

# Levels & Trends in Child Malnutrition

**UNICEF-WHO-The World Bank  
Joint Child Malnutrition  
Estimates**



THE WORLD BANK

This report was prepared at the World Health Organization and UNICEF by Mercedes de Onis, David Brown, Monika Blössner and Elaine Borghi.

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## KEY FACTS AND FIGURES

### *Stunting*

- Globally, an estimated 165 million children under-five years of age, or 26%, were stunted (i.e., height-for-age below -2 SD) in 2011 — a 35% decrease from an estimated 253 million in 1990.
- High prevalence levels of stunting among children under-five years of age in Africa (36% in 2011) and Asia (27% in 2011) remain a public health problem, one which often goes unrecognized.
- More than 90% of the world's stunted children live in Africa and Asia.

### *Underweight*

- Globally, an estimated 101 million children under-five years of age, or 16%, were underweight (i.e., weight-for-age below -2SD) in 2011 — a 36% decrease from an estimated 159 million in 1990.
- Although the prevalences of stunting and underweight among children under-five years of age worldwide have decreased since 1990, overall progress is insufficient and millions of children remain at risk.

### *Wasting*

- Globally, an estimated 52 million children under-five years of age, or 8%, were wasted (i.e., weight-for-height below -2SD) in 2011 — a 11% decrease from an estimated 58 million in 1990.
- Seventy percent of the world's wasted children live in Asia, most in South-Central Asia. These children are at substantial increased risk of severe acute malnutrition and death.

### *Overweight*

- Globally, an estimated 43 million children under-five years of age, or 7%, were overweight (i.e., weight-for-height above +2SD) in 2011 — a 54% increase from an estimated 28 million in 1990.
- Increasing trends in child overweight have been noted in most world regions, not only developed countries, where prevalence is highest (15% in 2011). In Africa, the estimated prevalence under-five overweight increased from 4% in 1990 to 7% in 2011. The prevalence of overweight was lower in Asia (5% in 2011) than in Africa, but the number of affected children was higher in Asia (17 million) than in Africa (12 million).
- Proper nutrition contributes significantly to declines in under-five mortality rates. Improving nutritional status is essential for achieving the Millennium Development Goals (MDGs).

# Introduction

Adequate nutrition is essential in early childhood to ensure healthy growth, proper organ formation and function, a strong immune system, and neurological and cognitive development. Economic growth and human development require well-nourished populations who can learn new skills, think critically and contribute to their communities. Child malnutrition impacts cognitive function and contributes to poverty through impeding individuals' ability to lead productive lives. In addition, it is estimated that more than one-third of under-five deaths are attributable to undernutrition (Liu et al, 2012; Black et al, 2008).

Nutrition has increasingly been recognized as a basic pillar for social and economic development. The reduction of infant and young child malnutrition is essential to the achievement of the Millennium Development Goals (MDGs)—particularly those related to the eradication of extreme poverty and hunger (MDG 1) and child survival (MDG 4). Given the effect of early childhood nutrition on health and cognitive development, improving nutrition also impacts MDGs related to universal primary education, promotion of gender equality and empowerment of women, improvements of maternal health and combating HIV/AIDS.

Three years remain to achieve the MDGs. Nutrition is at the top of the global development agenda and political commitments to scale up programmes aimed at reducing the scourge of child malnutrition have been made. The **Scale Up Nutrition (SUN)**<sup>1</sup> movement, launched in 2010, calls for intensive efforts to improve global nutrition in the period leading up to 2015. The movement has brought together government authorities from countries with a high burden of malnutrition, and a global coalition of partners committed to working together to mobilize resources, provide technical support, perform high-level advocacy and develop innovative partnerships.

<sup>1</sup> See <http://www.scalingupnutrition.org/>.

More recently, during the 2012 World Health Assembly (WHA), a 13-year comprehensive implementation plan (2012-2025) to address maternal, infant and child nutrition was endorsed.<sup>2</sup> The aim of the plan is to alleviate the double burden of malnutrition in children, starting from the earliest ages. The plan includes six global nutrition targets: child stunting, wasting, and overweight; anaemia in women of reproductive age; low birth weight; and exclusive breastfeeding.

In May 2012, the UN Secretary General, declared the **Zero Hunger Challenge (ZHC)**<sup>3</sup>, which initiated powerful, high-level advocacy for a major advance in global efforts on food and nutrition security. The ZHC aims to encourage different stakeholders — governments, regional organizations, farmers, business, civil society, donors, foundations and the research community — to join the Secretary General to promote effective policies, increased investments and provide sustained development that support hunger reduction.

At the close of the 2012 Olympic Games, the United Kingdom's Prime Minister hosted a summit on global child malnutrition, the **Global Hunger Event**, that brought together leaders from the developing world, the private sector and international development agencies to chart a new course of action aimed at slashing the number of stunted children by 25 million before the 2016 Olympic Games in Brazil.

<sup>2</sup> See [http://apps.who.int/gb/ebwha/pdf\\_files/WHA65/A65\\_R6-en.pdf](http://apps.who.int/gb/ebwha/pdf_files/WHA65/A65_R6-en.pdf)

<sup>3</sup> See <http://un-foodsecurity.org/node/1356>.

**Essential to the accountability of these global movements is monitoring progress towards agreed upon international targets.**

Generating accurate estimates of child malnutrition is difficult. Trustworthy estimates require reliable data collected using recognized international standards and best practices, employing standardized data collection systems that enable comparison between countries and over time, and applying sound state-of-the-art statistical methods to derive global and regional population estimates. UNICEF and WHO initiated a process in 2011 to respond to the challenge of providing accurate estimates by harmonizing the data and statistical methods used to derive child malnutrition estimates.

The process involves a joint annual review of available data to produce a single child

malnutrition dataset to which a unique, peer-reviewed, multi-level model is applied in order to produce estimates for various agencies' regional and income groupings. The World Bank joined the effort after the annual review meeting in 2012. One of the most important outcomes to emerge from this partnership is the unification of estimated prevalence and numbers estimates of stunting, underweight, wasting and overweight for **Global and All developing countries**<sup>4</sup> averages. This publication presents the results of the harmonization effort and reports, for the first time, joint UNICEF-WHO-World Bank prevalence and number estimates of child malnutrition for 2011 and trends since 1990. Estimates for the four anthropometric indicators are presented by United Nations, Millennium Development Goal, UNICEF, WHO regional and The World Bank income group classifications.



Measuring recumbent length in a child below 2 years of age in Chad.

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<sup>4</sup> Per classification provided by the United Nations Statistical Division,  
<http://unstats.un.org/unsd/methods/m49/m49regin.htm>

# Methodology

## Data sources and adjustments

In 2011, UNICEF and the WHO Department of Nutrition initiated an annual joint data review and prepared a global database of national child prevalence estimates to be used for computing regional and global averages and examining regional and global trends in child malnutrition.

UNICEF and WHO receive and review survey data from the published and grey literature as well as reports from national authorities on a continual basis. WHO maintains the WHO Global Database on Child Growth and Malnutrition ([www.who.int/nutgrowthdb](http://www.who.int/nutgrowthdb)), a repository of standardized anthropometric child data which has existed for 20 years (de Onis and Blössner, 2003). UNICEF maintains a global database populated in part through its annual data collection exercise that draws on submissions from more than 150 country offices.



