

# World Hunger, Poverty Facts, Statistics 2016

This fact sheet is divided into the following sections:

- [Hunger concepts and definitions](#)
- [Number of hungry people in the world](#)
- [Progress in reducing the number of hungry people](#)
- [Children and hunger](#)
- [Micronutrients](#)
- [Does the world produce enough food to feed everyone?](#)
- [Causes of hunger](#)

## **Hunger concepts and definitions**

**Hunger** is a term which has three meanings (Oxford English Dictionary 1971)

- the uneasy or painful sensation caused by want of food; craving appetite. Also the exhausted condition caused by want of food
- the want or scarcity of food in a country
- a strong desire or craving

**World hunger** refers to the second definition, aggregated to the world level. The related technical term (in this case operationalized in medicine) is either malnutrition, or, if malnutrition is taken to refer to both undernutrition and overnutrition (obesity, overweight) as it increasingly is, undernutrition. Both malnutrition and undernutrition refer to the effects on people of not having enough food.

There are two basic types of malnutrition/undernutrition. The first and most important is **protein-energy malnutrition (PEM)**. It is basically a lack of calories and protein. Food is converted into energy by humans, and the energy contained in food is measured by calories. Protein is necessary for key body functions including provision of essential amino acids and development and maintenance of muscles. Protein-energy malnutrition is the more lethal form of malnutrition/hunger and is the type of malnutrition that is referred to when world hunger is discussed. This leads to growth failure. Principal types of growth failure are:

- The two types of acute malnutrition are wasting (also called marasmus) or nutritional edema, (also called kwashiorkor). Wasting is characterised by rapid weight loss and in its severe form can lead to death. Nutritional edema is caused by insufficient protein in the diet. See visual illustrations [here](#).
- Stunting is a slow, cumulative process and is caused by insufficient intake of some nutrients. It is estimated by the United Nations Children's Fund (UNICEF) to affect 161 million children world wide (UNICEF [Nutrition](#)). Stunted children may have normal body proportions but look younger than their actual age. Stunting develops over a long period as a result of inadequate nutrition or repeated infections, or both.

The second type of malnutrition, also very important, is micronutrient (vitamin and mineral) deficiency. This is not the type of malnutrition that is referred to when world hunger is discussed, though it is certainly very important. Specific examples of micronutrient deficiency such as Vitamin A are discussed below. (For more examples see UNICEF Nutrition in Emergencies [Lesson 2.1 p 11](#) and for a good overview of malnutrition topics see all of [Lesson 2.](#))

[Take a two-question hunger quiz on this section](#)

### **Number of hungry people in the world**

The United Nations Food and Agriculture Organization estimates that about 795 million people of the 7.3 billion people in the world, or one in nine, were suffering from chronic undernourishment in 2014-2016. Almost all the hungry people, 780 million, live in developing countries, representing 12.9 percent, or one in eight, of the population of developing countries. There are 11 million people undernourished in developed countries (FAO 2015; for individual country estimates, see Annex 1. For other valuable sources, especially if interested in particular countries or regions, see IFPRI [2016](#) and Rosen et. al. 2016).

## Undernourishment around the world, 1990-2 to 2012-4

### Number of undernourished and prevalence (%) of undernourishment

	1990-2 No.	1990-2 %	2014-6 No.	2014-6 %
<b>World</b>	<b>1,010.6</b>	<b>18.6</b>	<b>794.6</b>	<b>10.9</b>
<b>Developed regions</b>	<b>20.0</b>	<b>&lt;5</b>	<b>14.7</b>	<b>&lt;5</b>
<b>Developing regions</b>	<b>990.7</b>	<b>23.3</b>	<b>779.9</b>	<b>12.9</b>
<b>Africa</b>	<b>181.7</b>	<b>27.6</b>	<b>232.5</b>	<b>20.0</b>
Sub-Saharan Africa	175.7	33.2	220.0	23.2
<b>Asia</b>	<b>741.9</b>	<b>23.6</b>	<b>511.7</b>	<b>12.1</b>
Eastern Asia	295.4	23.2	145.1	9.6
South-Eastern Asia	137.5	30.6	60.5	9.6
Southern Asia	291.2	23.9	281.4	15.7
<b>Latin America &amp; Carib.</b>	<b>66.1</b>	<b>14.7</b>	<b>34.3</b>	<b>5.5</b>
<b>Oceania</b>	<b>1.0</b>	<b>15.7</b>	<b>1.4</b>	<b>14.2</b>

