

Facts and figures on world food insecurity and malnutrition

Food insecurity is on the rise, a consequence of the current food crisis

Food insecurity and hunger continue to rise worldwide, as a result of the combined effect of the COVID-19 pandemic and of the mismanagement of the global food system, amplified by the disturbances created by the Ukraine war. Increasingly, the world is off track in the combat against hunger and malnutrition, as it is off track in making our food systems more sustainable and combatting climate change and its impact.

This does not bode well for the future.

Latest United Nations estimates of food security, presented in a [recent report](#) (SOFI 2022), show a further deterioration of the global food situation, perpetuating a trend observed over the last five years by a group of UN agencies comprising FAO, IFAD, UNICEF, WFP and WHO.

Food insecurity: the figures

In earlier articles on the global food situation, we had drawn the attention of readers on the three main ways to measure the extent of world malnutrition and we discussed the difficulties of making estimates, as well as issues around the stability and consistency of the numbers produced. This year we will limit this article to the result, inviting those readers interested by these questions to refer to what we had written in 2020 [[read](#)].

Moderate and severe food insecurity, as captured by surveys

The prevalence of moderate and severe food insecurity is measured on the basis of large national surveys using the [Food Insecurity Experience Scale](#) (FIES) introduced by FAO in 2014 and adopted by 59 countries covering more than a quarter of the world population, complemented by results of the [Gallup© World Poll](#) (GWP). The principle here is not to compute estimates based on statistical data, but to ask people about their experience.

The results over the 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 1** below that nearly one person out of 8 in the world - **924 million** - declared to have suffered from **severe** food insecurity in 2021. This proportion was **around person out of four in Africa** (322 million people) and more than **one out of ten in Asia** (489 million people). Women are slightly more affected than men.

In Africa, 40% of the people experiencing severe food insecurity in 2021 originated from Eastern Africa, while the situation deteriorated in all sub-regions of the continent, the increase of the number of the concerned being the fastest in Western Africa (multiplied by almost 2.5 since 2014). In Asia, more than 80% of people in severe food insecurity came from South Asia, while in Latin America, the number more than doubled between 2014 and 2021.

The increase between 2019 and 2021 is of 207 million people, of which more than half in Asia.

Table 1: Evolution of the number of people having experienced severe food insecurity (in millions)

Region	2014	2016	2018	2019	2020	2021	Variation (2021-2019)
Africa	192	233	247	264	301	322	57.8
Asia	310	285	368	377	452	489	112.3
Latin America & Caribbean	47	56	60	64	84	94	29.5
Oceania	1	1	2	2	1	2	0.4
Northern America & Europe	15	14	11	10	13	17	6.9
World	565	588	687	717	850	924	206.9

Source: [FAO](#)

Table 2 shows an incredible figure of more than **2.3 billion people** who experienced moderate food insecurity in the world in 2021 (almost 1 person out of 3). This proportion was of nearly **three people out of five in Africa** (795 million) and around **one out of four in Asia** (1.15 billion people).

Table 2: Evolution of the number of people having experienced moderate food insecurity (in millions)