Measuring standing height in a child above 2 years of age in the Maldives.

Based on these data, with due consideration to potential biases and the views of local experts, UNICEF and WHO developed, and now maintain, a joint analysis dataset of national child malnutrition prevalence estimates for children under-five years of age for all countries or territories using available survey data since 1985. Prevalences are based on the WHO Child Growth Standards (WHO, 2006) median for

- stunting – proportion of children with height-for-age below -2 standard deviations (SD);
- underweight – proportion of children with weight-for-age below -2 SD;
- wasting – proportion of children with weight-for-height below -2 SD; and
- overweight – proportion of children with weight-for-height above +2 SD.

Because of the different prevalence estimates obtained using the NCHS/WHO growth reference and the WHO Child Growth Standards (de Onis et al, 2006), historical survey estimates based on the NCHS/WHO growth reference, for which no raw data are available, have been converted to WHO-based prevalences using an algorithm developed by Yang and de Onis, 2008.

Surveys presenting anthropometric data for age groups other than 0–59 months or 0–60 months are adjusted using national survey results – gathered as close in time as possible – from the same country that include the age range 0–59/60 months. Details of the adjustment process are available online at [www.childinfo.org/files/Technical\\_Note\\_age\\_adj.pdf](http://www.childinfo.org/files/Technical_Note_age_adj.pdf).

National rural estimates are adjusted similarly using another national survey for the same country as close in time as possible with available data on national urban and rural data to derive an "adjusted national estimate".

In those instances where conversion of a prevalence estimate based on the NCHS/WHO growth reference is needed in addition to age adjustment, the age adjustment is completed first, followed by conversion to the WHO Child Growth Standards. All adjustments and conversions are documented in the analysis dataset. Survey data extracted from reports for which the raw data are not yet available are labeled as "pending re-analysis".

Where multiple survey results exist for the same country-year combination, preference is given to a re-analyzed result (using the raw data) over a converted result; to a survey result with *all* available indicators over results for only some indicators; and to a survey result which includes the full age range (e.g., 0–59/60 months) over one which includes a partial age range (e.g., 0–36 months).

Because of the need for re-analysis and/or adjustments (e.g., for age and/or urban-rural residence, or conversion from NCHS/WHO growth reference to the WHO Child Growth Standards), national malnutrition prevalence estimates included in the joint UNICEF-WHO analysis dataset may differ slightly from those in original reports. Re-analysis and adjustments are completed for the sole purpose of obtaining comparable data. The re-analysis or adjustment does not imply the expression of any opinion whatsoever on the part of UNICEF or WHO concerning the integrity of the originally reported data. Lastly, the mere availability of data on child malnutrition for a given country-year combination does not warrant inclusion into the joint analysis dataset. UNICEF and WHO evaluate survey estimates for inclusion in the joint analysis dataset on a case-by-case basis. In some cases, survey estimates have been excluded due to lack of comparable data for deriving global and regional trends.

The joint analysis dataset contains country classifications for UN regions and sub-regions, MDG, UNICEF, WHO regions and World Bank income groups. Estimates are presented for each of these classifications. An annex to this document lists the countries included in each of the regional classifications.

Lastly, the dataset includes the latest under-five population estimates from the United Nations Population Division corresponding to the survey year (variable YEAR1). Survey year is based on the time period during which a survey was conducted, except when surveys are conducted over two or more years, in which case the survey year is the mean when odd or the nearest year above the mean when even. For the joint analysis dataset constructed using survey data available through May 2012 (UNICEF-WHO Joint Global Nutrition Database, 2011 revision, completed



Weighing an infant in India.

July 2012), population estimates are from the 2010 revision of the World Population Prospects released in April 2011 by the United Nations Department of Economic and Social Affairs, Population Division.

(N.B. The dataset presents the code of "-1.0" for prevalence estimates and sample sizes with missing data. The dataset also includes information on author and primary reference of the surveys as well as the reference number under which the data appear in the WHO Global Database on Child Growth and Malnutrition.)

#### **Estimating trends multi-level modelling by regions or income groups**

The joint analysis dataset completed in July 2012 includes 639 nationally representative surveys from 142 countries/territories conducted over the period 1985 to 2011 (N.B. one exception, a survey from Papua New Guinea conducted during 1982-83). For 17 countries, only one national survey was available; 24 countries had two surveys, and 101 countries had three or more surveys.

About 48% (n=304) of the surveys were conducted before 2000 and 52% (n=335) were completed during 2000 or later. Of the 142 countries/territories represented in this dataset, no survey data was available since 2005 for 28 countries: Afghanistan, Bahrain, Bulgaria, Cape Verde, Comoros, Cuba, Czech Republic (The), Ecuador, Equatorial Guinea, Eritrea, Fiji, Gabon, Iran, Kiribati, Lebanon, Mauritius, Qatar, Romania, Samoa, Seychelles, Singapore, Tonga, Trinidad and Tobago, Turkmenistan, Ukraine, United States of America, Uruguay and Yemen.

Linear mixed-effect modeling is used to estimate prevalence rates by region or income group from 1990 to 2015. This method has been used in previous trend analyses and is described in detail in de Onis et al. (2004). Briefly, for the UN regions, a single linear mixed-effect model is fit to the data for each group of sub-regions belonging to the same region.



Weighing a toddler in Democratic Republic of the Congo.

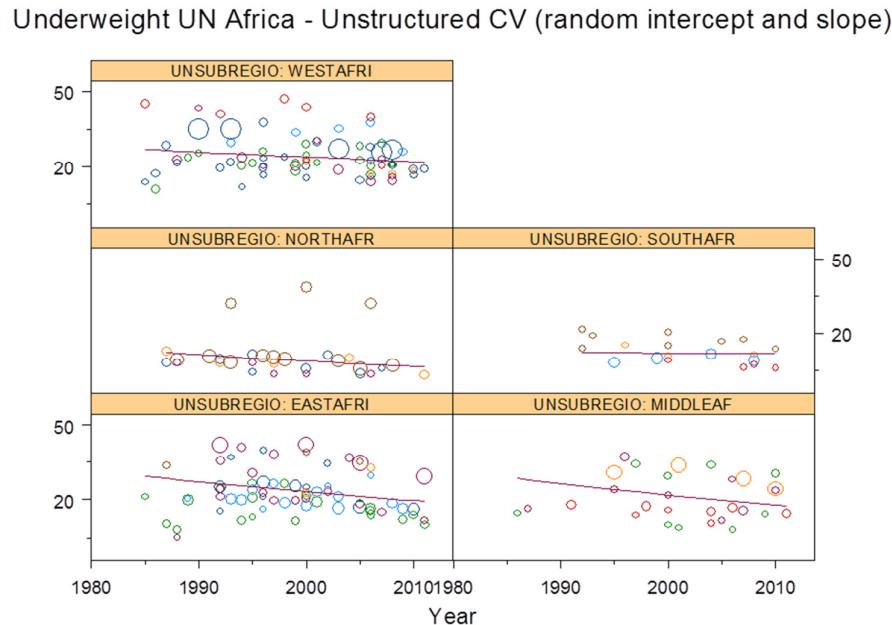
The basic model contains the factors sub-region, year, and the interaction between year and the sub-region as fixed effects with country as a random effect. Unstructured (which allows an intercept and slope to be estimated for each country) or compound symmetry covariance structures were considered. Model fitting was performed on the logistic transform (“logit”) of the prevalence to ensure that all prevalence estimates and their confidence intervals (CIs) would lie between zero and one. Analyses are weighted by the latest estimate of under-five population during the survey year.

