

## ***The State of Food Insecurity in the World 2015***

### **Questions and Answers**

<http://www.fao.org/hunger/en/>

#### **1. How much progress has been made in the fight against hunger?**

- The latest FAO estimates indicate that global hunger reduction continues: about 795 million people are estimated to be chronically undernourished in 2014–16, just over one every nine people, and 216 million fewer than in 1990–92. In the same period, the prevalence of undernourishment has fallen from 18.6 to 10.9 percent globally and from 23.3 to 12.9 percent for the developing countries.
- Despite overall progress, marked differences across regions persist. Sub-Saharan Africa has the highest prevalence of undernourishment, with only modest progress in recent years. Around one in four people in the region remains undernourished.
- On the contrary, conditions are much more favourable in northern Africa, where several countries show low levels of undernourishment.
- Asia, the most populous region in the world, still has the highest number of undernourished. Southern Asia has made slow progress in hunger reduction, while more rapid progress has been achieved in eastern and south-eastern Asia.
- Latin America and the Caribbean have recorded very fast progress in reducing hunger, particularly the southern countries of the continent.

#### **2. Why has the global number of hungry come down?**

- The lower global prevalence of undernourishment (PoU) reported in *SOFI 2015* reflects higher estimates of food consumption levels in some key countries and regions. Increases in the amounts of basic food such as cereals, oilseeds, meats, sugar and dairy products available for human consumption were observed in the recent past in a number of major producer and consumer countries.
- In some countries a lower PoU is also the result of reduced inequality in food access among the population. Updated information from recent national household budget surveys allowed one of the parameters used in estimating the PoU, i.e. the coefficient of variation, to be revised downwards.
- As countries continue to produce new and better data for food production, trade and consumption, the estimates are regularly updated, as has always been done. For this reason, estimates over time are revised backwards for each new edition of the *SOFI* report. Therefore, the estimates over time should not be compared *across* editions, but only *within* the same edition.

#### **3. The developing regions as a whole have almost reached the Millennium Development Goal 1c hunger target, while the World Food Summit goal has been missed by a large margin. What are the differences among regions in progress towards the international hunger targets?**

- Achievement of the MDG 1c hunger target requires a reduction of the proportion of undernourished people in the total population by at least 50 percent between 1990 and 2015. This target has almost been achieved in the developing regions as a whole. The estimated reduction in the PoU in 2014–16 is less than one percentage point away from the level required to have achieved the target. The PoU in the developing regions stands at 12.9 percent in 2014–16 – i.e. 0.8 percentage points above the MDG 1c target of 12.1 percent. Given this small difference, and allowing for a margin of reliability of the background data used to estimate undernourishment, the target can be considered as having been achieved.

- The World Food Summit (WFS) goal, which requires halving the number of undernourished people by 2015, was not achieved. Meeting the goal would have required bringing this number down to 515 million, that is, some 265 million less than the 795 million estimated in 2014–16. Given that the world population has grown by 1.9 billion since 1990–92, this goal should be considered rather ambitious. Among the developing regions, Latin America and the eastern and south-eastern regions of Asia have all achieved both the MDG 1c hunger target *and* the more ambitious WFS goal. The MDG 1c target has been reached in the Caucasus and Central Asia and in the northern and western regions of Africa. Progress has also been recorded in the Caribbean, Oceania, southern Asia, and southern and eastern Africa, but at too slow a pace to reach the MDG 1c target. Finally, Central Africa and western Asia are moving away from the hunger targets, with a higher proportion of undernourished in the population now than in 1990–92.

