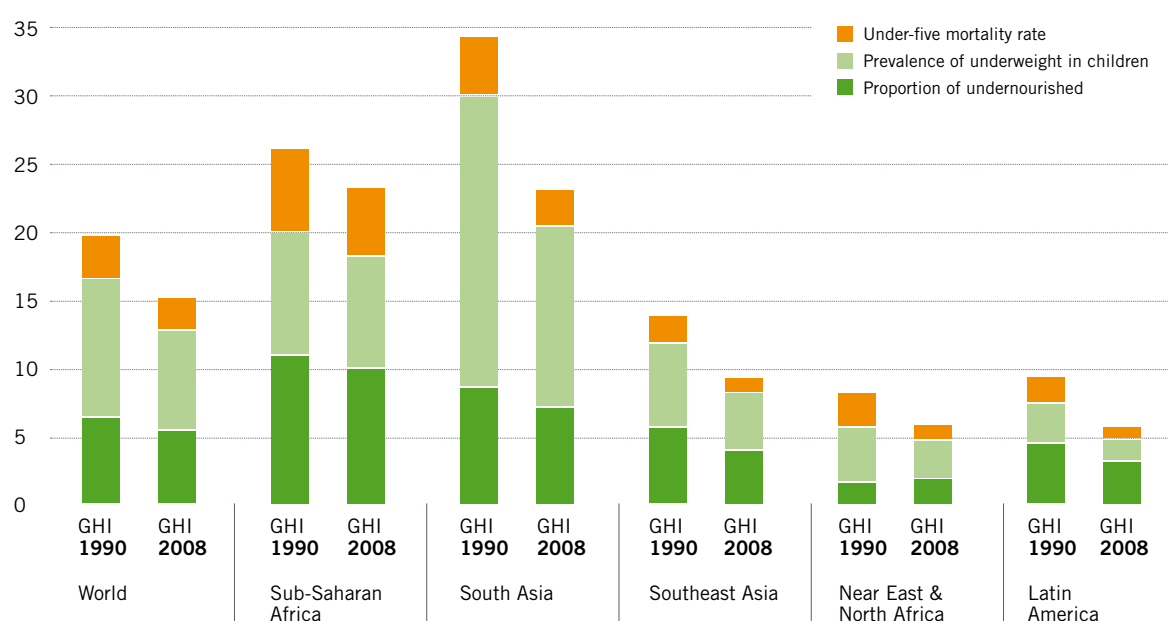
MINUS: CONGO HAS IN-
CREASED GHI BY MORE THAN 67%

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. The proportion of underweight children declined the most – by 5.9 points – while the under-five mortality rate and the proportion of undernourished also showed some improvement. 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.

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 1990–1992; data on the prevalence of underweight in children under five are for 1988–1992; and data on child mortality are for 1990. For the 2008 GHI, data on the proportion of undernourished are for 2002–2004, 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.

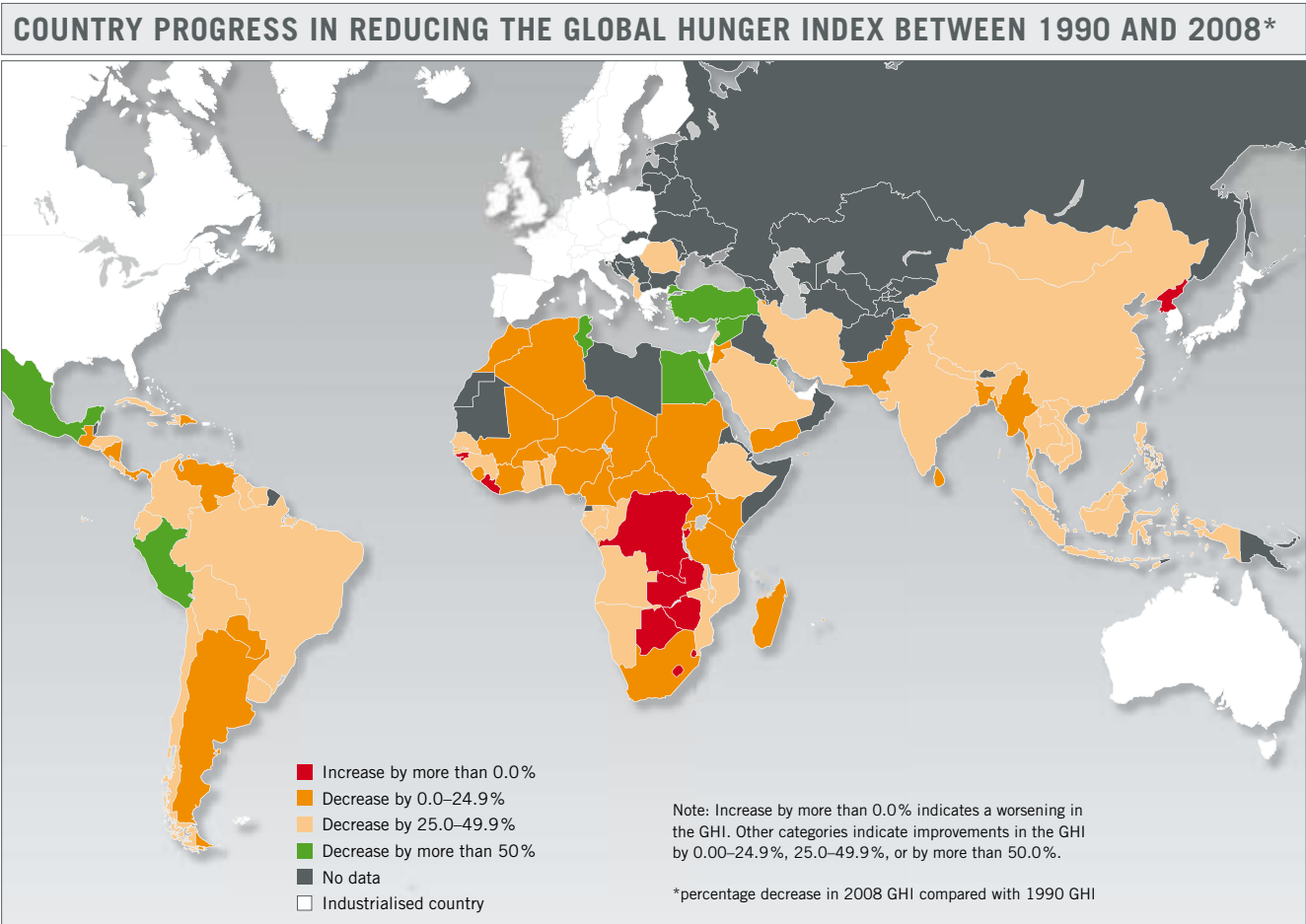
Sub-Saharan Africa and South Asia share the highest regional GHI scores (23.3 and 23.0 respectively), but food insecurity in the two regions stems from different sources. In South Asia, the major problem is a high prevalence of underweight in children under five, which stems from the lower nutritional 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.

CONFLICT EXACERBATES HUNGER

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 and no country in the region is among the 10 best perform-

ers in improving the GHI since 1990. Kuwait's seemingly remarkable progress in reducing hunger is mainly due to its unusually high level in 1990, when Iraq invaded the country. Strong agricultural growth and the lowering of inflation have contributed to the rapid progress of the second-best performer – Peru.

While it is laudable that some countries were able to cut their GHI by more than half, the 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. Conflict and political instability in Burundi, Comoros, the Democratic Republic of Congo, Guinea-Bissau, and Liberia have widened hunger. In Botswana and Swaziland, the high prevalence of HIV/AIDS, coupled with high inequality, have severely undermined food security despite greater national wealth. Negative trends in economic growth and food production in North Korea have led to higher rates of undernourishment and underweight in children.





Lack of access to food in Congo is having catastrophic consequences. The main reason for this are armed conflicts over its many natural resources. The result of the “curse of resources” is that the security situation in many parts of the country is very poor.