Source: FAO The State of Food Insecurity in the World 2015 p. 8

[Take a three-question hunger quiz on this section.](#)

### Progress in reducing the number of hungry people

The vast majority of hungry people live in developing regions, which saw a 42 percent reduction in the prevalence of undernourished people between 1990–92 and 2012–14. Despite this progress, about one in eight people, or 13.5 percent of the overall population, remain chronically undernourished in these regions, down from 23.4 percent in 1990–92. As the most populous region in the world, Asia is home to two out of three of the world's undernourished people.

- There has been the least progress in the sub-Saharan region, where more than one in four people remain undernourished – the highest prevalence of any region in the world. Nevertheless, the prevalence of undernourishment in sub-Saharan Africa has declined from 33.2 percent in 1990–92 to 23.2 percent in 2014–16, although the number of

undernourished people has actually increased.

- Hunger continues to take its largest toll in terms of the number of people impacted in Southern Asia, which includes the countries of India, Pakistan and Bangladesh. The estimate of 276 million chronically undernourished people in 2014–16 is only marginally lower than the number in 1990–92. Eastern Asia (where China is by far the largest country) and South-eastern Asia (including Indonesia, Philippines, Myanmar, Vietnam and others) have reduced undernutrition substantially.
- Latin America has the most successful developing region record in increasing food security.

2015 marks the end of the monitoring period for the two internationally agreed targets for hunger reduction. The target for the Millennium Development Goals for developing countries as a whole was to halve the proportion of hungry people by 2015 from the base year(s) of 1990-2, or from 23.2% to 11.6%. As the proportion in 2014-16 is 12.9%, the goal has almost been met. As can be seen from the table, East Asia, South East Asia, and Latin America and the Caribbean regions have met the goal.

World Food Summit target. The target set at the 1996 World Food Summit was to halve the number of undernourished people by 2015 from their number in 1990-92. Since 1990–92, the number of hungry people in developing regions has fallen by over 200 million, from 991 million to 790.7 million. However the goal is 495 million (1/2 of 991 million), which means that the target will not be reached.

(Source: FAO et al, 2015 pp 8-12)

### **Children and hunger**

Children are the most visible victims of undernutrition. Black et. al. (2013) estimate that undernutrition in the aggregate—including fetal growth restriction, stunting, wasting, and deficiencies of vitamin A and zinc along with suboptimum breastfeeding—is a cause of 3.1 million child deaths annually or 45% of all child deaths in 2011 (Black et al. 2013). Undernutrition magnifies the effect of every disease, including measles and malaria. The estimated proportions of deaths in which undernutrition is an underlying cause are roughly similar for diarrhea (61%), malaria (57%), pneumonia (52%), and measles (45%) (Black 2003, Bryce 2005). Malnutrition can also be caused by diseases,

such as the diseases that cause diarrhea, by reducing the body's ability to convert food into usable nutrients.

### **Stunting**

- Globally 161 million under-five year olds were estimated to be stunted in 2013.
- The global trend in stunting prevalence and numbers affected is decreasing. Between 2000 and 2013 stunting prevalence declined from 33% to 25% and numbers declined from 199 million to 161 million.
- In 2013, about half of all stunted children lived in Asia and over one third in Africa. (UNICEF et al. 2014b)

### **Wasting and severe wasting**

- Globally, 51 million under-five year olds were wasted and 17 million were severely wasted in 2013.
- Globally, wasting prevalence in 2013 was estimated at almost 8% and nearly a third of that was for severe wasting, totaling 3%.
- In 2013, approximately two thirds of all wasted children lived in Asia and almost one third in Africa, with similar proportions for severely wasted children. (UNICEF et al. 2014b)