#### **4. Which countries have made the biggest progress in hunger reduction?**

- Since 1990–92, 72 developing countries have achieved the MDG 1c hunger target. Of these, 29 have also achieved the more stringent WFS goal. Of the 72 developing countries that have achieved the MDG 1c target, 12 have maintained the prevalence of undernourishment close to or below 5 percent since 1990–92.
- The fastest progress was recorded in Latin America, owing to the hunger reduction in Brazil, Chile, Guyana, Nicaragua, Peru, Uruguay and the Bolivarian Republic of Venezuela. Among Asian countries, fast progress was recorded in Armenia, Azerbaijan, China, Georgia, Kyrgyzstan, Kuwait, Myanmar, Oman, Thailand, Turkmenistan and Viet Nam, which have reached both the WFS and the MDG 1c targets. Some African countries also made considerable progress; examples include Angola, Cameroon, Djibouti, Gabon, Ghana, Mali and Sao Tome and Principe. These countries have halved both the number of undernourished people and the prevalence of undernourishment since 1990–92.

#### **5. Which countries have made the least progress in hunger reduction?**

- Very slow progress was recorded in some countries of sub-Saharan Africa, including the Central African Republic, Cote d'Ivoire, Liberia, Madagascar, Namibia, Senegal, Swaziland, Uganda, United Republic of Tanzania and Zambia. In Asia, the Democratic Republic of Korea, Iraq and Tajikistan saw an increase in the number of undernourished people. In Latin America, an increase in the number of undernourished is reported for Guatemala, despite the good results of the region as a whole.

#### **6. Based on previous *SOFI* reports, FAO has recognized countries that had reached the MDG 1c hunger target and the WFS goal. Are these results confirmed by the 2015 figures?**

- The results are confirmed for the countries recognized in the past few years. However, some changes in the point estimates are possible, especially for the most recent periods. These most recent estimates inevitably rely on short-term projections, which are subject to reassessments based on market intelligence and additional information that has become available.

#### **7. Why does FAO monitor undernourishment only in countries from the developing regions?**

- The MDGs from 1 to 7 are meant to be assessed only for countries in the developing regions; only MDG 8 applies also to countries in the developed regions. For the developed countries, FAO only conducts a global assessment, without country-level details.

**8. Has FAO changed its methodology for computing the prevalence of undernourishment this year compared to that used for previous editions of *SOFI*?**

- The methodology for estimating undernourishment has not changed from that used last year. The latest refinements in the estimation procedure were introduced in 2014. These involved the methodology for computing coefficients of variation from household surveys and from other sources where reliable national household surveys are not available. As in the previous editions of *SOFI*, the methodology for estimating undernourishment is presented in Annex 2 of the report. More details are found in the FAO ESS Working Papers 14-04 (available at <http://www.fao.org/3/a-i4060e.pdf>) and 14-05 (available at <http://www.fao.org/3/a-i4046e.pdf>).

**9. Why is FAO estimating the prevalence of undernourishment up to 2014–16? How can we have information for 2016?**

- The most recent estimates included in *SOFI* are always based on projected data. The choice to project the three-year average 2014–16 in *SOFI 2015* arises from the need to maintain consistency with previous assessments of undernourishment. The monitoring of progress towards the MDG 1c and WFS hunger targets was started by FAO at the end of 1990s, assuming the three-year period 1990–92 as a starting point. Both targets are to be reached by the end of 2015. Hence, progress had to be assessed up to a three-year average period centred on 2015, that is, up to 2014–16.
- The estimates of undernourishment for 2014–16 are based on projected data for the dietary energy consumption (DEC). As explained in Annex 2 of *SOFI*, the latest available data from food balance sheets refer to 2013 for most countries, while for other countries data are available only until 2011. Therefore, additional sources were needed to estimate the three-year DEC up to 2014–16. The main source of missing data for 2012, 2013 and 2014 are the food consumption estimates from the short-term market outlook prepared by the FAO Trade and Markets Division. These estimates have been used to pro-rate the food balance sheet data to arrive at forecasts for 2012, 2013 and 2014. As a consequence, projections were needed for the last two years.
- A distributed lag model has been used to project the DEC for 2015 and 2016. This model attributes higher weights to more recent data and progressively less weight to older observations. Where this model did not produce plausible results, simpler forecasting methods have been used, such as the linear or exponential trend extrapolations.