GHI-WINNERS AND LOSERS FROM 1990 TO 2008

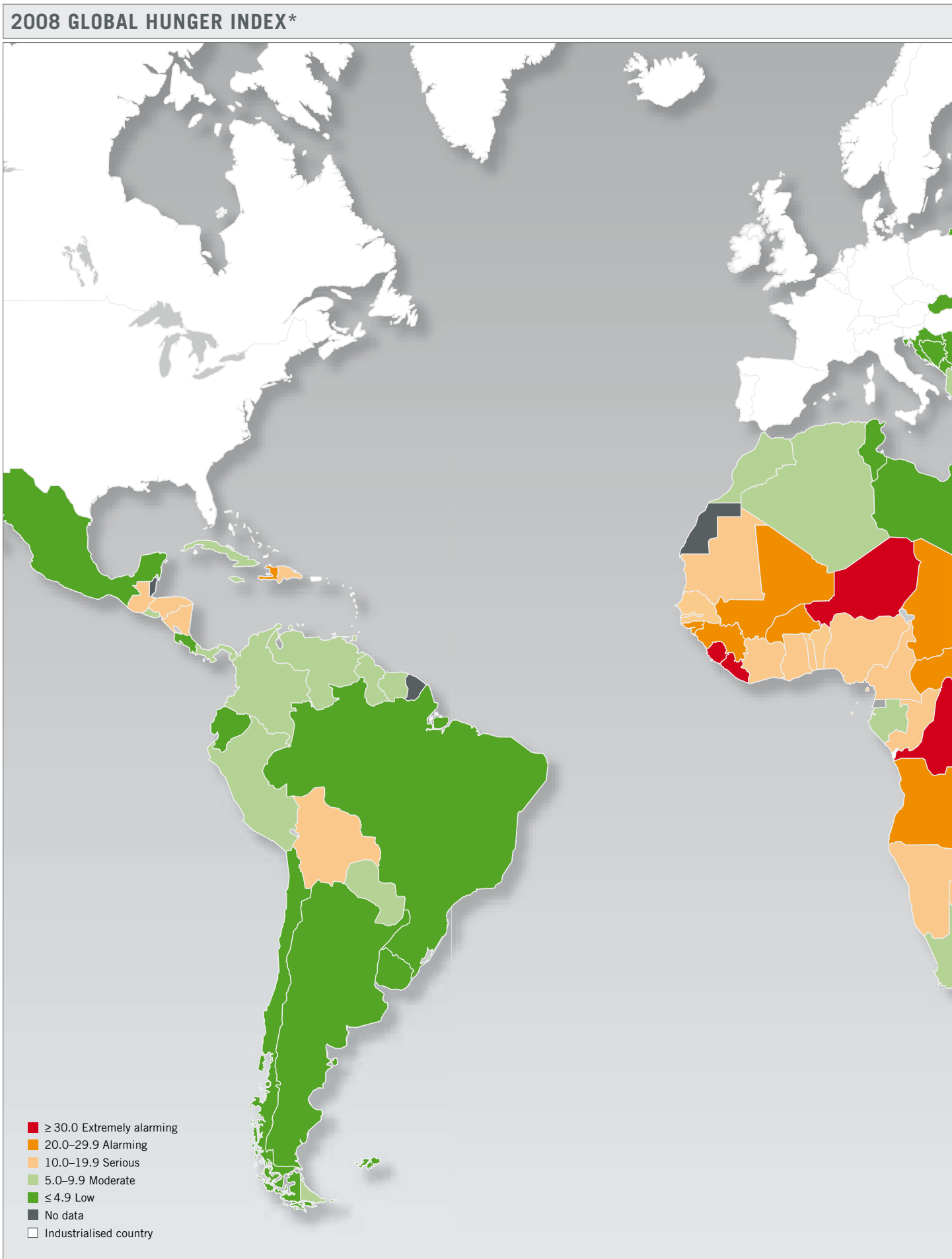
10 Best-Performing Countries (percentage change in GHI)

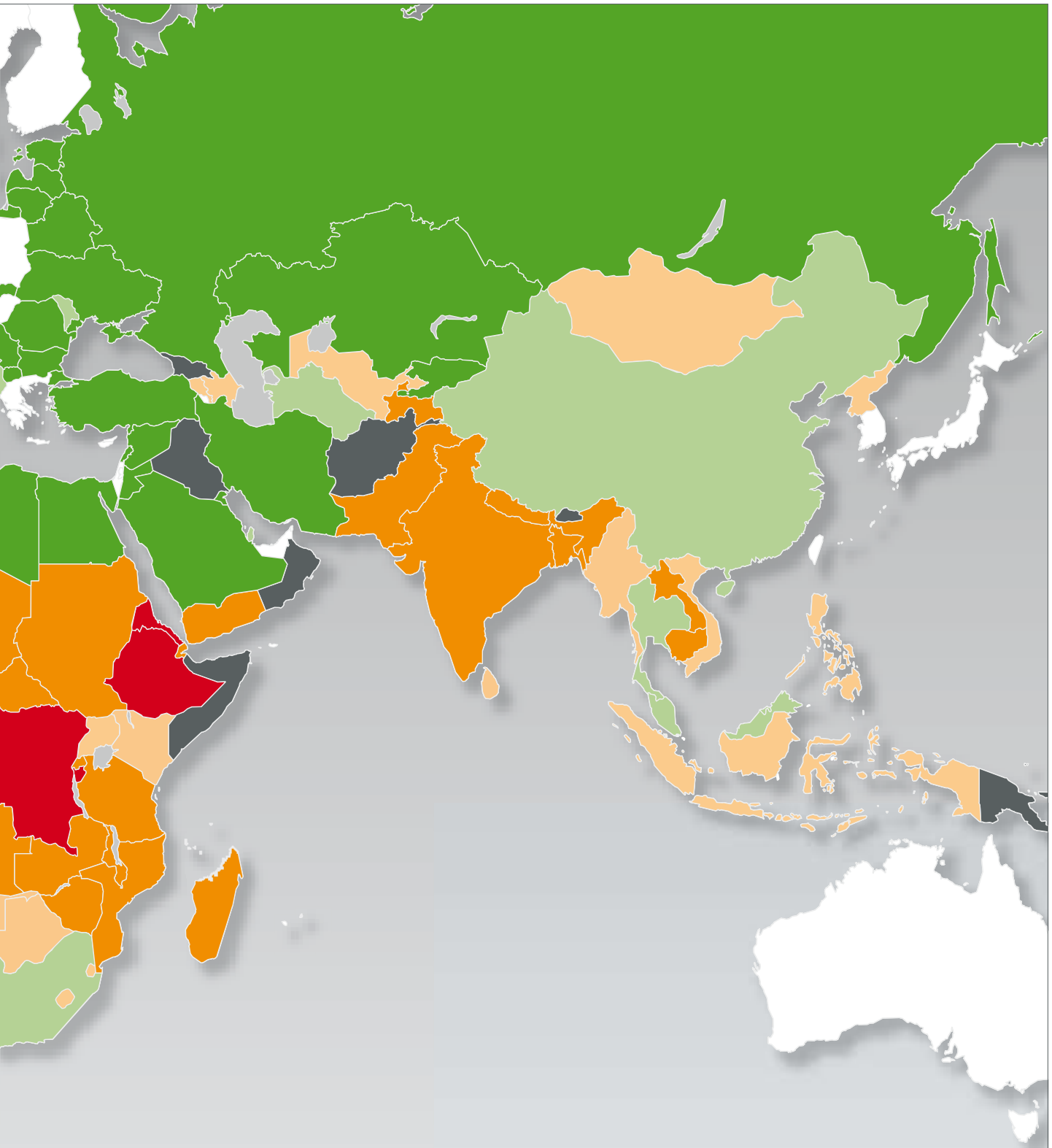
Kuwait	-72.4
Peru	-71.1
Syrian Arab Republic	-51.7
Turkey	-51.0
Mexico	-50.8
Egypt	-50.1
Vietnam	-47.2
Thailand	-45.9
Brazil	-45.6
Iran	-43.9

10 Worst-Performing Countries (percentage change in GHI)

Congo, Dem. Rep.	+67.6
North Korea	+42.8
Swaziland	+32.3
Guinea-Bissau	+19.3
Zimbabwe	+18.0
Burundi	+17.4
Liberia	+16.6
Comoros	+9.9
Botswana	+7.3
Zambia	+0.3

Note: Includes countries with 1990 GHI greater than 5.





Note: For the 2008 GHI, data on the proportion of undernourished are for 2002–2004, 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.

* by severity



PHOTO: GIDEON MENDEL/CORBIS

The spread of HIV/AIDS results in chronic illness and death for numerous young people – few of whom have access to treatment or specialised drugs. This loss has dire consequences for overall development and particularly for food production in the agricultural sector.

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. War and violent conflict have been major causes of widespread poverty and food insecurity in most of the countries with high GHI scores. Another common pattern is the lack of general freedom in terms of political rights and civil liberties. All 15 countries with the highest GHI scores have been consistently rated by the Freedom House Index as non-free or partially free in the period 2006–2008 (Freedom House 2008). Eritrea and the Democratic Republic of Congo currently have by far the highest proportion of undernourished – 75 and 74 percent of the population, respectively. India, Yemen, and Timor-Leste have the highest prevalence of underweight in children under five – more than 40 percent in all three countries. Sierra Leone and Angola have the highest under-five mortality rates – 27 and 26 percent, respectively.

