Facts and figures on world malnutrition

Food is at the basis of our life. It is in the food we eat that we find the building blocks for our bodies and the energy required to conduct our daily activities.

In a world where inequality is the rule [read], inequality is also present in food: some of us eat too little and some too much. Eating an inadequate quantity or quality of food (too much or too little compared to our requirements) is source of malnutrition.

Until recently, the world was mainly concerned (at least in speech, if not in action) with inadequately low food intake. Hunger, undernourishment, food security have been analysed, estimated and combatted for many years. Nowadays, overnourishment, overweight and obesity have also become issues of high on the agenda.

There are three main ways of trying to measure the extent of malnutrition:
- Indirectly through statistics and norm-based estimates;
- By asking people about their experience in this area and the perception they have of it;
- By direct measurement of certains characteristics of the body of a sample of people (anthropometric measurements).

The problem with the results of these various methods is that they may not always be perfectly consistent.

Estimates of the number of persons suffering from chronic undernourishment

Statistics on chronic undernourishment\(^1\) have been produced for several decades by the UN Food and Agriculture Organization (FAO) through the publication, since 1999 of its flagship report, SOFI (see the first SOFI of 1999).

In July 2019 the latest of this series of SOFI reports on the State of Food Insecurity and Nutrition in the World published jointly by FAO, the International Fund for Agricultural Development (IFAD), the United Nations Children's Fund (UNICEF), the World Food Programme (WFP) and the World Health Organization (WHO), in the framework of the monitoring process of the Sustainable Development Goals, presents data estimates that suggest that there were 820 million chronically undernourished persons in the world.

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\(^1\) Chronically undernourished people are unable to meet their minimum food requirements over a sustained period of time. This is fundamentally different from those people who suffer from a transitory undernourishment that may occur as a short term or temporary situation. [FAO]
in 2018, equivalent to 11% of total world population\(^2\). These estimates show the continuation of the recent slow increase in hunger-affected people in the world that reverses the declining trend observed during the period from 2003 to 2013.

**Figure 1: Number and percentage of chronically under-nourished persons in the World since 2005**

![Graph showing number and percentage of chronically under-nourished persons in the World since 2005.](image)

In absolute numbers, Asia remains by far the region with most persons suffering from chronic under-nourishment (almost 514 million people), while Africa is the region where the proportion of total population undernourished is highest (19.9% - up to 30.8% in Eastern Africa).

The increase estimated in 2018 at world level is confirmed in every region, with Africa representing the bulk of the change observed (+7.5 million people). In this region, the UN explains the observed increase of chronic undernourishment by "a combination of factors, including conflicts and extreme weather events, currently affecting a number of countries". Increase of the number of undernourished has been higher in conflict-affected and drought-sensitive countries. "The number of undernourished people in drought-sensitive countries has increased by 45.6 percent since 2012" and this increase has been higher than the reduction in numbers of undernourished observed in other African countries.

\(^2\) These figures are estimated for individual countries on the basis of a computation that uses as inputs (i) dietary energy consumption per person that is derived from production, trade and population statistics; (ii) the coefficient of variation of this consumption based on results of past household surveys or derived from a statistical model, and; (iii) the average minimum individual dietary energy requirement at a certain level of activity, based on the age and sex structure of the population. The detailed methodology is provided in one of the annexes of the UN report.
The total estimated number of undernourished in 2018 is roughly equivalent to the number in 2010 (see Figure 1 above and Table 1 below). Since then, it is worth noting that the number of chronically undernourished increased by more than 56 million people in Africa, while it dropped by almost the same number in Asia (less 58 million). Figures in Table 1 point clearly to Africa as being the region where action is most needed in order to reverse this concerning trend.

The situation has degraded in South America largely because of a general economic slowdown, the regional picture being particularly affected by the crisis prevailing in Venezuela where prevalence of undernourishment increased more than threefold over the last years to reach 21.2% in 2016–2018.

In Asia, the reduction of the number of chronically undernourished was put to a hold during these last years because of the war situation observed in Western Asia.

At national level, bad performers over the last decade such as Uganda or Nigeria, in Africa, have seen their undernourishment data deteriorate further. In Uganda, the number of chronically undernourished reached a total of 17.6 million (41% of total population). In Nigeria, the figure rose to 25.6 million people (13.4% of total population). Other bad performers in Africa include Madagascar and Malawi. In the Near East, it is estimated that 11% of total population of Lebanon is undernourished, 12.2% in Jordan (both because of the Syrian crisis and the flow of refugees it generated) and nearly 40% of the population of war-torn Yemen. No data is available for Syria.

The best world performers in terms of reduction of the number of undernourished over the 2004-06 to 2016-18 period were China (down from 206.0 to 122.4 million), India (from 253.9 to 194.4) and Indonesia (from 44.1 to 22.0 million).

