

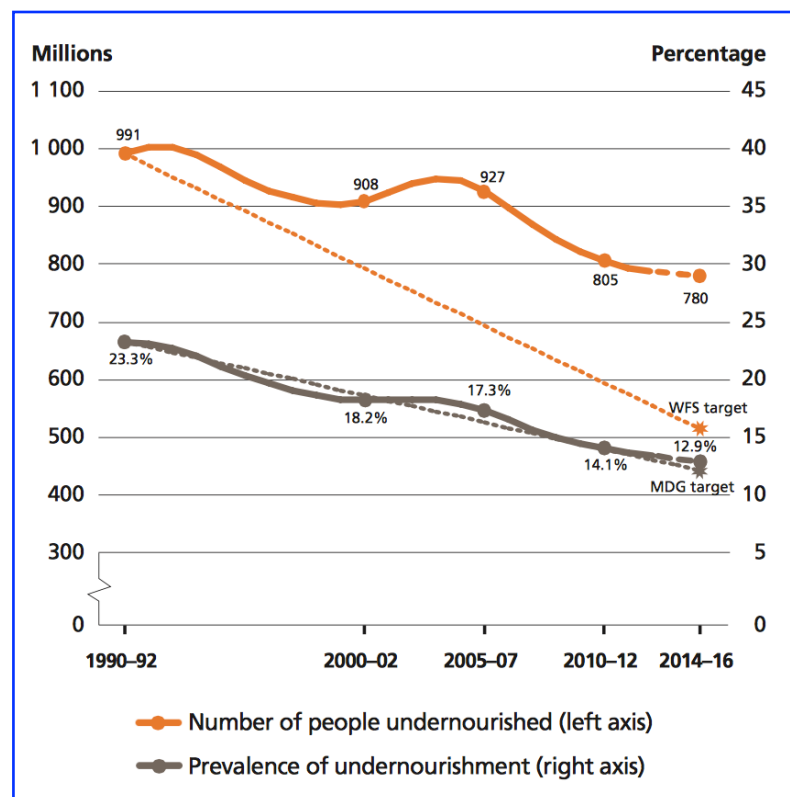
Facts and figures on world hunger

Chronic undernourishment

The report on the [State of Food Insecurity in the World](#) (SOFI) published jointly by FAO, WFP and IFAD in May 2015, presents data estimates that suggest that there are 795 million chronically undernourished persons in the world, of which 780 million in so-called developing (poor non-industrial) countries (11 million less than last year). In so-called developed countries (rich industrial), the number of undernourished persons is estimated to be around 15 million (in slight increase compared to last year's estimate).

The data presented in the latest SOFI report confirms the decreasing trend of this figure since the beginning of the 90s. According to the estimates published, there has been a reduction of 216 million of the total number of chronically undernourished persons in the world between the beginning of the 90s and 2014-2016. This evolution is the consequence of a reduction in Asia (-237 million) and Latin America & the Caribbean (-32 million), and of an increase in Sub-Saharan Africa (+44 million) and in the Near East & North Africa (+17 million).

Chronic undernourishment in non-industrial countries
(SOFI 2015)



The countries where the number of chronically undernourished has decreased most since the 90s are China (-155 million), Vietnam (-22 million), Brazil (approximately -20 million), Myanmar (-19 million), Indonesia and Thailand (-17 million each), and India (-16 million).