**Figure 1** shows an example of the fitting exercise for the UN region of Africa. UN regional prevalence estimates were derived using the sum of the estimated numbers affected in the sub-regions divided by the total under-five population of that region. Corresponding confidence limits were derived using the delta method based on the standard errors of the sub-region prevalence

estimates. The same approach was used to derive prevalence estimates and confidence intervals for aggregate levels for developing countries and all countries (i.e., global) (de Onis et al., 2004).

For the MDG, WHO, UNICEF regions and The World Bank income groups, the same approach is used wherein all regions or income groups are included in a single model as these regional or income classifications do not incorporate a sub-regional level.

Estimates for the UN and WHO regions were obtained using Statistical Analysis Systems package version 9.2 (SAS Institute, Cary, NC, USA). Estimates for MDG and UNICEF regions and World Bank income groups were obtained using Stata v11 statistical software (Stata Corp. College Station, TX, USA).



**Figure 1.** Each circle (bubble) represents a prevalence estimate from a country in a data year. The size of the circle is proportional to the under-five population in that country in the data year. The solid lines indicate sub-regional trends using multilevel regression (de Onis et al., 2004) on all the available data points in the region.

## **Harmonizing country surveys**

Harmonizing data in a way that allows for meaningful comparisons of data poses a major challenge in generating malnutrition estimates at the global and regional level. In many instances, differences across countries and over time are not amenable to harmonization. In others, such as in the selection of the survey target population (both in terms of age and/or residency), post-survey harmonization may be possible. In the case of non-standard analysis, for example, when data processing algorithms do not use the recommended flag limits (e.g., weight-for-age z-score  $-6 / +5$  SD), it is necessary to recalculate anthropometric prevalence estimates using a standard method. Further details can be found at [www.who.int/childgrowth/software](http://www.who.int/childgrowth/software).

## **Data quality issues**

Increased awareness of problems with anthropometric data quality in national surveys has raised consciousness on the importance of data quality procedures as well as the question of what is to be done if reported data are of poor quality. Data quality problems can be eliminated or minimized through proper survey planning, thorough training, continuous standardization, and close field supervision to ensure adherence to measurement protocols throughout the data collection process. Even data collected through large-scale surveys may not be suitable for inclusion in the joint analysis dataset if data quality issues exist, but are not identified until after publication.

WHO and UNICEF are committed to the collection of high quality data for monitoring the nutritional status of children and ensuring that the data included in the agencies' respective databases are of the highest quality. To this end, the WHO Global Database on Child Growth and Malnutrition maintains a well-established data quality review for inclusion of survey results (de Onis and Blössner, 2003) that is closely aligned with that maintained by UNICEF. The minimum criteria for inclusion require that a survey:

- employs a cross-sectional population-based random sample,
- covers the full, or nearly full, age range of children 0 to 5 years,
- has a minimum sample size of 400,
- utilizes standard measurement techniques for height and weight (WHO, 2008),
- provides full documentation of survey design, implementation (including limitations) and analysis, and
- derives estimates based on the WHO Growth Standards using the standard indicators and cut-off points (e.g., for stunting—proportion of children with height-for-age below  $-2$  standard deviations (SD); underweight—proportion of children with weight-for-age below  $-2$  SD; wasting—proportion of children with weight-for-height below  $-2$  SD; and overweight—proportion of children with weight-for-height above  $+2$  SD)(a standardized data collection form is available from WHO at: [www.who.int/nutgrowthdb/en](http://www.who.int/nutgrowthdb/en)), else raw data is available for re-analysis.

Efforts such as the International Household Survey Network and the Health Metrics Network, among others have highlighted improvements made to-date in health information systems worldwide. Moreover they underline the substantial work that remains to enhance the availability, accessibility and overall quality of data, as well as their timely analysis and utilization for evidence-based decision making.

It is unfortunate when survey data are of insufficient quality or are of good quality but go unanalyzed or unreported particularly given the scarcity of resources for conducting surveys and the time and effort involved in survey planning, implementation and dissemination. Scientists, NGOs and government officials conducting national surveys are encouraged to contact WHO and/or UNICEF for technical assistance during the survey planning and data collection processes

in order to improve data quality as well as during the post-survey period in order to explore opportunities for increasing the availability of and access to data for monitoring childhood nutritional status.

### **Scarcity of data**

Despite dramatic improvements in the number of population-based, nationally representative surveys (e.g., UNICEF-supported Multiple Cluster Indicator Surveys, the USAID-supported Demographic and Health Surveys, national nutrition surveys and others) conducted since

1990, many countries do not have high quality data on anthropometric indicators that allow an examination of trends over time. In some instances, surveys have been completed and reports written but documentation is either sub-optimal or the reports are not made available. These deficiencies in data collection, analysis and dissemination limit national, regional and global monitoring efforts (e.g., lacking data can lead to distortions in regional trend analyses). As previously noted, 28 of the 142 countries/territories represented in the July 2012 joint analysis dataset have had no survey-based anthropometric estimates available since 2005.



Marasmic-kwashiorkor child in Solomon Islands.

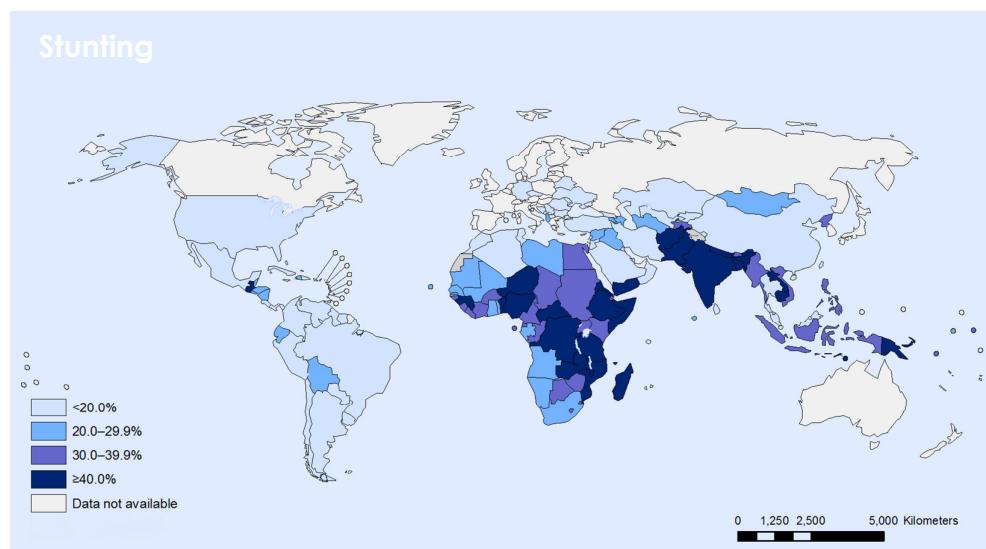
# Levels and Trends in Child Malnutrition, 1990–2011

