

## **Facts and figures on world food insecurity**

### **An alarming deterioration**

#### **Preliminary remark**

Despite reiterated commitments and a long series of declarations made by governments over decades, the world is off track: the end of hunger, of food insecurity and of all forms of malnutrition seems out of reach unless fundamental changes occur to make our food system more sustainable from the social, economic and environmental point of view.

The above sentence summarises the gist of what says the recent [State of Food Security and Nutrition in the World 2020](#) (SOFI 2020) produced jointly by a team of technical experts from FAO, IFAD, UNICEF, WFP and WHO.

The list of explanations of this poor performance that is suggested by the report - conflicts, climate change, economic slowdowns and downturns - could be misleading to an uninformed reader and give the impression that lack of progress in solving the hunger issue is due to bad luck. This would mean forgetting that conflicts are human made, that climate change is caused by the incredible surge in greenhouse gas emissions due to human activities and that economic crises are a result of the way in which policies implemented by governments shape our economic system [\[read\]](#). The fact is, if you scratch beneath the surface, that we could fix all these problems provided we accept to modify our behaviour and succeed in altering the political balance that protects interests of a few, to the detriment and suffering of many [\[read\]](#).

Perspectives outlined for the future by the UN report foresee an actual deterioration of the food situation, mainly because of the [COVID-19 pandemic](#) and unprecedented desert locust outbreaks, both of these causes being a direct consequence of poor policies. On the one hand, health systems have degraded in rich countries and have rarely properly been developed in poor countries owing to the priority given to budgetary orthodoxy [\[read\]](#), on the other, if we refer to the past experience that is confirmed by events in 2020, warnings of forthcoming locust outbreaks never obtain sufficient attention by those who could prevent them, until it is too late and the disaster is already happening.

The UN report laments on the fact that in a world of abundance, so many people do not eat properly in terms of both quantity and quality. Again, it does not attempt to scratch below the surface. The lamentation on results observed is useless; what is required, if we genuinely want the negative trend presented in the document to be reverted, is a clear criticism of the root causes of this distressing state of affairs, namely the policies pursued by governments. Luckily, the report does formulate here and there some proposals for policy-makers, but we may regret it that they are not sufficiently highlighted in order to put responsibilities where they really lie.

## Food insecurity: the figures

In a world where inequality is the rule, 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 the source of **malnutrition**.

Until recently, the world was mostly worried about low food intake. Hunger, undernourishment and [food insecurity](#) have been a reason for concern. Nowadays, overnourishment, overweight and obesity have also become issues 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 certain characteristics of the body of a representative sample of people (anthropometric measurements).

In the 2020 SOFI report, data of the third type is more limited than in the 2019 document. This note will therefore focus on the first two types and on undernourishment.

The note published last year on [hungerexplained.org](#) covered the three types of data on both undernourishment and overnourishment extensively [[read](#)].

## Estimates of the number of people suffering from chronic undernourishment

Statistics on chronic undernourishment<sup>1</sup> 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 2020 the latest of this series of SOFI reports prepared 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 almost **680 million chronically undernourished people in the world in 2019**, equivalent to 8.9% of the total world population<sup>2</sup>. These estimates, based on new figures (see **Box 1** below), show an increase "by 10 million people in one year and by nearly 60 million in five years".

In absolute numbers, Asia remains the region with most people suffering from chronic undernourishment (more than 380 million people) despite having reduced tremendously the number of undernourished (a decrease by more than 190 million since 2005), while Africa is the region where the proportion of the total undernourished population is highest and still growing (19.1% - up to 28.8% in Central Africa).