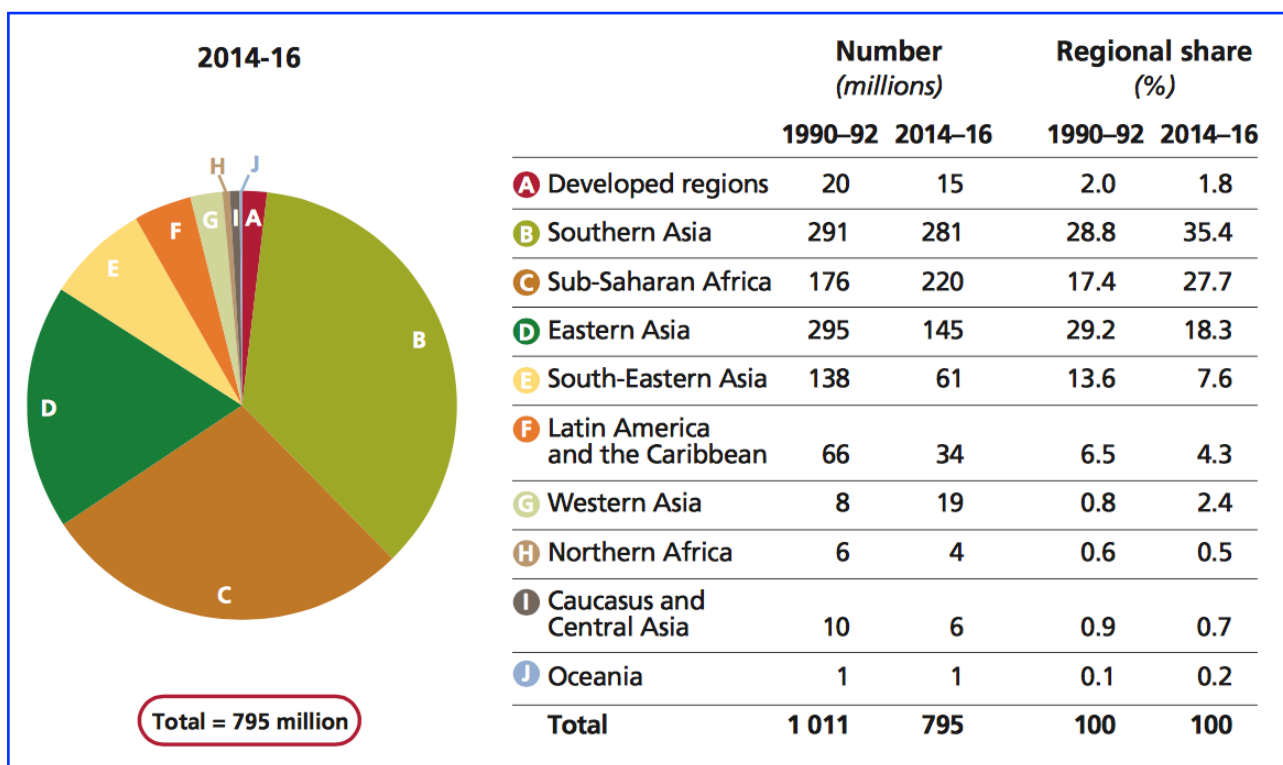
For this latter country which is the country where which has the largest number of undernourished persons (195 million), recent estimates show again an increase of the hungry, even though India is one of the fastest growing countries in the world.

The countries where the number of chronically undernourished has most increased since the 90s are Pakistan (+13 million each) where this number is still growing, Tanzania (+10 million), Iraq (+7 million), Uganda (+6 million - now decreasing) and DPR Korea (+5.5 million).

Although the number of chronically undernourished has been decreasing, according to SOFI, neither the reduction target fixed during the 1996 World Food Summit (to reduce by half the *number* of chronically undernourished) nor the target fixed under the Millennium Development Goal 1 (to reduce by half the *proportion* of world population chronically undernourished) will be achieved by the end of this year. The deficit is going to be around 270 million people for the World Food Summit target, and 140 million people for the Millennium Development Goal target. These figures illustrate that commitments made by world leaders to reduce hunger in the late 90s and at the start of this Century have not been fulfilled. The average yearly decrease of the number of hungry was 8 million a year over the 1990-2000 period, and 9 million a year since then: at this rhythm, it would take another 88 years to eradicate hunger!!! This notwithstanding, in December 2012, the representatives of countries member of the [FAO Council](#) had committed to eradicate hunger, although they did not specify any time-horizon for achieving this laudable objective.

According to the data presented in SOFI 2015, India remains the country where the largest number of hungry are living (195 million), followed by China (134 million) and Ethiopia (32 million). Estimates are that 220 million under-nourished people live in Africa (in increase by 14 million since 2010-2012, despite the relatively high level of growth in the continent, a fact that demonstrates that the type of growth that takes place does not benefit the most vulnerable).