[Take a three-question hunger quiz on this section](#)

### **Micronutrients**

Quite a few trace elements or micronutrients—vitamins and minerals—are important for health. Three very important micronutrient deficiencies in terms of health consequences for poor people in developing countries are:

#### **Iron**

- In developing countries every second pregnant woman and about 40% of preschool children are estimated to be anemic.
- In many developing countries, iron deficiency anemia is aggravated by worm infections, malaria and other infectious diseases such as HIV and tuberculosis.

- The major health consequences include poor pregnancy outcome, impaired physical and cognitive development, increased risk of morbidity in children and reduced work productivity in adults. Anemia contributes to 20% of all maternal deaths. (WHO Iron Deficiency Anemia)

### **Vitamin A**

- Vitamin A deficiency can cause night blindness and reduces the body's resistance to disease. In children Vitamin A deficiency can also cause growth retardation.
- An estimated 250 million preschool children are vitamin A deficient. An estimated 250,000 to 500 000 vitamin A-deficient children become blind every year, half of them dying within 12 months of losing their sight. (WHO Vitamin A Deficiencies)

### **Iodine**

- Iodine deficiency is one of the main cause of impaired cognitive development in children.
- Serious iodine deficiency during pregnancy can result in stillbirth, spontaneous abortion, and congenital abnormalities such as cretinism, a grave, irreversible form of mental retardation that affects people living in iodine-deficient areas of Africa and Asia.
- Iodine deficiency has a simple solution: iodized salt. Thanks to this intervention, the number of countries where iodine deficiency is a public health problem has halved over the past decade. However 54 countries still have a serious iodine deficiency problem. (WHO [Iodine Deficiencies](#))

### **Does the world produce enough food to feed everyone?**

The world produces enough food to feed everyone. For the world as a whole, per capita food availability has risen from about 2220 kcal/person/day in the early 1960s to 2790 kcal/person/day in 2006-08, while developing countries even recorded a leap from 1850 kcal/person/day to over 2640 kcal/person/day. This growth in food availability in conjunction with improved access to food helped reduce the percentage of chronically undernourished people in developing countries from 34 percent in the mid 1970s to just 15 percent three decades later. (FAO 2012, p. 4)  
A principal problem is that many people in the world still do not have sufficient income to purchase (or land to grow)

enough food or access to nutritious food. This is an element of “food access”. The FAO defines [four dimensions of food security](#), all of which must be fulfilled simultaneously, for food security to exist. The four dimensions are: 1) physical availability of food, 2) economic and physical access to food, 3) food utilization, and 4) the stability of those other dimensions over time.

### **What are the causes of hunger?**

What are the causes of hunger is a fundamental question, with varied answers.

**Poverty is the principal cause of hunger.** The causes of poverty include poor people’s lack of resources, unequal income distribution in the world and within specific countries, conflict, and hunger itself. As of 2016 (2012 statistics), the World Bank has estimated that there were 896 million poor people in developing countries who live on \$1.90 a day or less. This compares with compared with 1.95 billion in 1990, and 1.99 billion in 1981. This means that 12.7 percent of people in the developing world lived at or below \$1.90 a day in 2011, down from 37 percent in 1990 and 44 percent in 1981. (This compares with the FAO estimate above of 791 million people living in chronic undernourishment in developing countries.)

Progress has been slower at higher poverty lines. Over 2.1 billion people in the developing world lived on less than US \$ 3.10 a day in 2012, compared with 2.9 billion in 1990- so even though the share of the population living under that threshold nearly halved, from 66 percent in 1990 to 35 percent in 2012, far too many people are living with far too little. (World Bank [Poverty Overview](#))

Progress in poverty reduction has been concentrated in Asia, and especially, East Asia, with the major improvement occurring in China. In Sub-Saharan Africa, the number of people in extreme poverty has increased. The statement that ‘poverty is the principal cause of hunger’ is, though correct, unsatisfying. Why then are (so many) people poor? The next sections discuss some of the causes.