ALL COUNTRIES IN COMPARISON

The Global Hunger Index by county, 1990 and 2008

Global Hunger Index							
Rank	Country	1990	2008	Rank	Country	1990	2008
1	Mauritius	6.1	5	59	Djibouti	–	20.9
2	Jamaica	8	5.1	59	Guinea	29.3	20.9
3	Moldova	–	5.4	61	Pakistan	25.3	21.7
4	Cuba	7.3	5.5	62	Malawi	32.2	21.8
5	Peru	19.5	5.6	63	Rwanda	28.3	22.3
6	Trinidad and Tobago	8	5.9	64	Cambodia	32.4	23.2
7	Algeria	7.4	6	65	Burkina Faso	25.1	23.5
8	Albania	10.5	6.3	66	India	32.5	23.7
9	Turkmenistan	–	6.4	67	Zimbabwe	20.2	23.8
10	El Salvador	9.7	6.5	68	Tanzania	26.1	24.2
10	Malaysia	9.5	6.5	69	Haiti	35.9	24.3
10	Morocco	7.7	6.5	70	Bangladesh	32.3	25.2
13	Colombia	9.6	6.7	71	Tajikistan	–	25.9
14	South Africa	7.4	6.9	72	Mozambique	40.9	26.3
15	China	11.6	7.1	73	Mali	29.6	26.9
16	Fiji	12.7	7.3	74	Guinea-Bissau	23	27.5
17	Suriname	10.7	7.5	75	Central African Republic	32	28
18	Gabon	11.3	7.6	76	Madagascar	29.1	28.8
19	Venezuela	8.3	7.7	77	Comoros	26.4	29.1
20	Paraguay	8.3	7.9	78	Zambia	29.1	29.2
21	Guyana	14.6	8.6	79	Angola	39.8	29.5
22	Panama	10.1	8.9	80	Yemen, Rep.	30.7	29.8
23	Thailand	18.4	9.9	81	Chad	37.5	29.9
24	Armenia	–	10.2	82	Ethiopia	44	31
25	Azerbaijan	–	10.4	83	Liberia	27.3	31.8
26	Uzbekistan	–	11.2	84	Sierra Leone	32.4	32.2
27	Indonesia	16	11.3	85	Niger	38	32.4
28	Honduras	16.1	11.4	86	Burundi	32.6	38.3
29	Bolivia	16.5	11.7	87	Eritrea	–	39
30	Dominican Republic	14	12	88	Congo, Dem. Rep.	25.5	42.7
31	Mongolia	18.9	12.1				
32	Vietnam	23.9	12.6				
33	Nicaragua	16.4	12.8				
34	Ghana	24.4	13.9				
35	Philippines	18.9	14				
36	Lesotho	14.2	14.3				
36	Namibia	21.4	14.3				
38	Guatemala	16.1	14.6				
39	Myanmar*	18.7	15				
39	Sri Lanka	19.1	15				
41	Benin	22.8	15.1				
42	Côte d'Ivoire	19.4	15.3				
43	Senegal	22.1	15.4				
44	Uganda	19.9	17.1				
45	Gambia, The	18.4	17.3				
46	Mauritania	–	17.6				
47	Swaziland	13.4	17.7				
48	Botswana	16.7	17.9				
49	Togo	23	18.2				
50	Nigeria	23.7	18.4				
50	Timor-Leste	–	18.4				
52	Cameroon	22	18.7				
53	North Korea*	13.1	18.8				
54	Congo, Rep.	26.2	19.1				
55	Kenya	23.5	19.9				
56	Sudan*	24.5	20.5				
57	Lao PDR	28.1	20.6				
57	Nepal	27.6	20.6				

Global Hunger Index								
Country	1990	2008	Country	1990	2008	Country	1990	2008
Argentina	<5	<5	Latvia	–	<5			
Belarus	–	<5	Lebanon	5.1	<5			
Bosnia and Herzegovina	–	<5	Libya*	–	<5			
Brazil	7.8	<5	Lithuania	–	<5			
Bulgaria	–	<5	Macedonia	–	<5			
Chile	<5	<5	Mexico	8.1	<5			
Costa Rica	<5	<5	Romania	<5	<5			
Croatia	–	<5	Russian Federation	–	<5			
Ecuador	6.8	<5	Saudi Arabia	6.9	<5			
Egypt, Arab Rep.	8.6	<5	Serbia and Montenegro	–	<5			
Estonia	–	<5	Slovak Republic	–	<5			
Iran, Islamic Rep.*	8.3	<5	Syrian Arab Republic	9.6	<5			
Jordan	<5	<5	Tunisia	<5	<5			
Kazakhstan	–	<5	Turkey	6.2	<5			
Kuwait	12.6	<5	Ukraine	–	<5			
Kyrgyz Republic	–	<5	Uruguay	5.2	<5			

Note: Countries with GHI of less than 5 are not included in the ranking. Differences in the GHI of these countries are minimal, and for some countries marked with an asterisk the underlying data are unreliable.
Countries with identical 2008 GHI are ranked equally.



969 MILLION PEOPLE LIVE
ON LESS THAN US\$1 A DAY

17% OF THOSE LIVE ON
LESS THAN US\$0.50 A DAY

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, the table on page 20 shows that 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. The only low-income country with a low level of hunger is the Kyrgyz Republic, and the only upper-middle-income country with a serious level of hunger is Botswana.

POVERTY IS HIGHEST IN AFRICA

Increases in the incomes of the poor may not, however, have immediate effects on all three GHI indicators. Incomes may have a more immediate impact on the proportion of people who are food-energy deficient, but the effects on child malnutrition and child mortality may take longer to unfold. Al-

so, how well increasing incomes translate into improved nutrition depends on investments in basic health and education services, sanitation, and safe water supply.

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 (Ahmed et al. 2007), 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? It turns out that not all poverty is the same. IFPRI researchers have divided the population living on less than \$1 a day into three categories according to the depth of their poverty: (1) the subadjacent poor are those living on between \$0.75 and \$1 a day; (2) the medial poor are those living on between \$0.50 and \$0.75 a day; and (3) the ultra poor are those living on less than \$0.50 a day.

POVERTY: LIVING WITH LESS THAN ONE DOLLAR A DAY

Subadjacent poor	\$0.75 – \$1	485 million people
Medial poor	\$0.50 – \$0.75	323 million people
Ultra poor	less than \$0.50	162 million people

Source: Ahmed et al. 2007

COUNTRIES BY INCOME¹ AND GLOBAL HUNGER INDEX SEVERITY

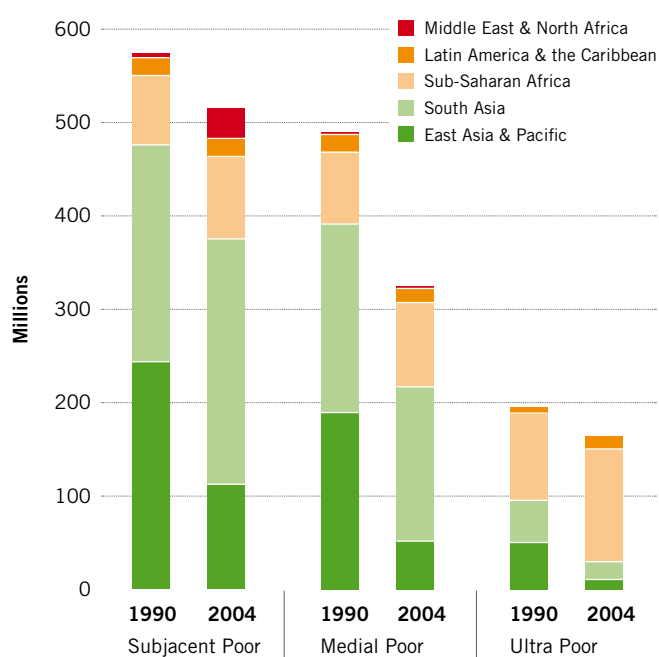
GHI	≤ 4.9 (low)	5.0 to 9.9 (moderate)	10.0 to 19.9 (serious)	20.0 to 29.9 (alarming)	≥ 30.0 (extremely alarming)
Low income	Kyrgyz Republic		Benin	Bangladesh	Burundi
			Côte d'Ivoire	Burkina Faso	Congo, Dem. Rep.
			Gambia	Cambodia	Eritrea
			Ghana	Central African Republic	Ethiopia
			Kenya	Chad	Liberia
			Mauritania	Comoros	Niger
			Mongolia	Guinea	Sierra Leone
			Myanmar*	Guinea-Bissau	
			Nigeria	Haiti	
			North Korea*	India	
			Senegal	Lao PDR	
			Timor-Leste	Madagascar	
			Togo	Malawi	
			Uganda	Mali	
			Uzbekistan	Mozambique	
			Vietnam	Nepal	
				Pakistan	
				Rwanda	
				Sudan*	
Low-middle income	Belarus*	Albania	Armenia	Tajikistan	
	Bosnia and Herzegovina	Algeria	Azerbaijan	Tanzania	
	Ecuador	China	Bolivia	Yemen, Rep.	
	Egypt, Arab Rep.	Colombia	Cameroon	Zambia	
	Iran, Islamic Rep.*	Cuba	Congo, Rep.	Zimbabwe	
	Jordan	El Salvador	Dominican Republic		
	Macedonia	Fiji	Guatemala		
	Syrian Arab Republic	Guyana	Honduras		
	Tunisia	Jamaica	Indonesia	Angola	
	Ukraine	Moldova	Lesotho	Djibouti	
		Morocco	Namibia		
		Paraguay	Nicaragua		
Upper-middle income	Argentina	Peru	Philippines		
	Brazil	Suriname	Sri Lanka		
	Bulgaria	Thailand	Swaziland		
	Chile	Turkmenistan			
	Costa Rica				
	Croatia	Gabon	Botswana		
	Kazakhstan	Malaysia			
	Latvia	Mauritius			
	Lebanon	Panama			
	Libya*	South Africa			
	Lithuania	Venezuela, RB			
	Mexico				
	Romania				
	Russian Federation				
	Serbia and Montenegro				
	Slovak Republic				
	Turkey				
	Uruguay				
High income	Estonia	Trinidad and Tobago	Note: For this 2008 GHI report, data on the proportion of undernourished are for 2002–2004, 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. For countries marked with an asterisk, the underlying data are unreliable. ¹ World Bank categorization		
	Kuwait				
	Saudi Arabia				