The latest prevalence estimates of stunting and underweight (**Figure 2**) displays maps with the latest national estimates depicting global patterns for each of the child malnutrition indicators) among children under-five years of age worldwide suggest that there have been decreases since 1990. While progress has been made, it is insufficient—leaving millions of children at risk of lower chances for survival. If current trends continue, UN regional projections for 2015 indicate that the goal of halving the 1990 underweight prevalence levels is unlikely to be achieved on a global level or in all developing countries (**Figure 3** and Statistical Tables). The same holds for stunting, for which the new target — a 40% reduction in the global number of children under-five years of age who are stunted by 2025 (since 2010) — remains out of reach under current rates of decline. Nonetheless, the declines in prevalence of underweight and

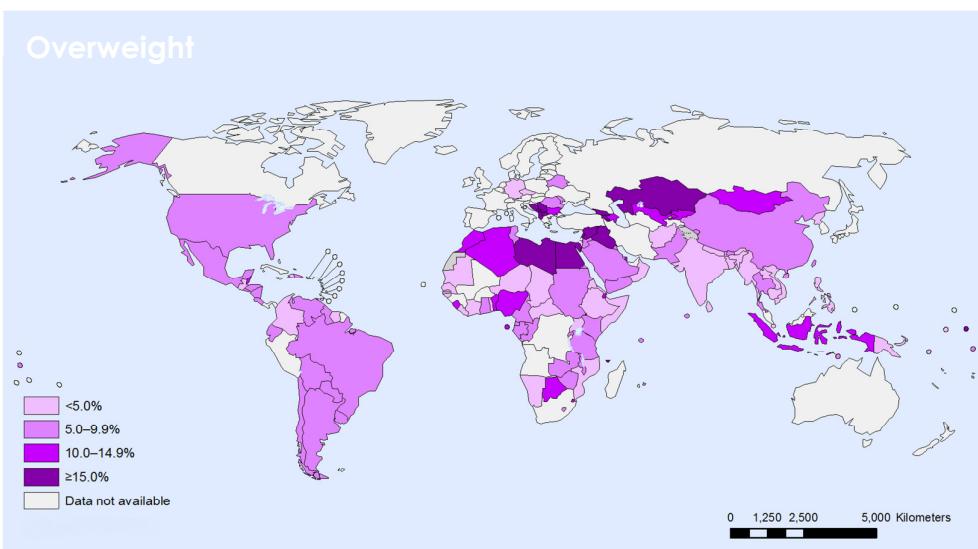
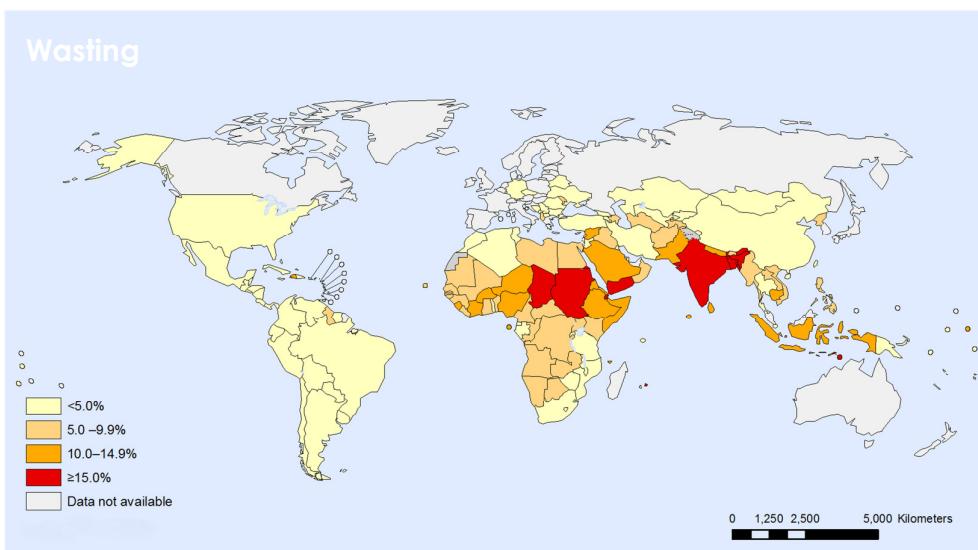
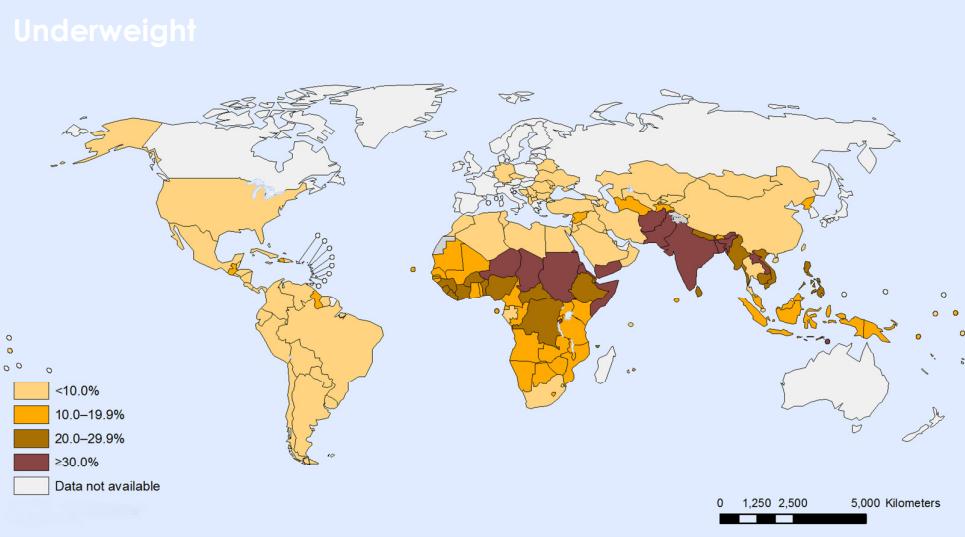
stunting translate into substantial decreases in the number of affected children with a forecasted decrease of 11–13 million children by 2015.

Since 1990 the global prevalence of stunting has decreased 36%, from an estimated 40% (95% confidence limits: 38%, 42%) in 1990 to 26% (24%, 28%) in 2011 with an average annual rate of reduction of 2.1% per year during this period. The number of stunted children under-five years of age in the world has declined from an estimated 253 million (241, 265 million) in 1990 to 165 million (151, 179 million).