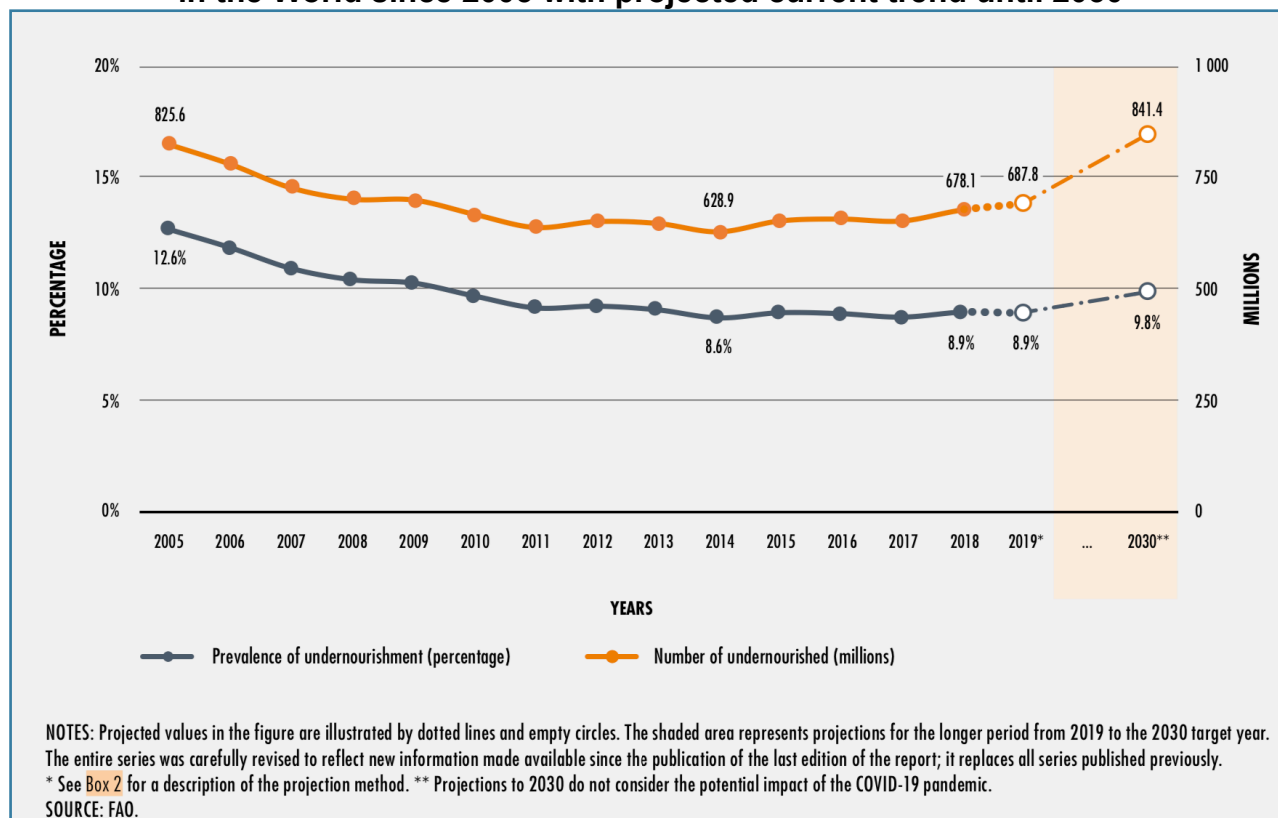
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<sup>1</sup> Chronically undernourished people are unable to meet their minimum food requirements over a sustained period of time. This is fundamentally different from those people who suffer from a transitory undernourishment that may occur as a short term or temporary situation. [[FAO](#)]

<sup>2</sup> 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 increase estimated in 2019 at world level (around 10 additional million people net) is mainly the result of a rise by almost 14 million in Africa. The UN puts this worrying evolution on the account of widespread poverty and inequality, lack of social protection, a high level of public debt, heavy dependence on commodity exports which makes countries vulnerable to external shocks, more frequent extreme meteorological events and a growing number of displaced people, in part because of conflicts. Poor access to health services and education are other factors explaining why people are unable to command the resources that would be sufficient to feed themselves correctly.

**Figure 1: Number and percentage of chronically undernourished people in the World since 2005 with projected current trend until 2030**



The total estimated number of undernourished in 2019 is roughly equivalent to the number in 2010 (see **Figure 1** above and **Table 1** below), illustrating a lost decade in the combat against hunger and undernourishment, despite a general commitment (in words) to the UN's [Sustainable Development Goals](#), and the launching of several initiatives aiming at eradicating hunger.

Since 2010, it is worth noting that the number of chronically undernourished increased by more than 54 million people in Sub-Saharan Africa, while it dropped by 43 million in Asia. Figures in **Table 1** point clearly to Africa as the region where action is most needed in order to reverse this concerning trend. This is no surprise, considering the type of food and agricultural policies and strategies that are being implemented on this continent [[read](#)]. Chad, Madagascar and Nigeria stand out among the countries where the situation deteriorated most over the last decade. In Chad, Liberia, Madagascar and Rwanda, more than one third of the population was undernourished in 2019.