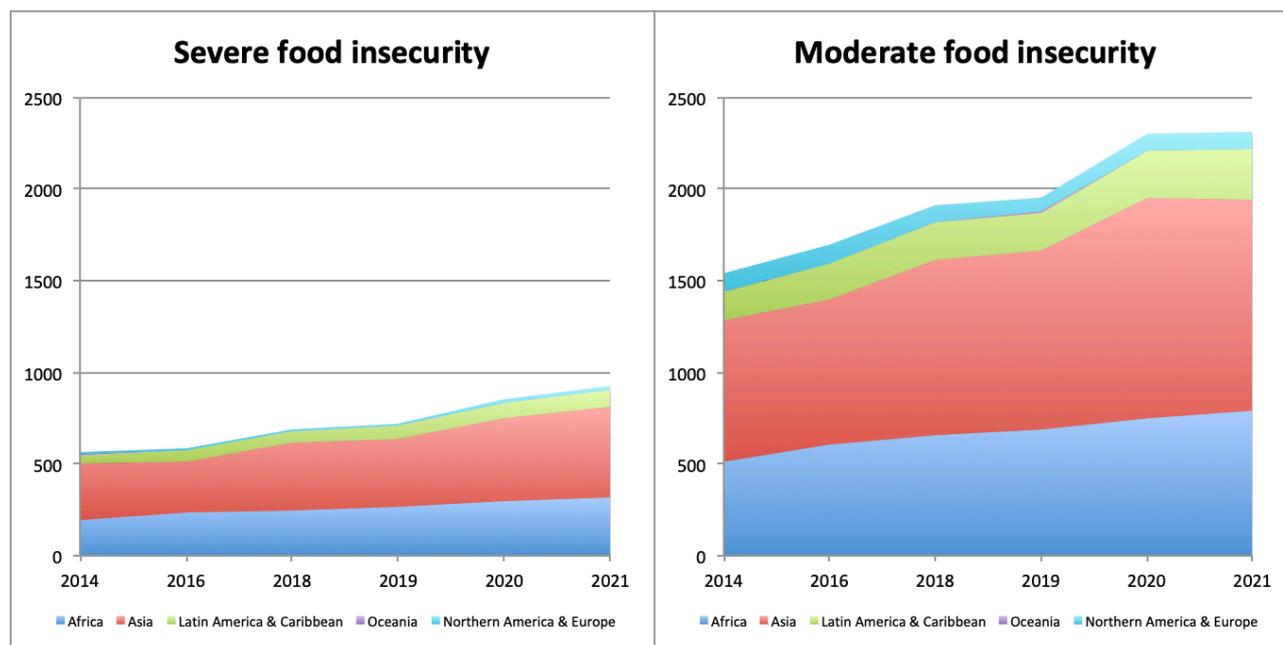
Region	2014	2016	2018	2019	2020	2021	Variation (2021-2019)
Africa	512	603	654	685	751	795	109.7
Asia	774	794	960	980	1197	1151	171.0
Latin America & Caribbean	152	195	202	205	258	268	62.5
Oceania	5	5	6	6	5	6	-0.1
Northern America & Europe	102	96	84	80	87	89	9.5
World	1544	1693	1906	1956	2298	2309	352.6

Source: [FAO](#)

The very high jump in the number of food insecure after 2019 can clearly be linked to the consequences of the COVID-19 pandemic that have been highlighted on hungereplained.org since early 2020 [read [here](#) and [here](#)], even though the pandemic is not the only explanation but rather an accelerator of past trends resulting from weaknesses of food systems, as is illustrated by the fact that the prevalence of food insecurity experience has been growing throughout the period 2014-2021.

Between 2019 and 2021, more than 200 million additional people experienced severe food insecurity, while around 350 million more people were exposed to moderate food security, amplifying a trend that had already been visible for several years. The most striking case, perhaps, is the Latin American and Caribbean region, where the number of people that experienced severe food insecurity doubled between 2014 and 2021 (Figure 1 illustrates this evolution).

Figure 1: Evolution of severe and moderate food insecurity in the regions



Source: [FAO](#) data

This evolution can also be related to the rapid increase of food prices observed since 2019, before even the outbreak of the COVID-19 pandemic, that can be explained by the preexisting weakness of food systems. Given the characteristics of the pandemic that circulates faster among inhabitants of large and dense cities where population is concentrated and where employment is frequently informal and insecure, its impact on poverty and food insecurity is often felt more in urban than in rural areas. Moreover, the pandemic also highlights inequalities, with women hit harder than men [\[read\]](#).

In 2022, the war in Ukraine, by disrupting global food commodity markets, and creating a movement of quasi panic, caused an acceleration of the price hike observed since early 2019 and may result in actual food shortages in some particularly vulnerable countries [\[read p. 5 & 6\]](#) while amplifying food insecurity worldwide.