**Table 1: Estimates of the number of undernourished people in the world (in millions)**

<table>
<thead>
<tr>
<th>Region</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>196</td>
<td>199,8</td>
<td>217,9</td>
<td>248,6</td>
<td>256,1</td>
</tr>
<tr>
<td>Asia</td>
<td>688,6</td>
<td>572,1</td>
<td>518,7</td>
<td>512,4</td>
<td>513,9</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>51,1</td>
<td>40,7</td>
<td>39,1</td>
<td>41,7</td>
<td>42,5</td>
</tr>
<tr>
<td>Oceania</td>
<td>1,8</td>
<td>1,9</td>
<td>2,3</td>
<td>2,5</td>
<td>2,6</td>
</tr>
<tr>
<td><strong>World</strong></td>
<td>947,2</td>
<td>822,3</td>
<td>785,4</td>
<td>811,7</td>
<td>821,6</td>
</tr>
</tbody>
</table>

* figures do not add up.
* 2018 figures are projected values.
Source: FAO.

To the explanatory factors given by the UN (war, climate change and economic downturn), one should add the food and agriculture policy measures adopted by countries, often under the influence of international organisations, particularly financial organisations, and large multinational companies. These policies and private sector- and donor-led initiatives such as AGRA or the New Alliance for Food Security and Nutrition contribute to further marginalise poor agricultural producers in Africa by supporting large private investments, the penetration of multinationals in input markets (seeds, fertiliser and pesticides) and an unregulated digitalisation of agriculture [read]. As a results small farmers are being deprived of their land to the benefit of large private investors or excluded from agricultural development programmes [read]. Regrettably, there is as yet no serious discussion among national or regional decision makers on the validity of these policies with respect to the achievement of the hunger eradication target. The main concern, for them, remains
increasing production whatever this means from a social or environmental perspective. The way production is achieved does not matter, as long as production increases! This idea is still well-rooted in policy makers’ minds, even if consequences of this stance means more hunger, more rural urban migration, greater exclusion of large parts of the rural population, and although there are serious doubts on the sustainability of results achieved.

**Moderate and severe food insecurity, as captured by surveys**

The prevalence of moderate and severe food insecurity is measured on the basis of surveys conducted in nearly 140 countries since 2014[^3] in collaboration with Gallup [read].

The results over the five years during which the surveys were conducted show that a growing number of people are experiencing moderate and acute food insecurity in the world, particularly in Africa and Latin America.

It can be seen from Table 2 below that almost one person out of eleven in the world - **704 million people** - suffered from **severe** food insecurity in 2018. This proportion was **almost one person out of five in Africa** (277 million people) and **approximately one out of thirteen in Asia** (353.6 million people). Women are slightly more affected than men.

In Africa, 40% of the people experiencing severe food insecurity in 2018 came from Eastern Africa, while the situation deteriorated in all subregions of the continent. In Asia, more than 75% of people affected came from South Asia, while in Latin America, the degradation observed is mostly taking place in South America.

**Table 2: Number of persons having experienced severe food insecurity in 2014 and 2018 (in millions)**

<table>
<thead>
<tr>
<th>Region</th>
<th>2014</th>
<th>2018</th>
<th>Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>210.7</td>
<td>277</td>
<td>+66.3</td>
</tr>
<tr>
<td>Asia</td>
<td>305.9</td>
<td>353.6</td>
<td>+47.7</td>
</tr>
<tr>
<td>Latin America*</td>
<td>45.1</td>
<td>54.7</td>
<td>+9.6</td>
</tr>
<tr>
<td>Northern America and Europe</td>
<td>16.1</td>
<td>10.6</td>
<td>-5.5</td>
</tr>
<tr>
<td>World**</td>
<td>585</td>
<td>704.3</td>
<td>119.3</td>
</tr>
</tbody>
</table>

* Central and South America.  
** figures do not add up.  
Source: FAO

Table 3 shows an incredible figure of **almost 1.7 billion people** who experienced moderate food insecurity in the world in 2018 (almost 1 person out of 4). This proportion was of **approximately one person out of two in Africa** (676.1 million people) and approximately **one out of five in Asia** (928 million people).

[^3]: A sample of people is questioned during the survey on their experience, based on the use of a Food Insecurity Experience Scale (FIES) which has 4 levels: 1. Uncertainty regarding ability to obtain food; 2. Compromising on food quality and variety; 3. Reducing food quantity, skipping meals; 4. No food for a day or more.
Table 3: Number of persons having experienced moderate food insecurity in 2014 and 2018 (in millions)

<table>
<thead>
<tr>
<th>Region</th>
<th>2014</th>
<th>2018</th>
<th>Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>554.1</td>
<td>676.1</td>
<td>+122</td>
</tr>
<tr>
<td>Asia</td>
<td>875.6</td>
<td>928</td>
<td>+52.4</td>
</tr>
<tr>
<td>Latin America*</td>
<td>141.2</td>
<td>187.8</td>
<td>+46.6</td>
</tr>
<tr>
<td>Northern America and Europe</td>
<td>105.2</td>
<td>88.7</td>
<td>-16.5</td>
</tr>
<tr>
<td><strong>World</strong></td>
<td>1696.3</td>
<td>2013.8</td>
<td>317.5</td>
</tr>
</tbody>
</table>

* Central and South America.
** figures do not add up.

Figure 2: Concentration and distribution of food insecurity by level of severity across regions in 2018

Source: FAO.