Number of undernourished by group of countries (SOFI 2015)



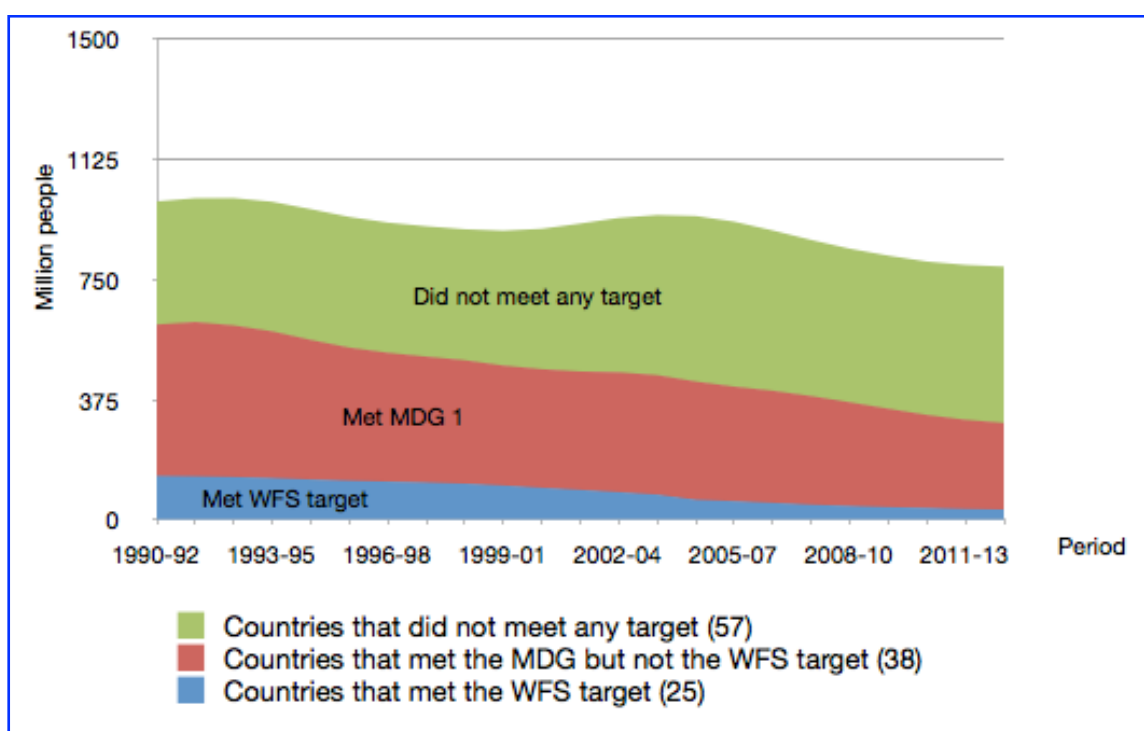
The above diagram shows that Asia remains by far the region where the largest group of undernourished people (487 million) live.

According to the 2015 SOFI report:

- 72 countries¹ had achieved the MGD target of halving the *proportion* of chronically undernourished people since 1990-92
- 29 countries² had achieved the more stringent WFS target of reducing by half the *number* of chronically undernourished people since 1990-92

This leaves more than 40 countries who have not achieved any target.

Evolution of the number of undernourished by category of countries (between 1990 to 2014)



based on SOFI 2014 data

Several sources claim that the statistics on the number of chronically undernourished people are underestimates of the real prevalence of food insecurity and hunger. For

¹ Algeria, Egypt, Morocco, Tunisia, Angola, Benin, Cameroon, Djibouti, Ethiopia, Gabon, Gambia, Ghana, Malawi, Mali, Mauritania, Mauritius, Mozambique, Niger, Nigeria, Sao Tome and Principe, South Africa, Togo, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Turkmenistan, Uzbekistan, China, Republic of Korea, Bangladesh, Iran, Maldives, Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Nepal, Philippines, Thailand, Viet Nam, Jordan, Kuwait, Lebanon, Oman, Saudi Arabia, Turkey, United Arab Emirates, Barbados, Cuba, Dominican Republic, San Vincent and the Grenadines, Trinidad and Tobago, Argentina, Bolivia, Brazil, Chile, Costa Rica, Guyana, Mexico, Nicaragua, Panama, Peru, Surinam, Uruguay, Venezuela, Fiji, Kiribati, Samoa and Solomon.