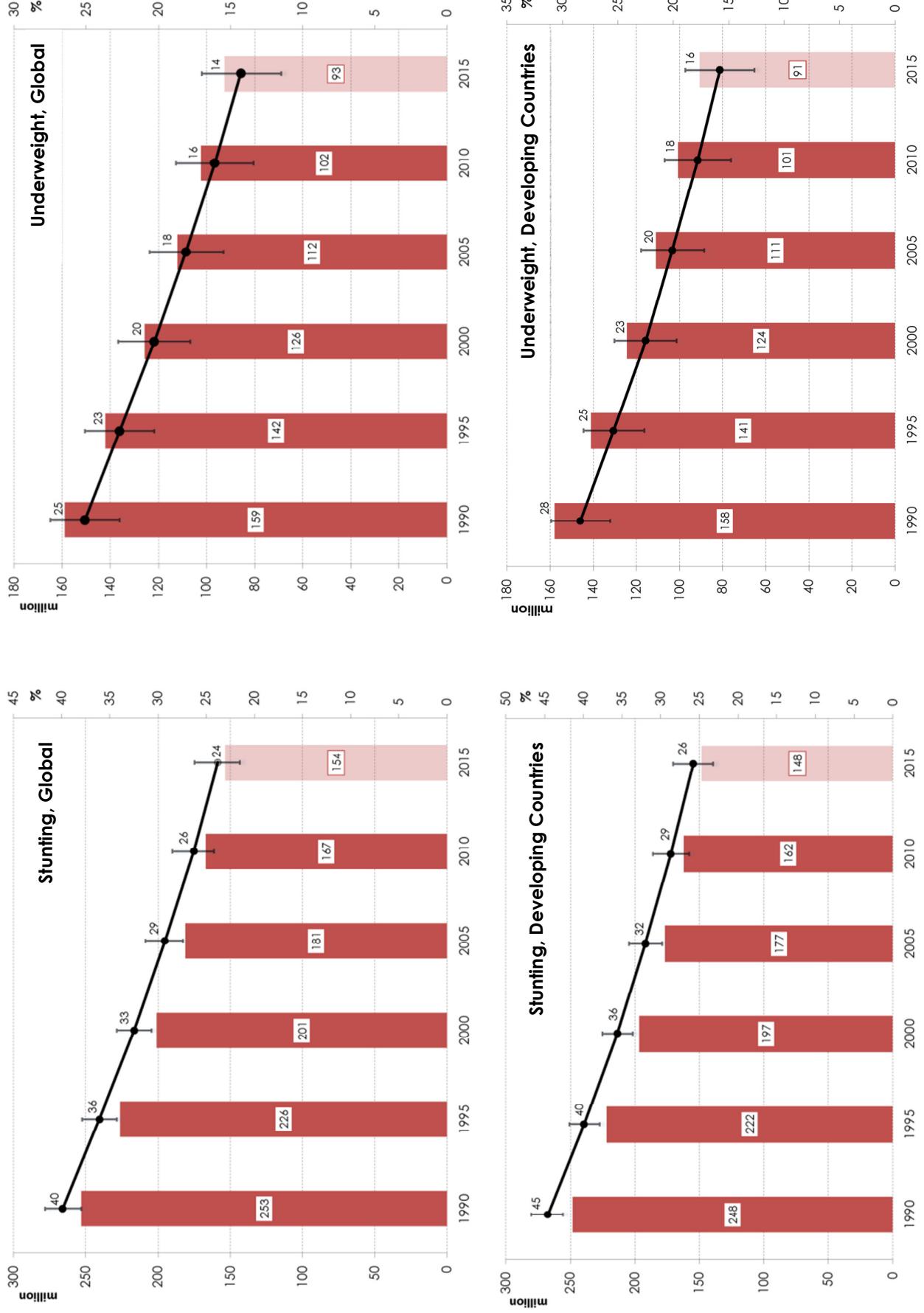
The global prevalence of underweight has declined 37% from 25% (23%, 28%) in 1990 to 16% (13%, 18%) with an average annual rate of reduction of 2.2% per year.



**Figure 2.** Latest country prevalence estimates for stunting among children under-five years of age.



**Figure 2, continued.** Latest country prevalence estimates for underweight, wasting and overweight among children under-five years of age.

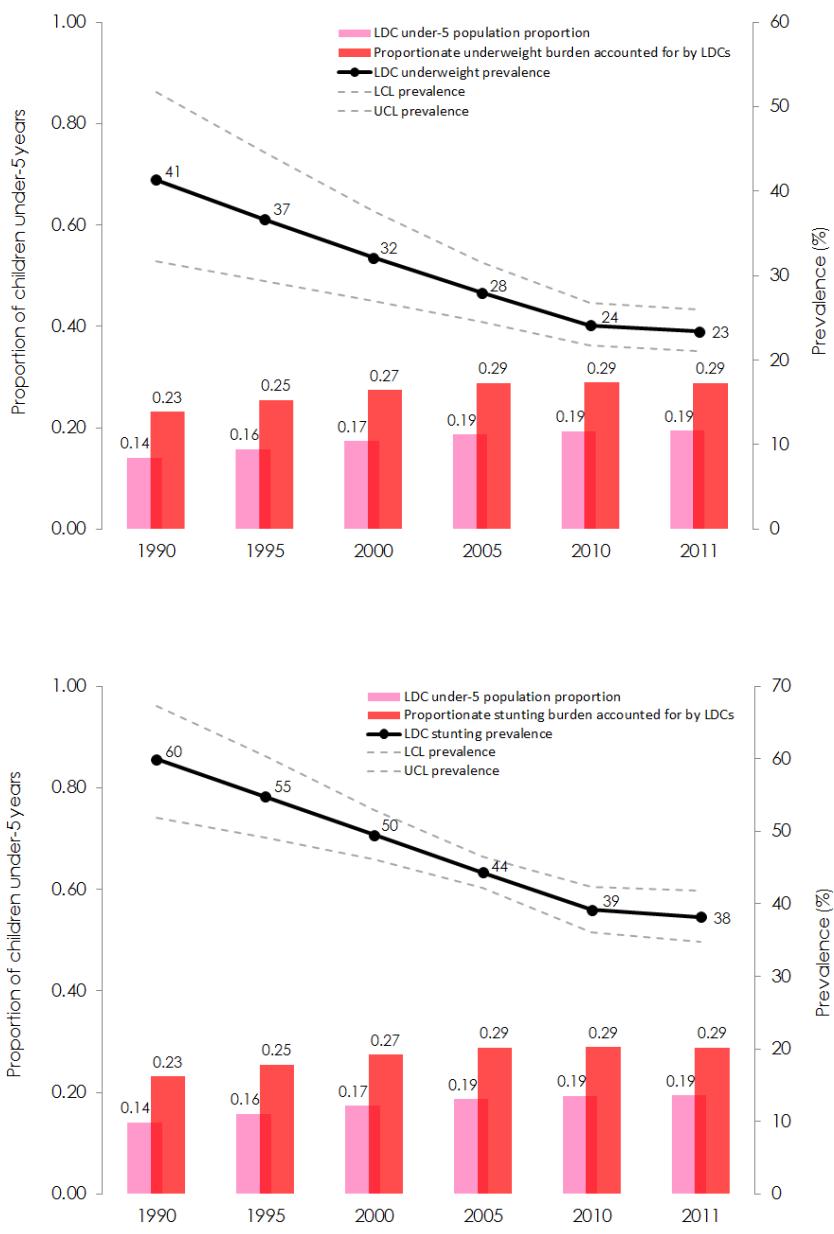


**Figure 3.** Estimated prevalence and burden numbers of stunting and underweight globally and for all developing countries, 1990–2015

Estimates from 2011 suggest stunting prevalence reductions of more than 40% in Asia and Latin America and the Caribbean since 1990. Reductions in Africa and Oceania have been more modest (10–15%). During the same period, reductions in the prevalence of underweight were 56% in Latin America and the Caribbean (overall prevalence <10%), 41% in Asia, 28% in Oceania and 22% in Africa.