Estimates of the number of people suffering from chronic undernourishment

Statistics on chronic undernourishment¹ 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 2022 the latest of this series of SOFI reports displays data estimates that suggest that there were between **702 and 828 million chronically undernourished people in the**

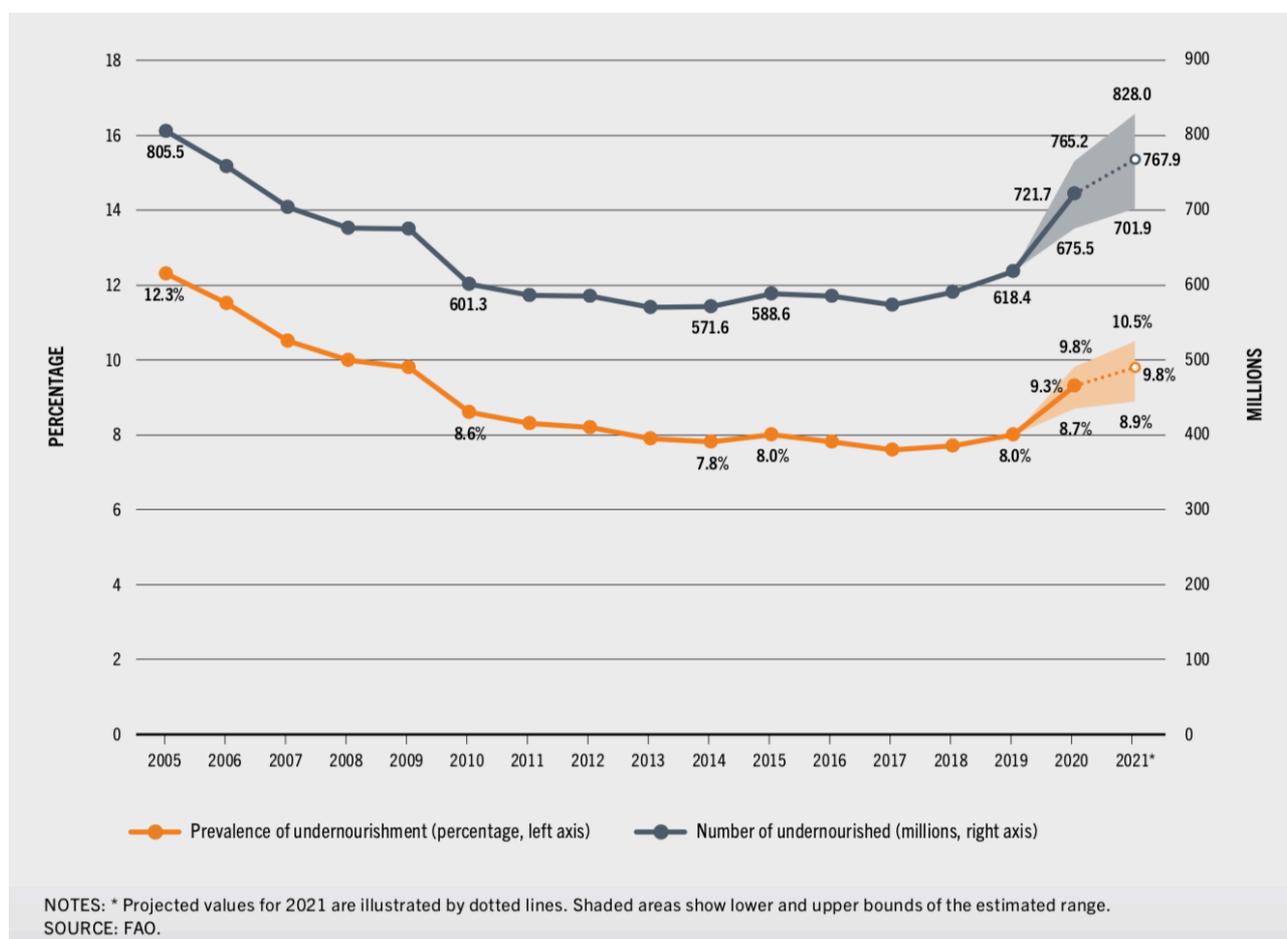
¹ Chronically undernourished people are unable to meet their minimum food requirements over a sustained period of time. This is fundamentally different from those people who suffer from a transitory undernourishment that may occur as a short term or temporary situation. [\[FAO\]](#)

world in 2020, equivalent to 9-10% of total world population estimated at 7.96 billion.² These estimates, that were earlier presented as a figure, are now given as a range, because of the specific difficulties met when making these estimates, particularly since the start of the pandemic (Figure 2).