The poorest of the poor often live in rural areas. They neither have access to education, agricultural extension services or urgently needed health care. During bad weather many villages can only be reached with difficulty because there are no streets.

Of the 969 million poor people in the developing world in 2004, 162 million were ultra poor, 323 million were medial poor, and 485 million were subjacent poor. The ultra poor are overwhelmingly concentrated in Sub-Saharan Africa, which is the only region in the world in which there are more ultra poor than medial or subjacent poor. In contrast, most of Asia's poor live just below the dollar-a-day line; only a small minority of people are ultra poor. Between 1990 and 2004, the number of subjacent poor in South Asia actually increased, but at the same time, there was a significant decrease in the number of medial and ultra poor. Sub-Saharan Africa, in contrast, experienced increases in the number of poor people in each category, particularly in ultra poverty. The ultra poor often live in remote rural areas; are more likely to be ethnic minorities; and have less education, fewer assets, and less access to markets than better-off people. 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. Sub-Saharan Africa has large numbers of people in this situation.

SUBJACENT, MEDIAL, AND ULTRA POVERTY BY REGION, 1990 AND 2004



Source: Ahmed et al. 2007



FOUR-FOLD: INCREASE
IN THE PRICE OF RICE SINCE 2003

THREE-FOLD:
INCREASE IN THE PRICE OF CORN
SINCE 2003

Rising Food Prices

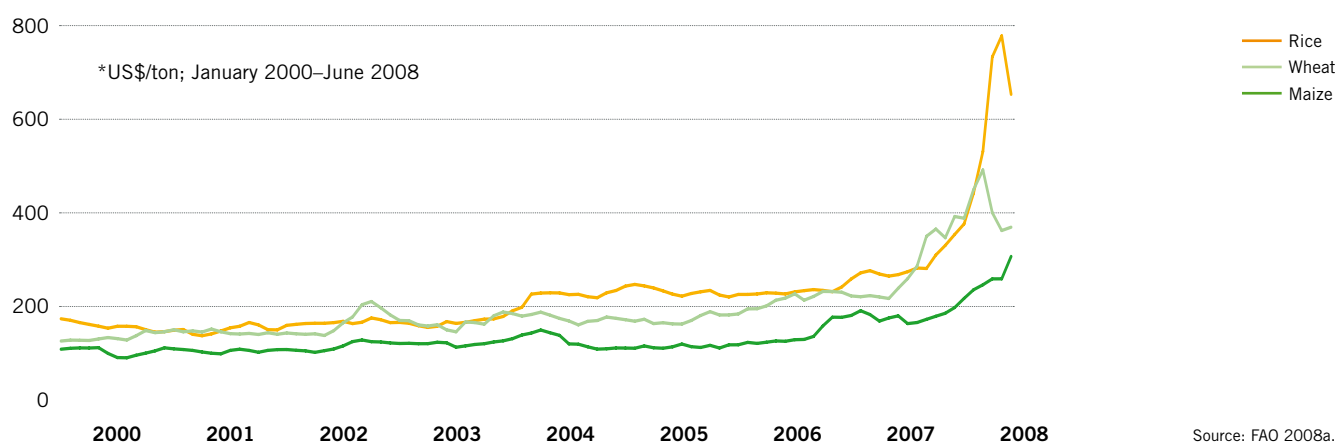
Intensify the Hunger Crisis

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 (IMF). Since 2005, however, real food prices have been on the rise. The Food and Agriculture Organization of the United Nations (FAO) 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.

By now, the causes of the price increases are familiar to many people: Economic growth and rising incomes in some developing countries have changed people's diets, pushed up demand for food, and depleted grain stocks in some coun-

tries. Biofuel mandates and generous subsidies in Europe and the United States have raised demand for maize and soybeans and distorted the comparative advantage of other countries on world markets. Rising oil prices have increased the cost of cultivating, fertilizing, and transporting crops. Severe weather in major grain-producing countries like Australia and Ukraine has cut into harvests. Insufficient increases in agricultural production have also been due to under investment in agricultural innovation and to land and water constraints. Some countries, including Argentina, Bolivia, China, Egypt, Ethiopia, India, and Pakistan, have implemented export restrictions that have constricted supplies on world markets and exacerbated the upward pressure on prices. And speculation on stock markets has played a role in rising food prices, although the extent of that role is not clear. There has been an enormous influx of speculative capital into food commodity markets that may not reflect actual supply and

DEVELOPMENT OF WORLD GRAIN PRICES*



demand but may instead be contributing to a cycle of speculative expectations and consequent price increases.

At the moment, food prices do not appear likely to fall to their 2000–03 levels, and price fluctuations may become even greater. Future price changes will depend, however, on decisions about biofuels, responses to climate change, and agricultural investment decisions. For instance, IFPRI research has shown that increased demand for biofuels between 2000 and 2007 accounted for 39 percent of the increase in the price of maize and 30 percent of the rise in the price of grains.

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. The table below shows that net cereal importers in the sample are substantially more than 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. The table on page 25 shows the relationship between the severity of the 2008 GHI and violent and nonviolent food protests.

GHI BY SEVERITY AND NET CEREAL EXPORTERS-IMPORTERS ¹				
< 4.9 (low)	5.0 to 9.9 (moderate)	10.0 to 19.9 (serious)	20.0 to 29.9 (alarming)	≥ 30.0 (extremely alarming)
Net importers	Net importers	Net importers	Net importers	Net importers
Belarus*	Albania	Armenia	Angola	Burundi
Bosnia and Herzegovina	Algeria	Azerbaijan,	Bangladesh	Congo, Dem. Rep.
Brazil	China	Republic of	Cambodia	Ethiopia
Chile	Colombia	Benin	Central African Republic	Liberia
Costa Rica	Cuba	Bolivia	Chad	Niger
Croatia	El Salvador	Botswana	Comoros	Sierra Leone
Ecuador	Fiji Islands	Cameroon	Djibouti	
Egypt	Gabon	Congo, Rep.	Guinea	
Estonia	Guyana	Côte d'Ivoire	Haiti	
Iran, Islamic Rep.*	Jamaica	Dominican Republic	Madagascar	
Jordan	Malaysia	Gambia	Malawi	
Kuwait	Mauritius	Ghana	Mozambique	
Kyrgyzstan	Morocco	Guatemala	Nepal	
Lebanon	Panama	Honduras	Pakistan	
Libya*	Peru	Indonesia	Rwanda	
Macedonia	South Africa	Kenya	Sudan*	
Mexico	Suriname	Mongolia	Tanzania	
Romania	Thailand	Namibia	Yemen	
Saudi Arabia	Trinidad and Tobago	Nicaragua	Zambia	
Syrian Arab Republic	Turkmenistan	Nigeria	Zimbabwe	
Tunisia	Venezuela, RB	North Korea*		
Turkey		Philippines	Net exporters	
Uruguay	Net exporters	Senegal	Burkina Faso	
	Moldova, Republic of	Sri Lanka	India	
Net exporters	Paraguay	Swaziland		
Argentina		Togo		
Bulgaria		Uganda		
Kazakhstan		Viet Nam		
Latvia				
Lithuania		Net exporters		
Russian Federation		Myanmar*		
Serbia and Montenegro		Uzbekistan		
Slovakia				
Ukraine				

Note: For the 2008 GHI, data on the proportion of under-nourished are for 2002–2004, 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. For countries marked with an asterisk, the underlying data are unreliable.