² Angola, Cameroon, Djibouti, Gabon, Ghana, Mali, Sao Tome and Principe, Armenia, Azerbaijan, Georgia, Kyrgyzstan, Kuwait, Oman, Turkmenistan, China, Myanmar, Thailand, Viet Nam, Cuba, Dominican Republic, San Vincent and the Grenadines, Brazil, Chile, Guyana, Nicaragua, Peru, Uruguay, Venezuela and Samoa.

example, while SOFI estimates that the number of chronically undernourished persons is negligible in Brazil in 2014, Brazilian NGOs claim that there are still about 13 million chronically undernourished people in the country, several years after the beginning of the implementation of the «Zero Hunger» programme. The same goes for the situation prevailing in rich countries. For example, the French research centre INRA estimated that 6 million adults were in a food insecure situation in France [\[read\]](#). Similarly, in the US, it is estimated that close to 17 million people did not eat sufficiently in 2011 (5.5% of the total US population), and in 2010, more than 48 million US citizens had food problems and benefitted at some time in the year of some food assistance. By slightly modifying the assumptions used to establish the SOFI estimates, results can be changed considerably and the estimate of chronically undernourished could be as high as 1.5 billion persons and the trend over the last decades could be found to be increasing (see details in the technical annex below). In order to improve global food security monitoring, FAO has been testing a new tool in four countries (Angola, Ethiopia, Malawi and Niger), the Food Insecurity Experience Scale (FIES) which is expected generate information on how food insecurity is being experienced by people. It is based on interviews and FAO expects that it will provide more detailed and reliable information. But so far no results have been officially published that could be compared to the official estimates published in the SOFI reports.

As it is, there are no estimates on the number of undernourished persons that differentiate between rural and urban areas. But it is generally agreed that the proportion of hungry is larger in rural areas than in cities, and that around 75% of the poorest households live in rural areas. There is therefore a paradox in the fact that rural people who live mostly from agriculture constitute the larger share of the hungry. However, the proportion of undernourished urban people cannot be neglected, as shown by the data available in some partial studies, and it tends to increase with time in certain countries (see box below). Urban dwellers are also more vulnerable to variations in the price of food than rural inhabitants who get a large share of their food from what they produce themselves (home-consumption). For example, the proportion of urban undernourished was 10% in Vietnam and almost 40% in Kenya, among the eight countries analysed by Anríquez, Daidone and Mane³.

³ **C. Anríquez, S. Daidone and E. Mane**, *Rising Food Prices and Undernourishment : A Cross-Country Inquiry*, ESA Working Paper No. 10-01, 2010 – Countries analysed: Bangladesh, Cambodia, Nepal, Vietnam, Tajikistan, Kenya, Malawi and Guatemala.

India – Food insecurity in cities

In urban India, the increase in social inequalities, the reduction of public expenditures on health and nutrition, the increase of job insecurity and the reduction of remunerations (particularly for women), the development of shanty towns without the most basic sanitary infrastructure and continuously increasing cost of housing, create conditions for a permanent food emergency. The situation is generally worse in small and middle sized cities than in the large metropolitan areas.

In 2001, around one Indian out of four was urban, and 23% of the urban people were living in shanty towns. In 2004-05, around 10% of urban Indians working in the formal sector were considered as poor, compared to 24% in the informal sector. 16.7% of the urban population consumed less than 1890 calories/person/day, and the situation had slightly degraded during the previous decade. The proportion of children suffering from anaemia was 72.2%, and 30% were stunted.

Over more than 50 years, India has established a vast system of public distribution of food which has become quite sophisticated with time (targeting). Main current priorities are: (i) employment generation; (ii) generalisation of drinking water and sanitation; (iii) nutrition education; (iv) the promotion of consumer cooperatives and (v) targeting of interventions towards the most vulnerable neighbourhoods and population groups.