In Least Developed Countries (LDCs) the prevalence of underweight decreased from 41% (32%, 52%) in 1990 to 23% (21%, 26%) in 2011 (**Figure 4**)—a 21% decrease from 37 million underweight children in 1990 to 29 million in 2011. While underweight prevalence is decreasing, increases in the under-five population in the LDCs counteracts this trend and results in stagnation in the proportion of the underweight burden numbers accounted for by LDCs since 2005.

Similarly, the prevalence of stunting in LDCs decreased from 60% (52%, 67%) in 1990 to 38% (35%, 42%) in 2011 (**Figure 4**). This decline accounts for an estimated decrease from 53 million stunted children in 1990 to 48 million in 2011 (an 11% decrease). Again, while stunting prevalence is decreasing, the increase in under-five population in the LDCs results in a continuing increase in the number of stunted children in LDCs.

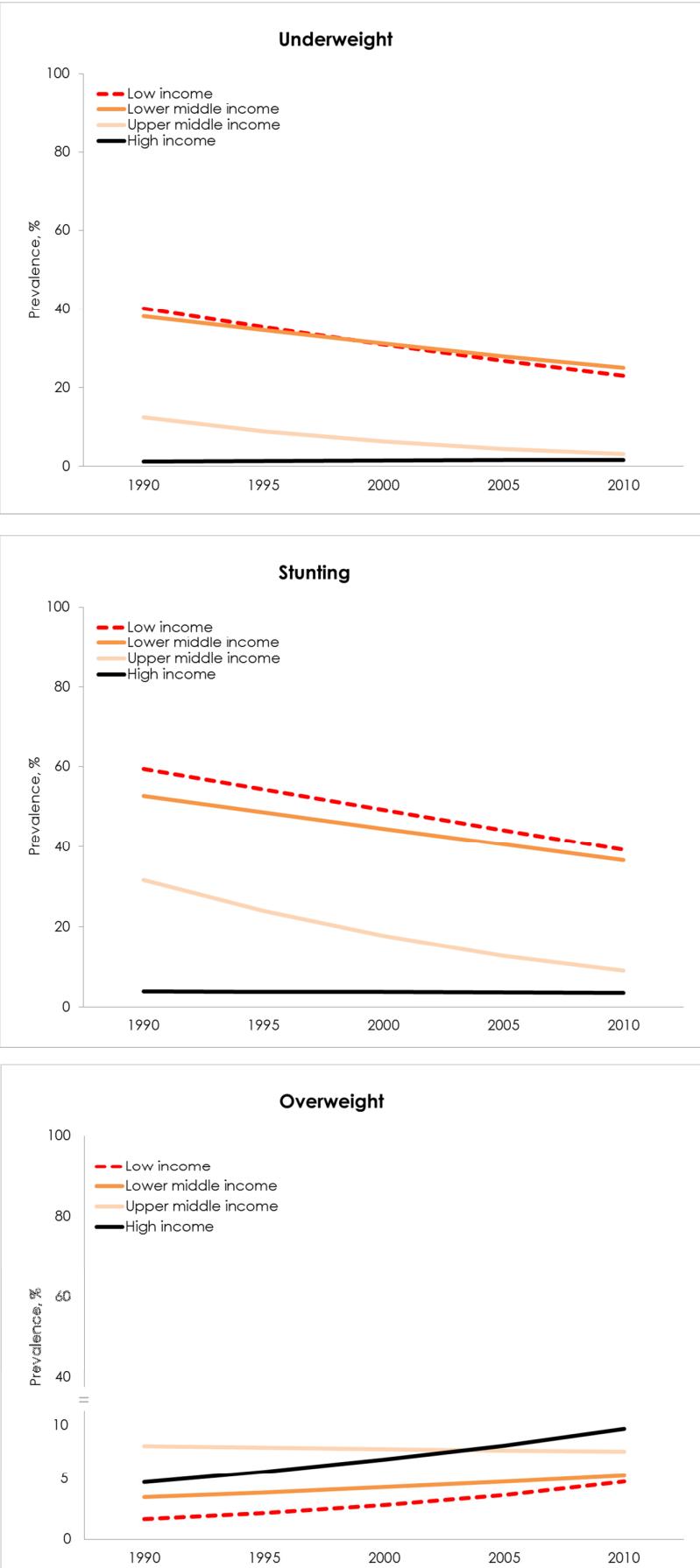


**Figure 4.** Prevalence of stunting and underweight (moderate or severe) among children under-five years of age and proportionate stunting and underweight burden accounted for by children under-five years of age in Least Developed Countries compared to the total population proportion of children under-five years, 1990–2011.

Across World Bank income groups as of 1 July 2012<sup>5</sup> (**Figure 5**), estimated prevalences of stunting are highest among the low income country group and lowest among the upper middle income group.

Estimated prevalences of overweight are similar among the low and lower middle income groups yet remain consistently higher than those for the upper middle income group.

For overweight, the low and high income country groups increase at a similar rate, but at different levels. Current estimates for the low and high income country groups are 4% (3%, 6%) and 8% (6%, 12%), respectively. The low income group is currently catching up with the lower middle income group.



<sup>5</sup> The World Bank's income classifications are updated on 1 July each year based on estimates of gross national income (GNI) per capita for the previous year. This analysis reflects the classification as of July 2012, and is applied for a whole time series.

**Figure 5.** Prevalence of underweight, stunting and overweight among children under 5 years of age by World Bank income group, 1990-2010.

# References

Black RE, Allen LH, Bhutta ZA, Caulfield LE, de Onis M, Ezzati M, Mathers C, Rivera J, for the Maternal and Child Undernutrition Study Group. Maternal and child undernutrition: global and regional exposures and health consequences. Lancet 2008;371:243–60.

de Onis M, Blössner M. The World Health Organization Global Database on Child Growth and Malnutrition: methodology and applications. Int J Epidemiol. 2003;32:518–26.

de Onis M, Blössner MB, Borghi E. Estimates of global prevalence of childhood underweight in 1990 and 2015. JAMA. 2004;291:2600–06.

de Onis M, Blössner M, Borghi E, Morris R, Frongillo EA. Methodology for estimating regional and global trends of child malnutrition. Int J Epidemiol. 2004;33:1260–70.

de Onis M, Onyango AW, Borghi E, Garza C, Yang H. Comparison of the World Health Organization (WHO) Child Growth Standards and the National Center for Health Statistics/WHO international growth reference: implications for child health programmes. Public Health Nutr. 2006;9:942–7.