¹ cereal exports/imports measured as 2003–2005 average



One of the reasons for the rise in food prices is the emergence of bio-fuel production which competes with food production. This trajectory has to be adjusted: Climate protection cannot be achieved at the cost of food production and hunger relief.

A food protest is a strike, protest, or riot over food- or agriculture-related issues. A violent food protest is a food protest involving the use of physical force or resulting in casualties. It is important to remember that the 2008 GHI reflects data from 2001 to 2006 and not the actual hunger situation in 2008. Nonetheless, countries are unlikely to have achieved drastic improvements in their hunger situation between 2006 and 2008. From January 2007 to June 2008, one third of all countries for which 2008 GHI was calculated had a violent or non-violent protest, with multiple occurrences in Bangladesh, Brazil, Côte d'Ivoire, Egypt, Haiti, Indonesia, Mexico, Moroc-

co, Peru, Philippines, Senegal, and South Africa. 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. The political instability reflected in protests over food prices can, however, have a dampening effect on economic growth.

GHI BY SEVERITY AND FOOD PROTESTS, JANUARY 2007–JUNE 2008

< 4.9 (low)	5.0 to 9.9 (moderate)	10.0 to 19.9 (serious)	20.0 to 29.9 (alarming)	≥ 30.0 (extremely alarming)
Non-violent	Non-violent	Non-violent	Non-violent	Non-violent
Argentina	China	Bolivia	Bangladesh	Ethiopia
Brazil	El Salvador	Guatemala	India	Niger
Jordan	Peru	Nicaragua	Madagascar	
Lebanon	South Africa	North Korea*	Nepal	
Mexico	Trinidad and Tobago	Philippines		
		Uzbekistan	Violent	
	Violent		Burkina Faso	
	Egypt, Arab Rep.	Violent	Guinea	
	Malaysia	Cameroon	Haiti	
	Morocco	Côte d'Ivoire	Mozambique	
	Russia	Honduras	Pakistan	
	Thailand	Indonesia	Yemen, Rep.	
	Tunisia	Kenya		
		Mauritania		
		Senegal		

Note: For the 2008 GHI, data on the proportion of under-nourished are for 2002–2004, 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. For countries marked with an asterisk, the underlying data are unreliable.



BETTER CHILDHOOD NUTRITION IMPROVES ADULT PRODUCTIVITY

A recent IFPRI-led study found that Guatemalan boys who received a high-energy, high-protein supplement in the first two years of life earned on average 46 percent higher wages as adults, and boys who received the supplement in their first three years earned 37 percent higher wages on average, compared with boys who did not receive the supplement. After age three, the nutritional supplement had no

effect on hourly wages, implying young children have specific nutritional needs that must be met at specific times. The results also suggest that by leading to increased productivity in adulthood, improving the nutrition of very young children can help break the intergenerational cycle of poverty and hunger.

Source: Hoddinott et al. 2008.

Children Suffer Most from Malnutrition

Certain countries and regions, particularly in Sub-Saharan Africa, appear to be particularly vulnerable to the effects of high food prices owing to their already precarious food security (as reflected in the GHI) and their low level of income. How then are higher food prices likely to affect people's food and nutrition security?

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 (IFAD), 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 (WFP) declined by 15 percent in 2007, reaching their lowest level since 1961 (WFP 2008). Reduced food aid flows force food aid providers to make difficult choices about which countries, communities, and even households will receive aid.

CHILDHOOD SHAPES THE FUTURE

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 (such as its vitamin A, iron, or zinc content) – may have permanent consequences that include stunting, reduced cognition, and increased susceptibility to infectious disease and mortality. Recent research by IFPRI, Cornell University, and other collaborators shows that nutritional deficits in young children often could not be made up later. Child stunting, underweight, and wasting (indicators of malnutrition) were 4, 6, and 4 percentage points higher, respectively, among poor communities that participated in recuperative maternal and child health and nutrition programs than among those that participated in preventive programs (Ruel et al. 2008). Thus if households are forced to limit the nutrition of infants, even temporarily, or if food aid does not meet the nutritional needs of infants and children, the negative impacts could be enduring, even affecting future productivity.



NOW: RELIEF FOR THOSE
CURRENTLY HUNGRY

LONG-TERM:
INVESTMENT IN RESILIENCE OF
FOOD SYSTEM

Action Plans against Hunger

In a context of slow progress against hunger in many countries, and worsening hunger in some, higher food prices pose dire risks for millions of people. By reducing people's purchasing power, high prices force the poor to make difficult choices that are likely to cut into their food and nutrition security. Households make decisions to eat fewer meals and cheaper foods of lower nutritional value, decisions that can have particularly severe consequences for infants and children.

What can be done to ensure people's food and nutrition security in this rapidly changing environment? The following section presents perspectives from different partners – Welt-hungerhilfe, IFPRI and Concern – that derive from different experiences and contexts but which are broadly complementary: The most immediate task is to increase assistance to the poorest people, through food aid and income support. In the longer term, countries need to invest in raising agricultural productivity to help meet the burgeoning demand for food and thereby reduce the pressure on food prices.

IFPRI'S PERSPECTIVE ON THE FOOD CRISIS

IFPRI has proposed two sets of policy actions – an emergency package and a resilience package (von Braun et al. 2008). The emergency package of actions to take immediately consists of the following:

1. **Expand emergency responses and humanitarian assistance to food-insecure people.** National emergency agencies need to invest more in preparedness and mobilize their capacities to monitor and assist vulnerable populations, even in slow-onset emergencies like the current food price crisis.
2. **Eliminate agricultural export bans and export restrictions.** These restrictions have exacerbated food price increases,

worsening the situation for all net cereal importers.

3. **Undertake fast-impact food production programs in key areas.** Short-term action is needed to provide small farmers with access to seeds, fertilizers, and credit.
4. **Change bio-fuel policies.** Bio-fuels made from food crops should be halted or at least reduced, and more support should go toward developing bio-energy technologies that do not compete with food.

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.** It is infeasible to accumulate a global stock of grain immediately, but countries should make coordinated pledges for a physical grain reserve to meet humanitarian needs and a "virtual" global food commodity exchange that could respond in situations of excessively high grain prices (von Braun and Torero 2008).
6. **Invest in social protection.** Countries need to adopt comprehensive social protection programs that will both mitigate short-term risks for the poor and prevent harmful long-term consequences.
7. **Scale up investments for sustained agricultural growth.** Such investments would include expanded public spending for rural infrastructure, services, agricultural research, science, and technology.
8. **Complete the Doha Round of World Trade Organization (WTO) negotiations.** Even in the light of recent breakdowns in negotiations, the fact remains that rule-based trade needs to be strengthened. Although it may take some time, it should be easier for countries to agree to lower agricultural tariffs when market prices are high.

This is a period of great risk for the nutrition and health of millions of poor people, and policymakers need to act carefully. The world food crisis has already garnered serious attention from donor-country policymakers and international institutions, as illustrated by the World Bank's 10-Point Plan for the Food Crisis (World Bank 2008), the FAO's June 2008 summit on the food crisis (FAO 2008b), the statement on the crisis from the leaders of the Group of Eight (G8) (G8 2008), and the United Nations' comprehensive framework for action in response to the crisis (United Nations 2008).

A NEW POLICY NEEDED

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 spe-

cific 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.

WELTHUNGERHILFE'S PERSPECTIVE ON THE FOOD PRICE CRISIS

A 10-POINT PLAN FOR ACTION

- Food aid has to be linked to development measures ensuring food security.** Short-term food aid measures must lead to sustainable self-sufficiency according to the principle of help toward self-help.
- Rural development has to become a focal point of development co-operation once again, more money has to be provided for agriculture.** The focus of development measures has been directed towards city inhabitants in recent years and has to be diverted back to the rural population, which accounts for two out of three people suffering from hunger.
- The increase in food prices has to be used as an opportunity to boost the local production of crops and their marketing in the developing countries, to make rural areas profitable again and thus more attractive.** Governments of developing countries need to invest in their rural infrastructure, promote farmers' organizations, allow access to land and agricultural inputs (fertilizer, seed, credits), improve processing, and promote transportation and store keeping.
- More emphasis must be put on rural research and technical advice in order to increase the worldwide production and productivity and to replenish the reserves of food-stuffs.** Researchers have to develop solutions for increasing crop yields adapted to local areas and consistent with the criteria of sustainability and the principle of help toward self-help.
- Investment in education and health is necessary.** Improving educational opportunities is one of the most effective ways to fight hunger; the higher the level of education, the better the nutritional status.
- Fair trade is a must for developing countries.** The EU and the industrialised countries must cancel their import restrictions and abolish agricultural export subsidies.
- Social security systems have to be established to protect the needy in times of crisis.** Crises or crop failures in developing countries generally mean poverty and hunger. The traditional security system based mainly on family solidarity is not sufficient. Preventive measures like micro-insurance or basic social care systems are needed.
- Bio-fuel production in the industrialized countries based on imports from developing countries should be deferred and reconsidered.** Energy plants should not compete with food plants in view of empty grain stores and rising food prices. Climate protection goals must be achieved through energy conservation, efficiency improvements, and innovative energy generation technologies.
- Consumers in industrialized countries have to get used to higher food prices.** Farming has to pay for itself without subsidies. That is the only way to diminish market distortions and to strengthen agriculture in the developing countries.
- Nongovernmental organisations (NGOs) have to be strengthened.** NGOs help organize farmers, highlight rural people's concerns to governments, and even sometimes take over the tasks of government institutions in rural areas.