(Based on: **MS Swaminathan Research Foundation and World Food Programme, Report on the state of food insecurity in urban India**, Chennai 2010)

Nutritional status

Estimates published in SOFI are based on the comparison of intake with energy needs (see our technical annex below). Another way of looking at hunger is to consider the nutritional status of people and its evolution over time. This is the approach used by UNICEF, WHO and the World Bank who published jointly a [Report on child malnutrition estimates](#). Data in this report corroborate the decrease trend of hunger described by SOFI data and are based on more than 600 nationally representative surveys of the nutritional status relying on measurements made on a representative sample of children. Global figures were extrapolated through modelling.

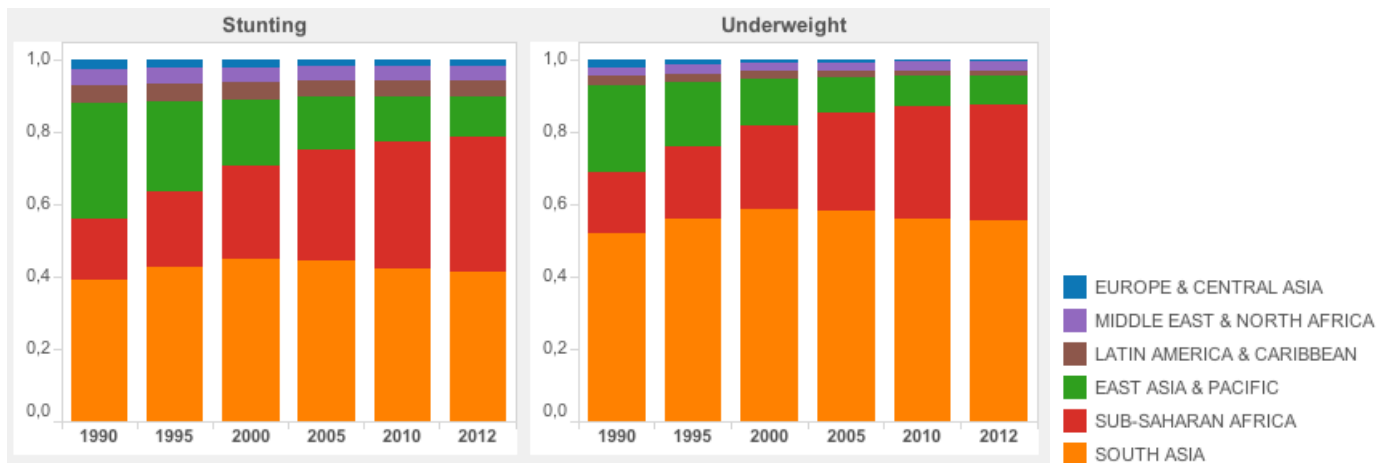
For example, it is estimated that 26% of world children aged less than 5 years are stunted. Nine out of ten of these children live in Africa and Asia. Their number decreased from an estimated 257 million in 1990 to 165 million in 2012 (a reduction by 35%). Highest prevalence is in Africa (36% in 2011) and Asia (27% in 2011).

It is estimated that 16% of children under five years old are underweight. Their number dropped between 1990 and 2011 from 159 million to 101 million (a reduction by 36%).

Globally, 52 million children less than five years of age were wasted (8% of the total) and their number only decreased by 11% between 1990 and 2011.

In the case of the nutritional status of children, the situation improved in all regions, but fastest in East Asia and the Pacific, and slowest in Sub-Saharan Africa, as illustrated by the diagrams below.