Liu L, Johnson HL, Cousens S, Perin J, Scott S, Lawn JE, Rudan I, Campbell H, Cibulskis R, Li M, Mathers C, Black RE, for the Child Health Epidemiology Reference Group of WHO and UNICEF. Global, regional, and national causes of child mortality: an updated systematic analysis for 2010 with time trends since 2000. Lancet. 2012;379:2151–61.

United Nations Children's Fund (UNICEF). Technical Note: Age-adjustment of child anthropometry estimates. (UNICEF, New York, 2010). Available on the world wide web at [http://www.childinfo.org/files/Technical\\_Note\\_age\\_adj.pdf](http://www.childinfo.org/files/Technical_Note_age_adj.pdf).

WHO Multicentre Growth Reference Study Group. WHO Child Growth Standards: Length/height-for-age, weight-for-age, weight-for-length, weight-for-height and body mass index-for-age: methods and development. (WHO, Geneva, 2006) Available on the world wide web at [http://www.who.int/childgrowth/publications/technical\\_report\\_pub/en/index.html](http://www.who.int/childgrowth/publications/technical_report_pub/en/index.html).

World Health Organization. Training Course on Child Growth Assessment. (WHO, Geneva, 2008). Available on the world wide web at <http://www.who.int/childgrowth/training/en/>.

Yang H, de Onis M. Algorithms for converting estimates of child malnutrition based on the NCHS reference into estimates based on the WHO Child Growth Standards. BMC Pediatr. 2008;8:19.

# Statistical Tables

## Regional and global estimates of under-five stunting, underweight, wasting and overweight

The detailed tables below present prevalence estimates of under-five stunting, underweight, wasting and overweight by different regional country classifications. Further details are available online at [www.childinfo.org/nutrition.html](http://www.childinfo.org/nutrition.html) and [www.who.int/nutgrowthdb/estimates/en/index.html](http://www.who.int/nutgrowthdb/estimates/en/index.html). Prevalence and 95% confidence limits are presented according to Louis TA, Zeger SL. Effective communication of standard errors and confidence intervals. Biostatistics, 2009;10:1-2.

These model-based estimates were derived using the method described in de Onis et al. 2004. UNICEF conducted the analyses for UNICEF and MDG regions; the World Bank conducted the analysis for the respective WB income groups; and WHO conducted analyses for UN and WHO regions. All agencies used the WHO and UNICEF Joint Global Nutrition Database, 2011 revision (completed July 2012), and the United Nations, Department of Economic and Social Affairs, Population Division (2011). World Population Prospects: The 2010 Revision, CD-ROM Edition. These data supersede relevant historical analysis previously published by WHO and UNICEF.

### Estimated prevalence and number of children under-five years of age affected by stunting (moderate or severe) by United Nations region: 1990, 2010, 2011

Region	prevalence estimate (%)			number (million)		
	1990	2010	2011	1990	2010	2011
Africa	38.5 <b>41.6</b> 44.6	33.6 <b>35.9</b> 38.2	33.3 <b>35.6</b> 38.0	42.3 <b>45.7</b> 49.0	52.2 <b>55.8</b> 59.4	52.5 <b>56.3</b> 60.0
Eastern	44.2 <b>50.6</b> 57.0	39.3 <b>42.5</b> 45.9	38.9 <b>42.1</b> 45.4	15.7 <b>18.0</b> 20.3	20.8 <b>22.6</b> 24.3	21.0 <b>22.8</b> 24.6
Middle	36.4 <b>47.2</b> 58.2	30.1 <b>35.6</b> 41.4	29.1 <b>35.0</b> 41.4	5.0 <b>6.4</b> 7.9	6.6 <b>7.8</b> 9.1	6.5 <b>7.8</b> 9.2
Northern	22.3 <b>28.6</b> 35.8	14.9 <b>21.3</b> 29.6	14.6 <b>21.0</b> 29.4	4.9 <b>6.3</b> 7.9	3.5 <b>5.0</b> 6.9	3.5 <b>5.0</b> 7.0
Southern	32.9 <b>36.2</b> 39.7	25.6 <b>31.1</b> 37.1	25.2 <b>30.8</b> 37.0	2.0 <b>2.2</b> 2.4	1.5 <b>1.9</b> 2.2	1.5 <b>1.8</b> 2.2
Western	35.4 <b>39.1</b> 42.9	32.1 <b>36.5</b> 41.1	31.7 <b>36.4</b> 41.2	11.5 <b>12.8</b> 14.0	16.3 <b>18.6</b> 20.9	16.5 <b>18.9</b> 21.5
Asia <sup>1</sup>	45.6 <b>48.4</b> 51.1	24.2 <b>27.7</b> 31.3	23.2 <b>26.8</b> 30.5	178.1 <b>188.7</b> 199.3	85.8 <b>98.4</b> 111.1	82.8 <b>95.8</b> 108.8
Eastern <sup>1</sup>	34.9 <b>36.8</b> 38.6	8.6 <b>9.2</b> 10.0	7.9 <b>8.5</b> 9.2	45.5 <b>47.9</b> 50.3	7.5 <b>8.1</b> 8.7	7.0 <b>7.5</b> 8.1
South-Central	54.4 <b>59.3</b> 64.0	31.3 <b>37.5</b> 44.1	30.1 <b>36.4</b> 43.2	98.6 <b>107.5</b> 116.1	58.7 <b>70.3</b> 82.7	57.0 <b>68.8</b> 81.7
South-Eastern	38.1 <b>47.3</b> 56.6	22.7 <b>28.2</b> 34.5	21.8 <b>27.4</b> 33.7	21.7 <b>27.0</b> 32.3	12.2 <b>15.2</b> 18.5	11.6 <b>14.6</b> 18.0
Western	22.7 <b>29.2</b> 36.6	10.8 <b>18.5</b> 29.7	10.4 <b>18.0</b> 29.5	4.9 <b>6.3</b> 7.9	2.8 <b>4.9</b> 7.8	2.8 <b>4.8</b> 7.9
Latin America & Caribbean	19.3 <b>24.6</b> 29.9	9.4 <b>13.8</b> 18.2	9.0 <b>13.4</b> 17.7	10.8 <b>13.7</b> 16.7	5.0 <b>7.4</b> 9.8	4.8 <b>7.1</b> 9.4
Caribbean	9.4 <b>16.5</b> 27.2	3.3 <b>7.0</b> 14.2	3.1 <b>6.7</b> 13.7	0.4 <b>0.7</b> 1.1	0.1 <b>0.3</b> 0.5	0.1 <b>0.2</b> 0.5
Central America	23.9 <b>34.0</b> 45.8	12.1 <b>19.2</b> 29.2	11.6 <b>18.6</b> 28.5	3.8 <b>5.4</b> 7.2	2.0 <b>3.1</b> 4.8	1.9 <b>3.0</b> 4.6
South America	15.5 <b>21.4</b> 28.8	7.2 <b>11.9</b> 19.0	6.9 <b>11.5</b> 18.6	5.6 <b>7.7</b> 10.4	2.5 <b>4.0</b> 6.4	2.3 <b>3.9</b> 6.2
Oceania <sup>2</sup>	26.8 <b>40.4</b> 55.7	16.8 <b>35.8</b> 60.6	16.0 <b>35.5</b> 61.4	0.3 <b>0.4</b> 0.5	0.2 <b>0.5</b> 0.8	0.2 <b>0.5</b> 0.8
All developing countries	42.6 <b>44.6</b> 46.7	26.3 <b>28.7</b> 31.0	25.6 <b>28.0</b> 30.4	237.0 <b>248.4</b> 259.9	148.7 <b>162.1</b> 175.4	145.9 <b>159.7</b> 173.4
Developed countries	3.3 <b>6.1</b> 11.0	4.0 <b>7.2</b> 12.5	4.1 <b>7.2</b> 12.6	2.5 <b>4.7</b> 8.5	2.8 <b>5.1</b> 8.8	2.9 <b>5.1</b> 8.9
<b>Global</b>	<b>38.1 39.9 41.8</b>	<b>24.1 26.3 28.4</b>	<b>23.5 25.7 27.9</b>	<b>241.4 253.1 264.9</b>	<b>153.5 167.1 180.7</b>	<b>150.8 164.8 178.8</b>