Female farmers in Burkina Faso till their fields with hoes. The yield is low in the Sahel. In order to increase productivity around 3,000 people in Kongoussi region are provided with agricultural extension services.

WELTHUNGERHILFE: RURAL DEVELOPMENT IS KEY TO ELIMINATE CAUSES

Three in four hungry people live in a rural environment: That's why Welthungerhilfe is committed to fighting hunger sustainably and have supported smallholders worldwide since its foundation. Wherever possible, experts work hand in hand with local partner organisations in the field of rural development.

In Burkina Faso – one of the poorest countries in the world – large-scale protests took place from February to April of 2008 because of the rise in food prices by 50 percent at the beginning of the year. Despite governmental price controls, a large proportion of the population can hardly afford staple foods. Crucial natural resources are threatened by climate change, floods make the situation worse.

This is where Welthungerhilfe enters with measures taken to empower people to help themselves. The agricultural sector is among the least productive in Africa. The causes: maladjusted cropping methods, low soil fertility and a poor infrastructure. Nearly 90 percent of the farmers pursue a sub-

sistence agriculture, the yield is hardly enough for their own needs. Many staple foods have to be imported. A rise in the cost of living has dramatic consequences, because by now many Burkinabés can only afford one meal per day.

In cooperation with the Burkina Faso farmers' organization Zood Noma, Welthungerhilfe counsels smallholders in the Koungoussi region. People are taught cultivation techniques, stone embankments prevent erosion and composting devices preserve soil fertility. By closely working together with bank cooperatives, they are granted access to micro-credits – for income-generating activities and the food supply during the dry season. Literacy courses and further education in the agricultural sector enhance the farmers' know-how and self-esteem.

In perspective, the long-term support through development cooperation plays a key role in eliminating the causes of hunger: rural development – and not only particular components of agriculture – requires not only more funding, it must become a fundamental focus of development cooperation again.



Schools are one aspect of the urgently needed development of infrastructure in rural areas.

PHOTO: CORDULA KROPKE/WELTHUNGERHILFE

CONCERN'S PERSPECTIVE ON THE FOOD PRICE CRISIS

CALL FOR IMMEDIATE ACTION

While Concern Worldwide recognizes that the root causes of the current food price crisis will take time to address, there are immediate actions which can be taken which will mitigate its impacts on the poorest people in the world.

1. In the short term, Concern believes that the poor need access to emergency supplies of food or, in certain circumstances, cash with which to buy food. To achieve this, the World Food Programme (WFP) must receive increased funding to provide essential food aid to those in need of it.
2. Support should be provided to governments of developing countries so they can provide cash-based social protection systems to ensure that the very poorest in these countries can access their basic needs in a budgetary predictable and reliable way.
3. Nutritional surveillance in developing countries by Ministries of Health and other institutions needs to be supported and scaled up to achieve the necessary coverage and quality so that policy-makers and others can identify the impacts of the crisis at a more local level, given geographical variations in food availability, access and quality. This is being done as part of the strengthening of health systems but will require prioritisation in particular countries.
4. Many of the world's poorest are small or marginal farmers who need access to seeds, tools, fertilizers, and credit to grow food for the coming year. Higher transportation costs and increased demand for such inputs increase their costs and put their availability increasingly

out of reach of the poorest farmers. Additional support, such as available and low costs inputs, or credit through a variety of channels, is required.

5. In the short term, the United States, the European Union, and many governments should urgently review their biofuel policies, which have had an impact on the world price of food. Such a review should look at the impact of inappropriate targets for biofuel production. It should also balance the displacement of food crops by biofuel crops and any negative impact on food prices with the energy and environmental goals necessary for a sustainable planet. In developing countries in particular, there is a need to ensure that essential staple crops are not displaced by biofuel crops to the extent that affordable food becomes unavailable to the poorest locally.
6. In the longer term, governments in the poorest countries, with the support of key donors and institutions of the international community, must undertake a serious reinvestment in agriculture, and in particular in the food security of the most vulnerable populations and the productivity of marginal farmers.

While this food crisis seems to have deeper roots and longer-term implications than previous food crises, Concern remains focused on the hunger of close to a billion of the world's population and on addressing this shameful situation. The food price crisis has served to bring the problem that the poorest face on a daily basis to the attention of the wider world and we need to harness the political will to address the food price crisis to actions to rid the world of hunger.

CONCERN: INJECTING CASH AT GRASSROOTS-LEVEL

For four decades Concern Worldwide has been responding to severe food crises and long term food insecurity in the developing world. The organisation is committed to improving livelihood and food security in rural communities and has been at the forefront of implementing innovative programs in these areas. In 2005/6 and 2006/7, Concern Worldwide in Malawi designed and delivered two emergency social transfer programs that have been evaluated as innovative and effective. Each has advanced thinking on best practice and what is feasible, both in emergency contexts and in the delivery of predictable protection.

Under the “Food and Cash Transfer” (FACT) project, a package was delivered to recipients half in cash and half in kind, the food package being provided in case supply shortages in local markets made food inaccessible to cash transfer recipients. The cash transferred was adjusted in line with movements in local food prices, to maintain constant food purchasing power throughout the hungry season. Adjustments were also made depending on household size. Lessons from this program were taken on board in the design of a

follow-up program in 2006/2007 called “Dowa Emergency Cash Transfers” project (DECT). This program also went further in terms of how the transfers were delivered.

A unique feature of the “Dowa Emergency Cash Transfers” (DECT) project was the use of smart-cards that were provided to each beneficiary household. The card was activated by fingerprint to prevent theft and corruption. In order to reach the 10,000+ beneficiary population at minimum inconvenience to them, Concern mapped out pay-points using criteria of convergence and convenience throughout the project area. These points were then used to disburse cash once a month for the five month duration of the intervention. A specially designed four-wheel drive vehicle served as a mobile bank. Altogether, 88 pay-days took place, and a total of MK 66,883,330 (Euro 338,000) was disbursed over the five-month period of the project.

Previous social transfer programs run by Concern have shown that the beneficiaries generally prefer cash rather than food as it empowers them to make choices on how to manage their lives and livelihoods. Concern also found that injecting cash at the grassroots level can generate a significant “multiplier” effect that benefits the whole community and the local economy.



PHOTO: CONCERN

After a drought in 2006 many peasants in Dowa District in Malawi lost their entire harvest. 10,000 families were on financial support for an interim period. Mobile banks made sure that they could provide food for themselves.

Appendix

DATA SOURCES AND CALCULATION OF THE GLOBAL HUNGER INDEX

THE GLOBAL HUNGER INDEX IS CALCULATED AS FOLLOWS

(1) $GHI = (PUN + CUW + CM)/3$

with GHI: Global Hunger Index

 PUN: proportion of the population that is undernourished (in %)

 CUW: prevalence of underweight in children under five (in %)

 CM: proportion of children dying before the age of five (in %)

All three index components are expressed in percentages and weighted equally. Higher GHI values indicate more hunger. The index varies between a minimum of 0 and a maximum of 100. However, the maximum value of 100 would only be reached if all children died before their fifth birthday, the whole population were undernourished, and all children under five were underweight.

Likewise, the minimum value of zero does not occur in practice, because this would mean there were no undernourished in the population, no children under five who were underweight, and no children who died before their fifth birthday.

GHI	Number of countries with GHI	Index components		
		Indicators	Reference years	Data sources
1990	95	Percentage of undernourished in the population ¹	1990-1992 ²	FAO 2006 and authors' estimates
		Prevalence of underweight in children under five	1988-1992 ³	WHO 2006 ⁴ and authors' estimates
		Under-five mortality	1990	UNICEF 2006
2008	120	Percentage of undernourished in the population ¹	2002-2004 ²	FAO 2006 and authors' estimates
		Prevalence of underweight in children under five	2001-2006 ⁵	WHO 2006 ⁴ and authors' estimates
		Under-five mortality	2006	UNICEF 2006

Notes: 1 Proportion of the population with calorie deficiency.
2 Average over a three year period.
3 Data collected from the year closest to 1990; where data for 1988 and 1992, or 1989 and 1991, was available, an average was used. The authors' estimates are for 1990.
4 Based on the World Health Organization (WHO) Child Growth Standards, which were revised in 2006 (for more information, see WHO 2006).
5 The latest data gathered in this period by authors.