Around 55% the world's undernourished were found in Asia (425 million) and more than one third in Africa (278 million). Compared with 2019, about 50 million more people were affected by hunger in 2021 in Africa, 85 million more in Asia, and over 13 million more in Latin America and the Caribbean.

According to these estimates, 84 to 210 million additional people faced chronic hunger in 2021, compared to 2019. This trend confirms the movement observed in the data drawn from the FIES survey.

Figure 2: Number and percentage of chronically undernourished people (2005-2021)



Source: [FAO](#)

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 methodological details are provided in Annex 1B of the [report SOFI 2021](#).

The total estimated number of undernourished in 2021 is roughly equivalent to the number in 2006 (see **Figure 1** above and **Table 3** below), illustrating a lost decade-and-a-half 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 2015, it is worth noting that the estimated number of chronically undernourished increased by almost 90 million people in Sub-Sahara Africa, while it rose by around 68 million in Asia. Figures in **Table 3** point clearly to Africa as the region where action is most needed in order to reverse this concerning trend that has been accelerated by the pandemic. This is no surprise, considering the type of food and agricultural policies and strategies that are being implemented on this continent [[read](#)].

Food security has rapidly degraded in South America, the regional picture being particularly affected by the crisis in Venezuela where prevalence of undernourishment increased from 8.4% in 2004-06 to 22.9% in 2019–2021.

Table 3: Estimates of the number of undernourished people in the world (in million)

Region	2005	2010	2015	2021	Variation (from 2015 to 2021)
Africa	189.9	171.0	187.4	278.0	90.6
Asia	552.5	381.5	356.4	424.5	68.1
Latin America & the Caribbean	51.7	39.1	35.9	56.5	20.6
Oceania	2.3	2.3	2.3	2.5	0.2
World	805.5	601.3	588.6	767.9	179.3

Note: Figures do not add up.
2021 figures are projected values.
Source: [FAQ](#)

To the explanatory factors given by the UN (war, climate change and economic downturn), one should add the economic policy measures, particularly in the area of food and agriculture, adopted by countries often under the influence of international organisations, particularly financial organisations, and large multinational companies (Box 2).

These policies and private sector- and donor-led initiatives such as [AGRA](#) 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 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 taking place 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.

The causes of hunger and malnutrition

As has been usual in the SOFI series presented by the UN, the list of [causes hunger](#) and malnutrition resulting from the “weaknesses” of food systems - conflicts, climate variability and extremes, economic slowdowns and downturns, high income inequality, low productivity and inefficient food supply chains, unaffordability of healthy diets - is suggested without pointing at the fact that these are the consequences of underlying **human decisions** that are the real root causes of the persistence of these “weaknesses” over decades.

Conflicts are human made, climate change is due to the extraordinary boom of greenhouse gas (GHG) emissions resulting from the massive use of fossil fuels by humans [\[read\]](#), and economic slowdowns and downturns are an effect of the rules and policy decisions that humans and their governments have made to manage the world economy, as are income inequality and poverty [\[read\]](#). As for low productivity and inefficient food supply chains, they too are the consequence of technological and organisational choices made by mankind over the last century, that are everything but “natural” or “inescapable” [\[read\]](#).

It is essential to point at this here from the start, to avoid proposing solutions to hunger and malnutrition that will only scratch the surface of the problems to be solved and merely alleviate in part the negative effect of fundamental choices made.

Unfortunately, this is largely what the SOFI reports do by advocating mitigating measures such as social protection to help families during conflicts, insurance and finance against extreme climatic events, cash support to vulnerable groups in case of crisis that either seem unfeasible because unrealistic (can social protection really be implemented when a conflict situation weakens the state apparatus?) or a relief that is evidently useful but does not address the true causes of the problem. Moreover, they are based on the dangerous belief that everything can be fixed with money, without modifying the real economy and its processes.

It is true that, some problems can be mitigated immediately through financial means without having to wait for the root causes to be resolved and for profound changes to be enacted [\[read\]](#). This should then, of course, be done without delay. But it does not exempt the world from simultaneously designing deep reforms [\[read\]](#) and implement them to avoid having to mobilise emergency relief again and again, while the economy continues to generate suffering for hundreds of millions of people.