**Conflict.** For 2012, the first and latest year for which its estimates are available, the Center for Research on the Epidemiology of Disasters (CRED) estimates that more than 172 million people were affected by conflict worldwide. Of this total 149 million or 87 percent were conflict-affected residents (CARs). Internally displaced persons (IDPs) accounted for another 18 million and refugees for five million. CRED says that the global total is higher because its

figures only include 24 countries for which comparable and validated data are available. CRED observes

- Pakistan with 28 million and Nigeria with nearly 19 million had the largest numbers of people affected by conflict.
- Libya and Somalia had the highest proportion of their populations affected by violence and insecurity at about 90 percent each.
- IDPs suffer the worst health impacts of conflict. They and their children are almost twice as likely as refugees to die from conflict-related causes, particularly disease and starvation.
- Conflict-affected residents also suffer significantly higher death rates than refugees (CRED [2013](#)).

The estimated number of conflict-affected residents (172 million) represents 21 percent of the estimated number of undernourished people (805 million), which gives an approximate idea of the importance of conflict as a cause of hunger. And for 2015 statistics on refugees, see [UNHCR 2016](#).

**Hunger is also a cause of poverty**, and thus of hunger. By causing poor health, small body size, low levels of energy, and reductions in mental functioning, hunger can lead to even greater poverty by reducing people's ability to work and learn, thus leading to even greater hunger. See Victoria et al. [2008](#).

**World population** A large world population does make it more difficult to provide a decent standard of living for all. Population growth rates have dropped substantially over the last 50 years. See Population Reference Bureau [2015](#) for analysis of population trends.

**Food and agricultural policy.** Low agricultural productivity, post harvest loss, and a lack of nutritious food are important factors. For two sources that discuss these issues, see IFPRI 2014 and Institute for Development Studies [HANCI](#).

**Climate change.** Climate change is increasingly viewed as a current and future cause of hunger and poverty. Increasing drought, flooding, and changing climatic patterns requiring a shift in crops and farming practices that may not be easily accomplished are three key issues. See the Hunger Notes special report: Hunger, the environment, and climate change for further information, especially articles in the section: Climate change, global warming and the effect on poor people such as [Global warming causes 300,000 deaths a year, study says](#) and [Could food shortages bring down](#)

## [civilization?](#)

(Updated December 28, 2016)

### Bibliography

Black, Robert E, Cesar G Victora, Susan P Walker, Zulfiqar A Bhutta, Parul Christian, Mercedes de Onis, Majid Ezzati, Sally Grantham-McGregor, Joanne Katz, Reynaldo Martorell, Ricardo Uauy, the Maternal and Child Nutrition Study Group. 2013. "Maternal and child undernutrition and overweight in low-income and middle-income countries." *Lancet* Volume 382, No. 9890, p 427–451. <http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2813%2960937-X/abstract> (The article is available free of charge, but you will be required to register with Lancet.) Accessed September 2016.

Black RE, Morris SS, Bryce J. "Where and why are 10 million children dying every year?" *Lancet*. 2003 Jun 28;361(9376):2226-34. Accessed September 2016.

Black, Robert E, Lindsay H Allen, Zulfiqar A Bhutta, Laura E Caulfield, Mercedes de Onis, Majid Ezzati, Colin Mathers, Juan Rivera, for the Maternal and Child Undernutrition Study Group Maternal and child undernutrition: global and regional exposures and health consequences. (Article access is free but will require registration) *The Lancet* Vol. 371, Issue 9608, 19 January 2008, 243-260. Accessed September 2016.

Jennifer Bryce, Cynthia Boschi-Pinto, Kenji Shibuya, Robert E. Black, and the WHO Child Health Epidemiology Reference Group. 2005. "WHO estimates of the causes of death in children." *Lancet* ; 365: 1147–52. Accessed September 2016.

Center for Research on the Epidemiology of Disasters. 2013. "People affected by conflict: Humanitarian needs in numbers." <http://cred.be/sites/default/files/PAC2013.pdf> Accessed September 2016.