Food insecurity has degraded in South America largely because of a general economic slowdown, the regional picture being particularly affected by the crisis in Venezuela where prevalence of undernourishment increased manifold in recent years to reach 31.4% in 2017–2019.

In Asia, the reduction of the number of chronically undernourished was effective in all sub-regions but in Western Asia, because of the war in Syria and Yemen. Good performers in this region included China, India and Indonesia.

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

Region	2005	2010	2015	2019
Africa	192.6	196.1	216.9	250.3
Asia	574.7	423.8	388.8	381.1
Latin America and the Caribbean	48.6	39.6	38.8	47.7
Oceania	1.9	2.0	2.2	2.4
<b>World*</b>	<b>825.6</b>	<b>668.2</b>	<b>653.3</b>	<b>687.8</b>

\* figures do not add up.  
2019 figures are projected values.  
Source: FAO.

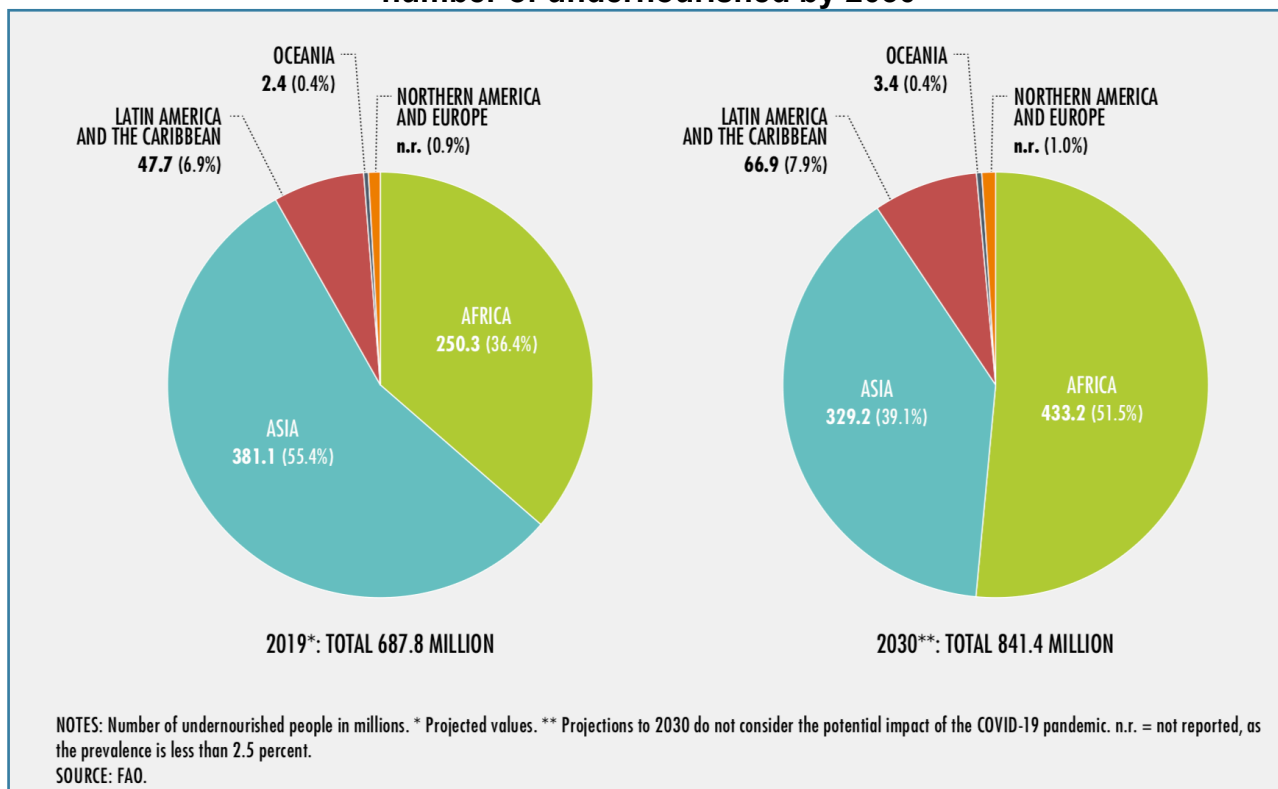
To the explanatory factors given by the UN (war, climate change and economic downturn), one should add, as already mentioned in the introduction of this article, the food and agriculture policy measures adopted by countries, often under the influence of international organisations, particularly financial 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](#) have contributed to further marginalise poor farmers 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 consequence small peasants are being deprived of their land to the benefit of large private investors or excluded from agricultural development programmes [[read](#)] and large multinationals are collecting profits by siphoning off government subsidies on inputs [[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 attainment of the hunger eradication goal. The main concern, for them, remains to produce more whatever the resulting social or environmental impact may be. The way production is achieved does not matter, as long as output increases! This idea is still well rooted in the mind of policy-makers, 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 about the sustainability of achievements made.