The calculation of GHI scores is restricted to developing countries and countries in transition for which measuring hunger is considered most relevant. The table above provides an overview of the data sources for the Global Hunger Index.

The first column indicates the reference year of the GHI and the second column specifies the respective number of countries for which the Index can be calculated.

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DATA UNDERLYING THE CALCULATION OF THE GLOBAL HUNGER INDEX

Country	Proportion of undernourished in the population (%)		Prevalence of underweight in children under 5 years (%)		Under 5 mortality rate (%)		GHI	
	1990-92	2002-04	1988-92	2001-06	1990	2006	1990	2008
Afghanistan	—	—	—	28.1	26.0	25.7	—	—
Albania	12.9	6.0	14.0 ***	11.3 ***	4.5	1.7	10.5	6.3
Algeria	5.0	4.0	10.4 ***	10.2	6.9	3.8	7.4	6.0
Angola	58.0	35.0	35.4 ***	27.5	26.0	26.0	39.8	29.5
Argentina	2.0	3.0	4.6 ***	3.3	2.9	1.6	<5	<5
Armenia	—	24.0	4.8 ***	4.2	5.6	2.4	—	10.2
Azerbaijan	—	7.0	14.1 ***	15.4 ***	10.5	8.8	—	10.4
Bahrain	—	—	17.7 ***	13.6	1.9	1.0	—	—
Bangladesh	35.0	30.0	47.0 ***	38.8	14.9	6.9	32.3	25.2
Belarus*	—	4.0	14.4 ***	1.3	2.4	1.3	—	<5
Benin	20.0	12.0	29.8 ***	18.4	18.5	14.8	22.8	15.1
Bhutan	—	—	—	—	16.6	7.0	—	—
Bolivia	28.0	23.0	8.9	6.1	12.5	6.1	16.5	11.7
Bosnia and Herzegovina	—	9.0	6.8 ***	1.6	2.2	1.5	—	<5
Botswana	23.0	32.0	21.3 ***	9.3 ***	5.8	12.4	16.7	17.9
Brazil	12.0	7.0	5.7 ***	3.7	5.7	2.0	7.8	<5
Bulgaria	—	8.0	6.6 ***	2.5	1.8	1.4	—	<5
Burkina Faso	21.0	15.0	33.6 ***	35.2	20.6	20.4	25.1	23.5
Burundi	48.0	66.0	30.7 ***	30.7 ***	19.0	18.1	32.6	38.3
Cambodia	43.0	33.0	42.6 ***	28.4	11.6	8.2	32.4	23.2
Cameroon	33.0	26.0	19.0 ***	15.1	13.9	14.9	22.0	18.7
Central African Republic	50.0	44.0	28.8 ***	22.6 ***	17.3	17.5	32.0	28.0
Chad	58.0	35.0	34.4 ***	33.9	20.1	20.9	37.5	29.9
Chile	8.0	4.0	0.9 ***	1.0 ***	2.1	0.9	<5	<5
China	16.0	12.0	14.3 ***	6.8	4.5	2.4	11.6	7.1
Colombia	17.0	13.0	8.4 ***	5.1	3.5	2.1	9.6	6.7
Comoros	47.0	60.0	20.4 ***	20.4 ***	12.0	6.8	26.4	29.1
Congo, Dem. Rep.	31.0	74.0	24.9 ***	33.6	20.5	20.5	25.5	42.7
Congo, Rep.	54.0	33.0	14.2 ***	11.8	10.3	12.6	26.2	19.1
Costa Rica	6.0	5.0	2.7 ***	0.5 ***	1.8	1.2	<5	<5
Côte d'Ivoire	18.0	13.0	24.9 ***	20.2	15.3	12.7	19.4	15.3
Croatia	—	7.0	1.3 ***	0.9 ***	1.2	0.6	—	<5
Cuba	8.0	1.0	12.6 ***	14.7	1.3	0.7	7.3	5.5
Djibouti	53.0	24.0	—	25.6	17.5	13.0	—	20.9
Dominican Republic	27.0	29.0	8.4	4.2	6.5	2.9	14.0	12.0
Ecuador	8.0	6.0	6.6 ***	6.2	5.7	2.4	6.8	<5
Egypt, Arab Rep.	4.0	4.0	12.8 ***	5.4	9.1	3.5	8.6	<5
El Salvador	12.0	11.0	11.1	6.1	6.0	2.5	9.7	6.5
Eritrea	—	75.0	—	34.5	14.7	7.4	—	39.0
Estonia	—	3.0	3.5 ***	2.8 ***	1.6	0.7	—	<5
Ethiopia	73.7 ***	46.0	38.0 ***	34.6	20.4	12.3	44.0	31.0
Fiji	10.0	5.0	25.8 ***	15.1 ***	2.2	1.8	12.7	7.3
Gabon	10.0	5.0	14.7 ***	8.8	9.2	9.1	11.3	7.6
Gambia, The	22.0	29.0	18.0 ***	11.5 ***	15.3	11.3	18.4	17.3
Georgia	—	9.0	—	—	4.6	3.2	—	—
Ghana	37.0	11.0	24.1	18.8	12.0	12.0	24.4	13.9
Guatemala	16.0	22.0	24.1 ***	17.7	8.2	4.1	16.1	14.6
Guinea	39.0	24.0	25.3 ***	22.5	23.5	16.1	29.3	20.9
Guinea-Bissau	24.0	39.0	21.1 ***	23.4 ***	24.0	20.0	23.0	27.5
Guyana	21.0	8.0	14.0 ***	11.5	8.8	6.2	14.6	8.6
Haiti	65.0	46.0	27.4 ***	18.9	15.2	8.0	35.9	24.3
Honduras	23.0	23.0	19.5 ***	8.6	5.8	2.7	16.1	11.4
India	25.0	20.0	60.9 ***	43.5	11.5	7.6	32.5	23.7
Indonesia	9.0	6.0	29.8	24.4	9.1	3.4	16.0	11.3
Iran, Islamic Rep.*	4.0	4.0	13.6 ***	6.5 ***	7.2	3.4	8.3	<5
Iraq	—	—	—	7.1	5.3	4.6	—	—
Jamaica	14.0	9.0	6.7 ***	3.1	3.3	3.1	8.0	5.1
Jordan	4.0	6.0	4.8	3.6	4.0	2.5	<5	<5
Kazakhstan	—	6.0	5.0 ***	3.5	6.0	2.9	—	<5
Kenya	39.0	31.0	21.8 ***	16.5	9.7	12.1	23.5	19.9
Kuwait	24.0	5.0	12.2 ***	4.3 ***	1.6	1.1	12.6	<5
Kyrgyz Republic	—	4.0	3.7 ***	2.7	7.5	4.1	—	<5
Lao PDR	29.0	19.0	39.0 ***	35.4 ***	16.3	7.5	28.1	20.6
Latvia	—	3.0	2.8 ***	5.1 ***	1.8	0.9	—	<5
Lebanon	2.0	3.0	9.6 ***	3.4	3.7	3.0	5.1	<5

Note: *** indicates author's estimates. For countries marked with an *, data underlying the GHI are unreliable.