**10. *SOFI 2015* indicates that certain countries and regions (e.g. Latin American and the Caribbean, Guyana, Suriname) have reached the World Food Summit goal or the MDG 1c hunger target. But the percentage reduction of the number of the prevalence of undernourishment is only 48 percent rather than the required 50 percent. Why?**

- Achievement of the MDGs is meant to be assessed over a 25-year period, from 1990 to 2015, while observations for the prevalence of undernourishment are only available for the 24-year period from 1990–92 to 2014–16. This is a consequence of the choice to start the monitoring of progress towards the MDG 1c and WFS hunger targets from 1990–92. To address this potential inconsistency, the 50 percentage reduction in the PoU and the number of undernourished required for achieving the targets had to be adjusted by a factor of 24/25. In practice, this means that a cut-off point of 48 percent has been used.

**11. The main indicator on which *SOFI* is based – the prevalence of undernourishment – has been criticized for being based on a narrow definition of hunger, covering only chronically inadequate dietary energy. What has been done to respond to this criticism?**

- The prevalence of undernourishment is designed to capture a more circumscribed concept of food insecurity, namely a state of dietary energy deprivation lasting over one year. This report addresses this limitation by also presenting and discussing measures of different dimensions of food security, through a new suite of food security indicators. The suite comprises numerous indicators that reflect elements of a broader concept of food insecurity and hunger.
- FAO has continued to maintain and enrich the suite of indicators introduced in the 2013 edition of the report, to better capture different dimensions of food security and nutrition. Updated data for the Suite of Food Security Indicators are available in FAOSTAT and at the ESS website (<http://www.fao.org/economic/ess/ess-fs/ess-fadata/en/>)

**12. Would it not make more sense to use household surveys that allow for direct and more accurate measurement of undernourishment, instead of the complex system on which the prevalence of undernourishment is based?**

- Ideally, the adequacy of dietary energy intake, and thus the condition of being undernourished, should be assessed at the individual level, by comparing individual energy requirements with individual energy intake. This would allow the prevalence of undernourishment to be estimated by counting the number of people classified as undernourished.
- However, such a “head count” approach is not feasible for two reasons. First, individual energy requirements are practically unobservable with standard data collection methods. Second, individual food consumption is influenced by disparities in intra-household food allocation, the variability of individual energy requirements, and the day-to-day variation in food consumption for reasons other than food insecurity (including different workloads or lifestyles, or cultural and religious habits).
- Moreover, the cost of implementing household surveys capable of properly estimating undernourishment in the vast majority of countries monitored by FAO on a yearly basis would be very high. At a minimum, these surveys would need to capture food consumption at the individual level and obtain sufficient information to assess habitual consumption levels. They would also need to secure information on the anthropometric characteristics and activity levels of each surveyed individual, to estimate the relevant individual energy requirement threshold. Such data requirements imply that specific surveys – different from, and much more expensive than, existing household surveys – would be needed for this purpose. In contrast, the PoU methodology allows information from household surveys to be integrated with macro data sources, such as food balances, censuses and demographic surveys.

**13. What is the minimum dietary energy requirement and how does FAO compute it?**

- The minimum dietary energy requirement (MDER) is a country-specific normative threshold that FAO employs as a cut-off point to estimate the prevalence of undernourishment. The MDER is a standard energy requirement, specific for age classes and sex, derived from a joint FAO/WHO/United Nations University expert consultation held in 2001. These standards are obtained by calculating, with reference to each age class and sex, the needs for basic metabolism – that is, the energy expended by the human body in a state of rest – and multiplying them by a factor that takes into account physical activity, referred to as the physical activity level (PAL) index. The FAO methodology uses an age- and sex-weighted average standard energy requirement as a national-level MDER.