**Evolution of the share of total stunted and underweight children by region
(1990 - 2012, World Bank regions)**



Source: <http://data.worldbank.org/child-malnutrition/regional-burdens-and-shares-of-total-burden>

Materne Maetz
(June 2015)

For more information:

- The full report of the [2015 State of Food Insecurity of the World](#), FAO, WFP and IFAD
- The [SOFI website](#), FAO
- [Levels & Trends in Child Malnutrition](#), UNICEF-WHO-The World Bank Joint Child Malnutrition Estimates, 2012
- [Our comments on the 2014 State of Food Insecurity of the World](#), hungerexplained.org
- Our comments on the 2013 State of Food Insecurity of the World, hungerexplained.org
- [What is the real number of hungry people in the world?](#), hungerexplained.org

Technical annex: Some methodological considerations

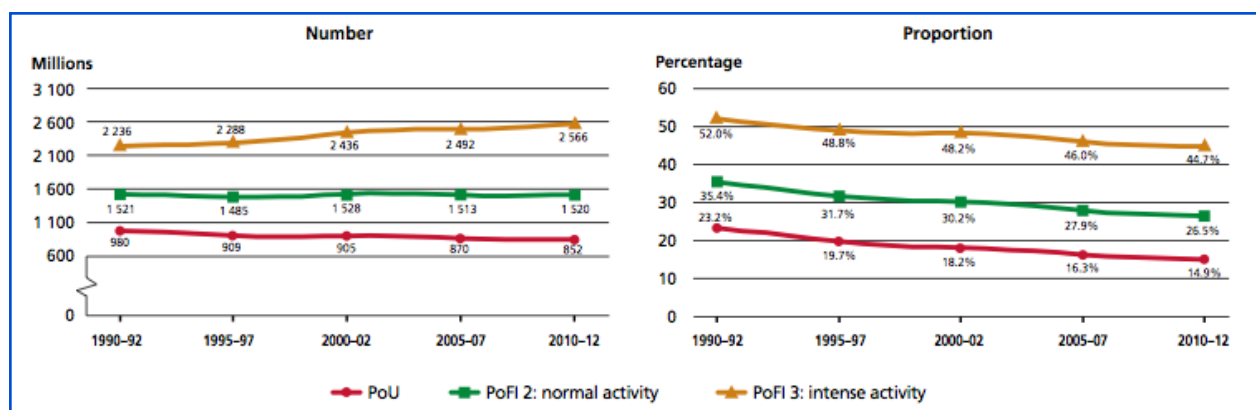
The estimates published in SOFI are made using a method that was revised between 2010 and 2012 and that has been used for the first time for the 2012 report. The main consequence of the change in the method of estimation has been a re-estimation of the figures for the 90s (+150 million hungry) and a slight reduction of the figures of 2007-2009 (-13 million persons).

The revised method is based on the use of an “indicator of prevalence of undernourishment” while the earlier method was using an “indicator of chronic undernourishment”. This new indicator carries two major innovations: (i) it is computed setting the caloric threshold at a higher level of energy need, and (ii) this threshold is now determined as a function of the energetic requirements of three different lifestyles: moderate, normal and intense levels of physical activity.

The lifestyle selected in the 2012 estimates (868 million undernourished in the world, of which 852 million in non-industrial countries) is a “sedentary” lifestyle that corresponds to a caloric requirement that is 1.55 times the basal metabolism (energy requirement at rest). If one refers to the [FAO/WHO norms defined in 2001](#), this level of requirement corresponds to a lifestyle that does not require much physical effort, similar to that of urban people spending a good part of their time sitting. An agricultural worker that has to rely on his/her own energy to farm, fetch water and fuelwood (which is the condition of the majority of farmers living in a state of food insecurity) should be classified in the category of intensively active persons whose level of physical activity corresponds to an energy requirement equivalent to 2 to 2.4 times the basal metabolism.

The [annex 2 of the FAO Report](#) shows that if energy requirements were taken to be those corresponding to a level of intensive activity, the estimate of the number of undernourished would be more than 2.5 billion persons. Moreover, as illustrated by the graph below, if this level were taken as a point of reference, the number of persons suffering from hunger would have been increasing since the beginning of the 90s (and not decreasing as when the point of reference is a moderate level of activity).

Evolution of the number of undernourished in non-industrial countries as a function of the level of activity



Source: FAO, SOFI 2012

It is therefore probable that the real number of persons suffering from hunger in the world is higher than 1.5 billion, and it is also possible to say that it is likely that this number is stable or on the increase and not decreasing as suggested by the official figures presented by FAO in its report.

[Materne Maetz](#) and Frédéric Dévé
(March 2013)