The COVID-19 crisis and the food crisis amplified by the Ukraine conflict [\[read\]](#) should be an opportunity for accelerating such changes and for propelling economic and food systems towards greater social, economic and environmental sustainability.

More data on undernourishment resulting from direct measurements

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

- More than **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) in 2020. This number

decreased by 14% between 2012 and 2020 but will probably increase as a result of the current crisis whose effect is likely to last for several years;

- **45.4 million children** under five in the world were affected by wasting (weight too low for height) in 2020. 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 and here too, it is expected that the crisis will contribute to raise these figures;
- Africa and Asia accounted for more than nine out of ten of all stunted and wasted children;
- In 2019, **29.9 percent** of all women aged between 15 and 49 years were affected by anaemia, with rates above 30% in Africa and Asia, and only 14.6% in Northern America and Europe;
- The latest estimates available give **20.5 million babies** suffering from low birthweight in 2015 (one out of seven). It is important to remember that low birthweight newborns have a higher risk of dying in the first 28 days after birth. Those who survive are more likely to suffer from stunted growth and lower intelligence quotient. They also face increased danger, later in life, of overweight and obesity and adult-onset chronic conditions, including cardiovascular diseases and diabetes.

Data and considerations on overweight and obesity:

- Adult obesity is increasing sharply in all regions, with global prevalence hitting 13.1% in 2016. This trend has been boosted by industry-led marketing and greater access to ultra-processed foods, often high in energy, fats (particularly saturated and trans fats), free sugars and salt, along with inadequate levels of physical activity. Highest rates are found in Northern America, Western Asia, and Australia and New Zealand with levels around and above 30%;
- Overweight and obesity are on the rise in almost all countries and are known to be contributing to **4 million deaths** globally every year.

Conclusion

The latest UN data on food security do not bode well for the future. They clearly show that food insecurity and hunger continue to rise worldwide, as a result of the combined effect of the mismanagement of the global food system, amplified by the COVID-19 pandemic. It is unlikely, given the impact of the Ukraine war, that the negative trend observed during the past five years will be reversed.

The world is off track in the combat against malnutrition, as it is off track in making our food systems more sustainable and combatting climate change and its impact. Only a miracle would allow humanity to achieve the Sustainable Development Goals. In the likely absence of such a miracle, genuine commitment of governments could however turn around this worrying trend

At hungerexplained.org, we think that unless policies followed by countries are fundamentally modified in a way that we have suggested on several occasions on this

site³, 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, they can contribute to creating more capacity for the poor to graduate out of poverty and food insecurity, they can only be effective if overall and sectoral economic policies (particularly but not exclusively in the food and agricultural sector) are conducive and offer opportunities for the poor to improve their living by a fairly remunerated work so as to have access to healthy diets. Social protection alone does, however, not constitute a sustainable solution for eradicating malnutrition, and a solution to malnutrition has to be found in a way that the environment is preserved (biodiversity, water and land resources, climate) by developing and promoting appropriate food production technologies and accessible even to the poorest.

Materne Maetz
(July 2022)

For more information:

- FAO, IFAD, UNICEF, WFP and WHO, [The State of Food Security and Nutrition in the World 2022. Repurposing food and agricultural policies to make healthy diets more affordable](#). Rome, FAO.
- FAO, [Voices of the Hungry - The Food Insecurity Experience Scale](#). Website.

Earlier articles on hungerexplained.org related to the topic:

- [Ukraine war and food crisis: facts and debates](#), 2022.
- Opinions: [Sanctions Now Weapons of Mass Starvation](#) by Anis Chowdhury and Jomo Kwame Sundaram, 2022.
- [COVID-19 and food crisis: the main operating mechanisms](#), 2020.

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

Archives on the world food situation :

- [Facts and figures on world food insecurity and malnutrition - The impact of the COVID-19 pandemic](#), 2021.
- [Facts and figures on world food insecurity](#) - An alarming deterioration, 2020.
- [Facts and figures on world malnutrition](#), 2019.
- [Facts and figures on world malnutrition](#), 2018.

³ 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.

- [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.](#)