**14. Why does the prevalence of undernourishment indicator underestimate undernourishment by assuming a minimal level of physical activity, when, in fact, many poor people are engaged in demanding physical activities?**

- As it is practically impossible to implement the head count approach, FAO developed the PoU estimate for the population as a whole, summarized by the statistical device of a “representative” individual. As body weight, metabolic efficiency and physical activity levels vary in any population, there is a range of values for energy requirements compatible with healthy status. Hence, only values below the minimum of such a range can be associated with undernourishment in a probabilistic sense. Thus, for the PoU to indicate that a randomly selected individual in a population is undernourished, the appropriate threshold must be set at the lower end of the range of normal energy requirements.

**15. What is the relationship between hunger and undernutrition?**

- In many of our case studies, we find that although there has been significant progress in fighting undernourishment, there have been no improvements in nutritional outcomes, as measured, for instance by the proportion of children who are stunted or underweight. This means that, although people may have stable access to sufficient food for their energy needs, this food is not always of sufficient quality to provide all the necessary vitamins and other nutrients, or that some people are too ill to utilize the nutrients they consume.
- There are many reasons why undernutrition may occur. Lack of dietary diversity can result in undernutrition, especially where diets are poor in micronutrient-rich foods such as meat, fish and dairy products. Poor access to safe water and sanitation – both crucial for mitigating the risk of disease – can inhibit efficient food utilization. Poor education and lack of access to ante-natal and child-care facilities are also important.
- In many situations, nutritional supplements may be needed to improve the nutritional status of the population in the short term. A range of food security and other nutrition-enhancing interventions in agriculture, health, hygiene, water supply and education, particularly targeting women, are necessary in the medium and longer term.

**16. *SOFI 2015* takes stock of uneven progress towards international hunger targets and especially the MDG 1c of halving the proportion of people that are undernourished. Why did you decide to focus on this issue?**

- The year 2015 marks the end of the MDG monitoring period – about half a year remains before the deadline for achieving most of the MDG targets. It is important to examine not only the progress towards hunger reduction, but also the factors that shape this progress, which give rise to wide differences across regions and countries. *SOFI* identifies remaining problems and provides guidance on which policies should be emphasized in the future.

**17. What are these factors and why does *SOFI* single them out for analysis?**

- A number of factors shape progress towards food security and nutrition goals. Economic growth, agricultural productivity growth, markets (including international trade) and social protection can all determine the pace of hunger reduction. Protracted crisis situations also have detrimental effects on food security and malnutrition. This list is by no means exhaustive, but provides a good picture of what influences progress in the fight against hunger.

**18. SOFI mentions the economic growth is necessary for hunger reduction. What is the relationship?**

- Economic growth is necessary for alleviating poverty and reducing hunger and malnutrition – countries that become richer are less susceptible to food insecurity. But it is not sufficient – the relationship between economic growth and hunger is complex.
- Looking at the numbers during the last 25 years, one can see that the rate of poverty alleviation has been faster than that of hunger reduction. This is because the hungry are the poorest of the poor with no assets, no or little education and skills and are often characterized by ill health. Very poor people cannot participate in growth processes that require capital or generate employment for the educated and skilled. For example, economic growth generated by exploitation of resources, such as minerals and oil, is likely to have very weak direct linkages to the poor – it requires capital and skills that the extremely poor do not have.
- What matters for effectively improving food security is *inclusive* growth: economic growth that reaches those in extreme poverty.

**19. Are there any ways to promote inclusive growth?**

- Agriculture is a sector that can significantly contribute to inclusive growth – especially family farming and smallholder agriculture. Approximately three-quarters of the world's poor live in rural areas, with the share even higher in low-income countries. And agricultural growth in these countries is three times as effective in reducing extreme poverty compared to growth in other sectors.
- Social protection is also key for inclusive growth. It can establish a virtuous circle of progress involving the poor, with increased incomes, employment and wages.