Food and Agriculture Organization. 2008. An Introduction to the Basic Concepts of Food Security. <http://www.fao.org/docrep/013/al936e/al936e00.pdf> Accessed June 2017.

Food and Agriculture Organization. 2012. FAO Statistical Yearbook 2012 <http://www.fao.org/docrep/015/i2490e/i2490e03a.pdf> Accessed September 2016.

Food and Agriculture Organization, International Fund for Agricultural Development, World Food Program. 2015. "The State of Food Insecurity in the World 2015. Strengthening the enabling environment for food security and nutrition." Rome: FAO.

Institute of Development Studies. "Hunger and Nutrition Commitment Index." <http://www.hancindex.org/> Accessed September 2016.

International Food Policy Research Institute. 2014. 2014 Global Food Policy Report. Accessed September 2016.

International Food Policy Research Institute. 2015. 2015 Global Hunger Index. <https://www.ifpri.org/publication/2015-global-hunger-index-armed-conflict-and-challenge-hunger> Accessed September 2016.

International Food Policy Research Institute. 2016. 2016 Global Hunger Index. <http://www.ifpri.org/publication/2016-global-hunger-index-getting-zero-hunger> Accessed December 2016.

Oxford University Press. 1971. Oxford English Dictionary. Definition for malnutrition.

Population Reference Bureau. 2016. "2015 World Population Data Sheet." [http://www.prb.org/pdf15/2015-world-population-data-sheet\\_eng.pdf](http://www.prb.org/pdf15/2015-world-population-data-sheet_eng.pdf) Accessed September 2016.

Rosen, Stacey, Karen Thorne and Birgit Meade. 2016. International Food Security Assessment, 2016-26. Economic Research Service, United States Department of Agriculture. Accessed December 2016.

UNHCR 2016 "Global Trends: Forced Displacement in 2015." 2016. <https://s3.amazonaws.com/unhcrsharedmedia/2016/2016-06-20-global-trends/2016-06-14-Global-Trends-2015.pdf> Accessed December 2016.

UNICEF, WHO, The World Bank. 2014a. "Levels and Trends in Child Malnutrition." <http://www.who.int/nutgrowthdb/estimates2013/en/> Accessed September 2016.

UNICEF-WHO-The World Bank. 2014b "Summary of key facts about the 2013 joint malnutrition estimates." [http://www.who.int/entity/nutgrowthdb/summary\\_jme\\_2013.pdf?ua=1](http://www.who.int/entity/nutgrowthdb/summary_jme_2013.pdf?ua=1) Accessed September 2016.

Cesar G. Victora, Linda Adair, Caroline Fall, Pedro C Hallal, Reynaldo Martorell, Linda Richter, and Harshpal Singh Sachdev. 2008. "Maternal and child undernutrition: consequences for adult health and human capital." Lancet. 2008

Jan 26; 371(9609): 340–357. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2258311/> Accessed September 2016.

World Bank. 2016. Poverty website. <http://www.worldbank.org/en/topic/poverty> and the Overview page <http://www.worldbank.org/en/topic/poverty/overview> Accessed September 2016.

World Bank. 2013. “The State of the World’s Poor: Where are the Poor and where are they the Poorest?” [http://www.worldbank.org/content/dam/Worldbank/document/State\\_of\\_the\\_poor\\_paper\\_April17.pdf](http://www.worldbank.org/content/dam/Worldbank/document/State_of_the_poor_paper_April17.pdf) Accessed September 2016.

World Health Organization WHO Global Database on Child Growth and Malnutrition <http://www.who.int/nutgrowthdb/en/> Accessed September 2016.

World Health Organization Comparative Quantification of Health Risks: Childhood and Maternal Undernutrition <http://www.who.int/publications/cra/en/> Accessed September 2016.

World Health Organization. “Micronutrient Deficiencies.” <http://www.who.int/nutrition/topics/micronutrients/en/> Accessed September 2016.