	Proportion of undernourished in the population (%)		Prevalence of underweight in children under 5 years (%)		Under 5 mortality rate (%)		GHI	
Country	1990-92	2002-04	1988-92	2001-06	1990	2006	1990	2008
Lesotho	17.0	13.0	15.6 ***	16.6	10.1	13.2	14.2	14.3
Liberia	34.0	50.0	24.3 ***	21.9 ***	23.5	23.5	27.3	31.8
Libya*	–	1.0	6.2 ***	0.3	4.1	1.8	–	<5
Lithuania	–	1.0	8.8 ***	2.7	1.3	0.8	–	<5
Macedonia	–	5.0	6.0 ***	2.6 ***	3.8	1.7	–	<5
Madagascar	35.0	38.0	35.5	36.8	16.8	11.5	29.1	28.8
Malawi	50.0	35.0	24.4	18.4	22.1	12.0	32.2	21.8
Malaysia	3.0	3.0	23.4 ***	15.2 ***	2.2	1.2	9.5	6.5
Mali	29.0	29.0	34.9 ***	30.1	25.0	21.7	29.6	26.9
Mauritania	15.0	10.0	–	30.4	13.3	12.5	–	17.6
Mauritius	6.0	5.0	9.9 ***	8.5 ***	2.3	1.4	6.1	5.0
Mexico	5.0	5.0	13.9	3.4	5.3	3.5	8.1	<5
Moldova	–	11.0	4.7 ***	3.2	3.7	1.9	–	5.4
Mongolia	34.0	27.0	11.8 ***	4.9	10.9	4.3	18.9	12.1
Morocco	6.0	6.0	8.1	9.9	8.9	3.7	7.7	6.5
Mozambique	66.0	44.0	33.2 ***	21.2	23.5	13.8	40.9	26.3
Myanmar*	10.0	5.0	33.0 ***	29.6	13.0	10.4	18.7	15.0
Namibia	34.0	24.0	21.5	12.9 ***	8.6	6.1	21.4	14.3
Nepal	20.0	17.0	48.7 ***	38.8	14.2	5.9	27.6	20.6
Nicaragua	30.0	27.0	12.3 ***	7.8	6.8	3.6	16.4	12.8
Niger	41.0	32.0	41.0	39.9	32.0	25.3	38.0	32.4
Nigeria	13.0	9.0	35.1	27.2	23.0	19.1	23.7	18.4
North Korea*	18.0	33.0	15.9 ***	17.8	5.5	5.5	13.1	18.8
Oman	–	–	15.9 ***	5.8 ***	3.2	1.2	–	–
Pakistan	24.0	24.0	39.0	31.3	13.0	9.7	25.3	21.7
Panama	21.0	23.0	5.9 ***	1.4 ***	3.4	2.3	10.1	8.9
Papua New Guinea	–	–	24.1 ***	23.8 ***	9.4	7.3	–	–
Paraguay	18.0	15.0	2.9	6.5 ***	4.1	2.2	8.3	7.9
Peru	42.0	12.0	8.8	2.4	7.8	2.5	19.5	5.6
Philippines	26.0	18.0	24.5 ***	20.7	6.2	3.2	18.9	14.0
Qatar	–	–	17.3 ***	18.1	2.6	2.1	–	–
Romania	3.1	1.8	7.4 ***	3.5 ***	3.1	1.8	<5	<5
Russian Federation	–	3.0	7.0 ***	1.4 ***	2.7	1.6	–	<5
Rwanda	43.0	33.0	24.3	18.0	17.6	16.0	28.3	22.3
Saudi Arabia	4.0	4.0	12.3 ***	6.1 ***	4.4	2.5	6.9	<5
Senegal	23.0	20.0	28.3	14.5	14.9	11.6	22.1	15.4
Serbia and Montenegro	–	9.0	–	1.8	2.8	0.8	–	<5
Sierra Leone	46.0	51.0	22.3 ***	18.6 ***	29.0	27.0	32.4	32.2
Slovak Republic	–	7.0	1.4 ***	1.7 ***	1.4	0.8	–	<5
Somalia	–	–	–	32.8	20.3	14.5	–	–
South Africa	5.8 ***	4.4	10.3 ***	9.4 ***	6.0	6.9	7.4	6.9
Sri Lanka	28.0	22.0	26.2 ***	21.8 ***	3.2	1.3	19.1	15.0
Sudan*	31.0	26.0	30.4 ***	26.7 ***	12.0	8.9	24.5	20.5
Suriname	13.0	8.0	14.2 ***	10.5 ***	4.8	3.9	10.7	7.5
Swaziland	14.0	22.0	15.1 ***	14.7 ***	11.0	16.4	13.4	17.7
Syrian Arab Republic	5.0	4.0	20.0 ***	8.5	3.8	1.4	9.6	<5
Tajikistan	–	56.0	10.3 ***	14.9 ***	11.5	6.8	–	25.9
Tanzania	37.0	44.0	25.1	16.7	16.1	11.8	26.1	24.2
Thailand	30.0	22.0	22.0 ***	7.0	3.1	0.8	18.4	9.9
Timor-Leste	11.0	9.0	–	40.6	17.7	5.5	–	18.4
Togo	33.0	24.0	21.2	19.7 ***	14.9	10.8	23.0	18.2
Trinidad and Tobago	13.0	10.0	7.5 ***	4.1 ***	3.4	3.8	8.0	5.9
Tunisia	1.0	1.0	8.5	1.6 ***	5.2	2.3	<5	<5
Turkey	2.0	3.0	8.4 ***	3.5	8.2	2.6	6.2	<5
Turkmenistan	–	7.0	5.9 ***	7.1 ***	9.9	5.1	–	6.4
Uganda	24.0	19.0	19.7	19.0	16.0	13.4	19.9	17.1
Ukraine	–	3.0	2.8 ***	1.0	2.2	2.4	–	<5
United Arab Emirates	4.0	–	–	–	1.5	0.8	–	–
Uruguay	7.0	2.0	6.3 ***	6.0	2.3	1.2	5.2	<5
Uzbekistan	–	25.0	9.6 ***	4.4	7.4	4.3	–	11.2
Venezuela, RB	11.0	18.0	10.7 ***	3.1 ***	3.3	2.1	8.3	7.7
Vietnam	31.0	16.0	35.5 ***	20.2	5.3	1.7	23.9	12.6
Yemen, Rep.	34.0	38.0	44.1 ***	41.3	13.9	10.0	30.7	29.8
Zambia	48.0	46.0	21.2	23.3	18.0	18.2	29.1	29.2
Zimbabwe	45.0	47.0	8.0	14.0	7.6	10.5	20.2	23.8

Note: *** indicates author's estimates. For countries marked with an *, data underlying the GHI are unreliable.



The International Food Policy Research Institute (IFPRI) was founded in 1975. Its mission is to provide policy solutions that reduce poverty in developing countries, achieve sustainable food security, improve health and nutrition, and promote environmentally friendly agricultural growth. To achieve these goals, the Institute focuses on research as well as capacity strengthening and policy communication. It works closely with national agricultural research and nutrition institutions and regional networks in developing countries. The Institute also engages in wide-ranging dialogue so that the new scientific insights generated by its research results can be integrated into agricultural and food policies and can raise public awareness regarding food security, poverty, and environmental protection. IFPRI is funded by governments, international and regional organisations, and private foundations, many of which are members of the Consultative Group on International Agricultural Research (www.cgiar.org). This association consists of 15 international agricultural research centres that work closely with national agricultural research systems, governments, NGOs, and the private sector.



OUR VISION

All the people of this world shall lead an independent life in dignity and justice – free from hunger and poverty. Deutsche Welthungerhilfe (German Agro Action) was founded in 1962 as the national committee of the “Freedom from Hunger Campaign” set up by the United Nations’ Food and Agriculture Organisation (FAO). Today, it is one of Germany’s largest non-governmental organisations. Non-profit-making, non-denominational and politically independent, the organisation is run by a board of honorary members under the patronage of the President of the Federal Republic of Germany. Its work is funded by private donations and public grants.

WHAT WE WANT

- Welthungerhilfe campaigns worldwide for human rights, sustained development, a guaranteed food supply and conservation of the environment. We regard our work as successful when people improve their living conditions to such an extent that they can enjoy a secure livelihood without outside aid.
- As citizens of a wealthy country, we bear a responsibility for making sure we do not only pay lip-service to the idea of solidarity with the poorest members of the human race. For this reason, together with partners from the world of politics, media and schools, we campaign for fairer co-operation with countries in the developing world.
- We use the funds entrusted to us sparingly and effectively. The work of our staff is characterised by commitment, experience and competence.

HOW WE WORK

- We provide help from one set of hands by means of rapid humanitarian aid in acute crisis regions. Where hunger and poverty are chronic, we cooperate closely with local partners on long-term projects.
- As part of this process we provide support for the landless, for small-scale farmers, women, children and young people; and for people who need start-up aid in order to lead their lives in justice and dignity.
- We fund our work from private donations and public grants. We have received the “seal of approval” from Germany’s Central Institute for Social Issues (DZI) for the cost-effective and transparent way we use our funds.
- Levels of control such as internal auditing, evaluation or regular reports from projects ensure that funds are used correctly.



OUR IDENTITY – WHO WE ARE

Concern Worldwide is Ireland's largest non-governmental organisation, dedicated to the reduction of suffering and working towards the ultimate elimination of extreme poverty. We work in 30 of the world's poorest countries and have over 4,000 committed and talented staff.

OUR MISSION – WHAT WE DO

Our mission is to help people living in extreme poverty achieve major improvements in their lives, which last and spread without ongoing support from Concern. To this end, Concern will work with the poor themselves, and with local and international partners who share our vision, to create just and peaceful societies where the poor can exercise their fundamental rights. To achieve this mission we engage in long-term development work, respond to emergency situations, and seek to address the root causes of poverty through our development education and advocacy work.

OUR VISION – FOR CHANGE

A world where no-one lives in poverty, fear or oppression; where all have access to a decent standard of living and the opportunities and choices essential to a long, healthy and creative life; a world where everyone is treated with dignity and respect.

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