It is therefore quite likely that the trend observed in recent years will continue and that projections made by the UN at the 2030 horizon will come true (see **Figure 2**).

**Figure 2: If recent trends persist, Africa will become the region with the highest number of undernourished by 2030**



**Box 1: The difficulty of making estimates of the number of food-insecure in the world**

For those readers of [hungerexplained.org](http://hungerexplained.org) who have been following the world food situation over years, the new figures provided by the UN on the number of undernourished may be misleading. According to the published estimates, (only) 690 million people or 8.9% of the world population were undernourished in 2019, compared to the estimate of 810 million that had been made for 2018. Unfortunately, this apparent decrease in the number of undernourished is not observed in reality because these two figures are not comparable, the reason being that this latest estimate is the result of “new data on population, food supply and more importantly, new household survey data that enabled the revision of the inequality of food consumption for 13 countries, including China”. Those who have been reading past articles on the facts and figures on world malnutrition know that this type of data plays a crucial role in the computation of UN estimates.

In fact, when updating past numbers of undernourished on the basis of new data, it appears that “an additional 60 million people have become affected by hunger since 2014” and, “if this trend continues, the number of undernourished people will exceed 840 million by 2030”, a projection that does not take into account the effect of the current pandemic that “may add an additional 83 to 132 million people to the ranks of the undernourished in 2020”.

This demonstrates, if necessary, how difficult it is to make these estimates and that it is safer to consider evolution of a time series of consistent estimates rather than an isolated figure [for more on the methodological difficulties, check [here](#)].

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

The prevalence of moderate and severe food insecurity is measured on the basis of available large national surveys using the [Food Insecurity Experience Scale](#) (FIES) introduced by FAO in 2014 conducted in 30 countries, covering approximately 20 percent of the world population, complemented in other countries by results of the [Gallup® World Poll](#) (GWP). The principle here is not to compute estimates based on statistical data, as in the previous section, but to ask people about their experience.

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 Asia and Africa.

It can be seen from **Table 2** below that almost one person out of ten in the world - **746 million people** - suffered from **severe** food insecurity in 2019. This proportion was **almost one person out of five in Africa** (249 million people) and approximately **one out of eleven in Asia** (422 million people). Women are slightly more affected than men.

In Africa, almost half of the people experiencing severe food insecurity in 2019 came from Eastern Africa, while the situation deteriorated in all sub-regions of the continent, and the increase of the number of the affected being fastest in Western Africa (+79% since 2014). In Asia, more than 80% of people interested came from South Asia, while in Latin America, the number increased by more than one third.

**Table 2: Number of people having experienced severe food insecurity in 2014 and 2019 (in millions)**

Region	2014	2019	Variation
Africa	192.0	248.5	56.5
Asia	349.8	421.8	72.0
Latin America and the Caribbean	43.8	62.4	18.6
Oceania	1.0	1.8	0.8
Northern America and Europe	15.4	11.8	-3.6
<b>World</b>	<b>602.0</b>	<b>746.3</b>	<b>144.3</b>

Source: FAO

**Table 3** shows an amazing figure of more than **2 billion people** who experienced moderate food insecurity in the world in 2019 (more than 1 person out of 4). This proportion was of around **one person out of two in Africa** (675 million people) and of approximately **one out of five in Asia** (1027 million people).

It is important to note here that these results demonstrate 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 2017-19, 12 million people suffered from severe food insecurity in those countries, of which 2.6 million in the US, 0.9 million in the UK and 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 2017-19: near to 28 million in the US, 4.4 million in Italy, 4 million in Japan, 3.9 million in France, 3.4 million in the UK and 2.9 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 [\[read\]](#).