It is important to note here that these results show that food insecurity is also an issue in rich countries, a reality that has been long overlooked in global statistics. The figures tell us that in 2018, more than 10 million people suffered from severe food insecurity in those countries, of which more than 3 million in the US, 1.2 million in the UK, 0.8 million in Japan, 0.6 million each in Germany and in Italy, and 0.5 million in France.

Moderate food insecurity has even hit a much larger number of people - almost 90 million - in rich countries during 2018: near to 30 million in the US, 4.2 million in Italy, 4.1 million in France, 3.7 million in the UK, 3.6 million in Japan and 3 million in Germany. This confirms to some extent data published earlier by some NGOs suggesting that there were several tens of million people who suffered chronic undernourishment in rich countries where the need for food assistance programmes increased considerably since the 2008 global financial and economic crisis. [read]
More data on undernourishment resulting from direct measurements

The data presented here result from direct anthropometric or other measurements performed on samples of persons:

- Nearly 149 million children under five years of age (22% of the total) across the world suffered from stunted growth (low value of height for age). This number decreased by 10% over the last six years;
- 49.5 million children under five in the world were affected by wasting (weight too low for height). Roughly half lived in Southern Asia and one-quarter in Sub-Saharan Africa. Not surprisingly, there is strong evidence that they are mostly found in poor households;
- In 2018, Africa and Asia accounted for more than nine out of ten of all stunted children and over 90% of all wasted children;
- 32.8 percent of all women aged between 15 and 49 years were affected by anaemia (more than 600 million), the highest rates being found in Africa and Asia;
- 20.5 million babies suffered from low birthweight in 2015 (one out of seven).

Data and considerations on overweight and obesity

- Globally, the prevalence of overweight is increasing in all age groups, particularly among school-age children and adults. The increase in prevalence of obesity between 2000 and 2016 has been even faster than that of overweight;
- Overweight and obesity are on the rise in almost all countries, contributing to 4 million deaths globally;

Figure 3: Overweight in 2018

Source: State of Food Insecurity and Nutrition in the World
• Over **40 million children** under five were considered overweight in 2018. This number is steadily increasing;
• Overweight affected **131 million** children aged 5–9 years and **207 million** adolescents in 2018;
• Africa and Asia accounted for more than **75% of all overweight children** worldwide;
• Throughout the world, most school-age children do not eat enough fruit or vegetables, but regularly consume fast food and carbonated soft drinks. They also lack regular physically activity.
• In 2018, nearly two in five adults (38.9%) were overweight, representing **2 billion adults** worldwide;

**Conclusion**

In a cruel twist of irony, the increase of the number of undernourished people in the world takes place at a time when declarations and pledges to eradicate hunger by 2030 have multiplied [read here and here]. This strongly undermines the hope for the bright future that was promised to us not so long ago, as policies adopted almost everywhere in the world are in favour increased inequality [read].

Most recent data on malnutrition are clear: while hunger increases, overweight and obesity also increase, even at a faster rate! This is a consequence of greater inequalities in the world [read here and here].

At hungerexplained.org, we believe that unless policies followed by countries are fundamentally modified in a way that we have suggested on several occasions on this site⁴, one can only expect that the degradation observed will continue in the future, along with its huge attached human cost in terms of lost lives and suffering.

Some believe that the solution can be found in the combination of pro-growth policies - even if they are exclusive and develop inequality - and social protection and education measures. In fact, when this approach is implemented, social protection is often used as a cover-up for the most violent anti-social economic policies. This, in our view, is not acceptable.

While social protection and education measures are indispensable and, if well-designed, it is true that they can contribute to creating more capacity for the poor to graduate out of poverty, they can only be effective if overall and sectoral economic policies (particularly in the food and agricultural sector) are conducive and offer opportunities for the poor to improve their living by a fairly remunerated work. Social protection alone does however not constitute a sustainable solution for eradicating malnutrition in the world.

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⁴ See: **Policies for a transition towards more sustainable and climate friendly food systems** 2018, **Climate is changing - Food and Agriculture must too - Towards a “new food and agricultural revolution”** 2016, and **Seven principles for ending hunger sustainably**, 2013.
For more information:

- WHO, Obesity, WHO website.

Earlier articles on hungerexplained.org related to the topic:

- Digitalisation of agriculture in Africa is bound to increase exclusion and inequality, 2019.
- Growing inequalities are a threat to world social and political stability, 2017.
- The World Economic Forum’s “New Vision for Agriculture” is moving ahead on the ground..., 2017.
- How to stop the global inequality machine, 2017.
- Africa: can the continent end hunger and become food self-sufficient by 2025? 2016.
- Seven principles for ending hunger sustainably, 2013.
- Food security: definition and drivers, 2013.

and all our articles under “World Hunger” category.

Archives on the world food situation:

- Facts and figures on world malnutrition, 2018.
- Facts and figures on world hunger 2017.
- Facts and figures on world hunger 2015.
- Facts and figures on world hunger 2014.
- Our comments on SOFI 2013, 2013.
- Facts and figures on world hunger 2013.
- What is the real number of hungry people in the world?, 2013.