**20. SOFI mentions that family farming and smallholder agriculture are crucial in the fight against hunger**

- More than 90 percent of the 570 million farms worldwide are managed by an individual or a family, relying predominately on family labour. These farms produce more than 80 percent of the world's food, in terms of value. Their role in fighting hunger is key. Increasing smallholder productivity improves access to food and incomes. It raises the demand for labour in rural areas, generating jobs for the poor and raising the unskilled labour wage rate. In this way, household members can diversify their income sources by obtaining better-paid off-farm work. A good example is Ghana, where good policies and investments in agricultural productivity have resulted in significant hunger reduction.

**21. What is the role of social protection?**

- In recent decades we have seen a significant increase in social protection in terms of coverage. Today, every country in the world has at least one social safety net programme in place. School-feeding programmes – the most widespread type of social protection programme – are implemented in 130 countries.
- Social protection directly contributes to poverty alleviation and hunger reduction but it is also crucial for promoting inclusive growth. Cash transfers to poor farmers, in particular women, who have no access to financial services for investments, can influence their productive capacity. They can often be saved and/or invested in productive assets and can improve social inclusion for even greater returns over the participants' lifetimes. Other social transfer programmes, combined with additional interventions in the areas of drinking water supply, health and/or education enhance nutritional outcomes and promote human capital.

## 22. What is the role of markets and trade?

- Markets that function well are important for promoting food security and nutrition. Markets facilitate the flow of food from surplus to deficit areas, and ensure food availability. They also transmit price signals to farmers to adjust their production and input use. Improving access to marketing opportunities can also help boost productivity.
- Trade also delivers benefits at the international level, but there are also underlying risks. For example, freer trade boosts imports and increases both the quantity and variety of available food. In one country, greater competition from abroad may trigger improvements in productivity through greater investment, but in another country cheaper imports could have disastrous impacts on domestic farmers and workers, with job losses and reduced incomes. The linkages between food security and international trade are complex and context-specific and the opportunities and risks should be carefully assessed.

## 23. Why it is difficult to make progress in protracted crises and what should be done?

- Countries and territories in protracted crisis are those considered as situations with recurrent human-made and natural hazards, longevity of food crises, breakdown of livelihoods and insufficient governance and institutional capacity to deal with the crisis.<sup>1</sup> The combination of multiple contributing factors and the changing typology of these crises – from catastrophic, short-term, highly visible events to more structural, longer-term and protracted situations – have resulted in severe impacts on the food security and nutrition status of vulnerable people which is significantly worse in these contexts than in other developing countries.
- The approximate combined population in protracted crisis situations in 2012 was 366 million people, of whom approximately 129 million were undernourished between 2010 and 2012 (including conservative estimates for countries lacking data). This accounted for approximately 19 percent of the global total of food-insecure people, or approximately 41 percent of the total if India and China are factored out. In 2012, the mean prevalence of undernourishment in protracted crisis situations was 39 percent, compared with 15 percent, on average, in the rest of the developing world.
- Addressing food insecurity and malnutrition in protracted crises is particularly challenging. With ongoing and fundamental threats to both lives and livelihoods, protracted crises call for specially designed and targeted assistance. Strong political commitment is necessary to address the underlying causes of protracted crises and action should focus on addressing vulnerability, respecting basic human rights and integrating humanitarian and development assistance.
- Successful interventions for addressing food security and nutrition issues in protracted crisis situations are often seen to be more about preventive actions than responses to the impacts of recurrent crises. Comprehensive country-owned processes (e.g. safety nets) and innovative funding mechanisms are needed to enable a more integrated, agile and flexible approach that can reduce the erosion of development gains in times of crisis while responding to immediate needs.

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<sup>1</sup> The three measurable criteria for identifying countries in protracted crisis in *SOFI 2010* were (i) longevity of crisis: at least 8 of the past 10 years on the GIEWS list; (ii) aid flow: at least 10% of total official development assistance in the form of humanitarian assistance (between 2000-10); and (iii) economic and food security status: LIFDC status.