**Table 3: Number of people having experienced moderate food insecurity in 2014 and 2019 (in millions)**

Region	2014	2019	Variation
Africa	534.1	674.5	140.4
Asia	850.9	1027.4	176.5
Latin America and the Caribbean	141.5	205.3	63.8
Oceania	4.4	5.9	1.5
Northern America and Europe	102.6	88.1	-14.5
<b>World</b>	<b>1633.5</b>	<b>2001.2</b>	<b>367.7</b>

Source: FAO

### **Box 2: Data stability and consistency**

The data presented above calls for two remarks.

#### 1.- Data stability

Whereas it is understandable that past estimates of the number of undernourished presented in the first part of this paper may be updated on the basis of new data resulting from population census or household consumption surveys, it is more challenging to grasp why data from past surveys presented in the second part of this paper should be updated after years. This is, however, what has occurred. These changes should be better explained in order to preserve the credibility of the data presented. For example, how is it possible to justify that the number of persons declaring to have experienced moderate food insecurity in Africa back in 2014 could be 554 million in the 2019 SOFI and 534 million in the 2020 SOFI? On what basis was this update made? Similar differences can be seen for other figures, as for example for the number of severely food insecure in Asia: 305.9 million in 2014 in the 2019 SOFI, compared to 349.8 million in the 2020 SOFI.

#### 2.- Data consistency

The data presented in the first two parts of this paper may also seem to be diverging. For example, in the first part, it appears quite clearly that Asia stands out as the good performer with a considerable decrease in the number of undernourished. In the second part, however, both the number of severely and moderately food insecure are increasing in Asia by more than 20% each. The explanation provided by the SOFI report in terms of difference in timeliness of data is not convincing and raise a major issue: of what use for decision-making is an indicator that is not timely and only provides reliable results with a lag of several years?

Inconsistency is particularly well illustrated in the case of Asia where, despite the fact that estimates for Asia of the number of undernourished was strongly updated on the basis of new data (see **Box 1**) resulting in a much greater reduction of food insecurity estimates, the difference in the trends between the two datasets actually grew, as data produced from surveys show an increase of food insecurity.

These problems call for serious thinking that will probably imply difficult choices and/or clearer and more convincing explanations from the point of view of methodology. Unless this is done in transparency, the risk is that the data presented in SOFI might suffer a regrettable and dramatic loss of credibility because of lack of stability and convergence.

## Conclusion

The state of food security and nutrition of the world described in this year's SOFI shows that the world is not on track for eradicating hunger by 2030. Worse even, the situation deteriorated in 2019. With the COVID-19 crisis and its dramatic impact on the economy during which the most vulnerable people are being hit hardest, we see more food insecurity everywhere.

This is happening in a world where food is more than abundant, although in many places the negative consequences of climate change are starting to be felt.

These facts and figures strongly undermine the hope for a brighter future.

At [hungerexplained.org](https://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 site<sup>3</sup>, 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.

[Materne Maetz](#)  
(August 2020)

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For more information:

- FAO, IFAD, UNICEF, WFP and WHO, [State of Food Insecurity and Nutrition in the World, 2020](#).

Earlier articles on [hungerexplained.org](https://hungerexplained.org) related to the topic:

- [COVID-19 and food crisis: the main operating mechanisms](#), 2020.
- Opinion: [Green Counter-Revolution in Africa?](#) by Jomo Kwame Sundaram, 2020.
- Opinion: [Back to reality - Reflections around the COVID-19 crisis](#), by M. Maetz, 2020.
- [Digitalisation of agriculture in Africa is bound to increase exclusion and inequality](#), 2019.

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<sup>3</sup> 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.



- [Growing inequalities are a threat to world social and political stability](#), 2017.
- [Why famines in a world of plenty?](#) 2017.
- [The World Economic Forum's "New Vision for Agriculture" is moving ahead on the ground...](#), 2017.
- [Seven principles for ending hunger sustainably](#), 2013.
- [Food security: definition and drivers](#), 2013.
- [Food crises: A consequence of disastrous economic policies](#), 2012.

and all our articles under "[World Hunger](#)" category.

Archives on the world food situation :

- [Facts and figures on world malnutrition](#), 2019.
- [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.