<sup>1</sup> Excluding Japan

<sup>2</sup> Excluding Australia and New Zealand

Prevalence and 95% confidence limits (lower P upper)

**Estimated prevalence and number of children under-five years of age affected by underweight (moderate or severe) by United Nations region: 1990, 2010, 2011**

Region	prevalence estimate (%)			number (million)		
	1990	2010	2011	1990	2010	2011
Africa	20.0 <b>22.7</b> 25.4	15.9 <b>17.9</b> 19.9	15.7 <b>17.7</b> 19.7	22.0 <b>24.9</b> 27.9	24.7 <b>27.8</b> 30.9	24.7 <b>27.9</b> 31.1
Eastern	22.1 <b>27.2</b> 32.9	16.1 <b>19.6</b> 23.8	15.7 <b>19.3</b> 23.5	7.8 <b>9.7</b> 11.7	8.5 <b>10.4</b> 12.6	8.5 <b>10.4</b> 12.7
Middle	18.9 <b>26.5</b> 35.7	13.1 <b>17.8</b> 23.7	12.7 <b>17.4</b> 23.4	2.6 <b>3.6</b> 4.9	2.9 <b>3.9</b> 5.2	2.8 <b>3.9</b> 5.2
Northern	6.8 <b>11.3</b> 18.2	3.1 <b>6.7</b> 13.6	3.0 <b>6.5</b> 13.4	1.5 <b>2.5</b> 4.0	0.7 <b>1.6</b> 3.2	0.7 <b>1.5</b> 3.2
Southern	8.0 <b>12.1</b> 18.0	9.0 <b>11.9</b> 15.6	9.0 <b>11.9</b> 15.7	0.5 <b>0.7</b> 1.1	0.5 <b>0.7</b> 0.9	0.5 <b>0.7</b> 0.9
Western	21.5 <b>25.9</b> 30.9	18.9 <b>22.0</b> 25.5	18.6 <b>21.8</b> 25.4	7.0 <b>8.5</b> 10.1	9.6 <b>11.2</b> 13.0	9.7 <b>11.4</b> 13.2
Asia <sup>1</sup>	29.2 <b>32.9</b> 36.7	15.2 <b>20.0</b> 24.7	14.6 <b>19.3</b> 24.1	114.0 <b>128.5</b> 143.1	54.1 <b>70.8</b> 87.6	52.1 <b>69.1</b> 86.1
Eastern <sup>1</sup>	13.9 <b>15.0</b> 16.2	3.1 <b>3.4</b> 3.7	2.9 <b>3.1</b> 3.4	18.0 <b>19.5</b> 21.1	2.7 <b>2.9</b> 3.2	2.5 <b>2.7</b> 3.0
South-Central	40.8 <b>48.6</b> 56.4	22.4 <b>30.6</b> 40.1	21.6 <b>29.8</b> 39.4	73.9 <b>88.1</b> 102.3	42.1 <b>57.3</b> 75.3	40.8 <b>56.2</b> 74.5
South-Eastern	27.2 <b>31.2</b> 35.5	14.4 <b>17.2</b> 20.3	13.9 <b>16.6</b> 19.8	15.5 <b>17.8</b> 20.3	7.7 <b>9.2</b> 10.9	7.4 <b>8.8</b> 10.5
Western	10.2 <b>14.4</b> 19.9	1.8 <b>5.1</b> 13.2	1.6 <b>4.8</b> 13.1	2.2 <b>3.1</b> 4.3	0.5 <b>1.3</b> 3.5	0.4 <b>1.3</b> 3.5
Latin America & Caribbean	5.5 <b>7.7</b> 9.9	2.4 <b>3.5</b> 4.7	2.3 <b>3.4</b> 4.5	3.0 <b>4.3</b> 5.5	1.3 <b>1.9</b> 2.5	1.2 <b>1.8</b> 2.4
Caribbean	4.9 <b>8.5</b> 14.3	1.7 <b>3.7</b> 7.7	1.6 <b>3.5</b> 7.5	0.2 <b>0.3</b> 0.6	0.1 <b>0.1</b> 0.3	0.1 <b>0.1</b> 0.3
Central America	6.7 <b>11.1</b> 17.9	2.3 <b>4.2</b> 7.3	2.2 <b>3.9</b> 7.0	1.1 <b>1.7</b> 2.8	0.4 <b>0.7</b> 1.2	0.4 <b>0.6</b> 1.1
South America	4.1 <b>6.1</b> 9.1	2.0 <b>3.2</b> 4.9	2.0 <b>3.1</b> 4.8	1.5 <b>2.2</b> 3.3	0.7 <b>1.1</b> 1.7	0.7 <b>1.0</b> 1.6
Oceania <sup>2</sup>	14.3 <b>19.4</b> 25.8	8.3 <b>14.2</b> 23.1	8.0 <b>14.0</b> 23.2	0.1 <b>0.2</b> 0.2	0.1 <b>0.2</b> 0.3	0.1 <b>0.2</b> 0.3
All developing countries	25.7 <b>28.4</b> 31.0	14.8 <b>17.8</b> 20.8	14.3 <b>17.4</b> 20.4	143.0 <b>157.9</b> 172.8	83.6 <b>100.7</b> 117.8	81.7 <b>99.0</b> 116.3
Developed countries	0.9 <b>1.5</b> 2.8	1.6 <b>2.3</b> 3.4	1.7 <b>2.4</b> 3.4	0.7 <b>1.2</b> 2.1	1.1 <b>1.6</b> 2.4	1.2 <b>1.7</b> 2.4
<b>Global</b>	<b>22.7</b> <b>25.1</b> 27.5	<b>13.4</b> <b>16.1</b> 18.8	<b>13.0</b> <b>15.7</b> 18.4	<b>144.2</b> <b>159.1</b> 174.0	<b>85.3</b> <b>102.3</b> 119.4	<b>83.3</b> <b>100.7</b> 118.0

<sup>1</sup> Excluding Japan

<sup>2</sup> Excluding Australia and New Zealand

Prevalence and 95% confidence limits (lower P upper)

**Estimated prevalence and number of children under-five years of age affected by wasting (moderate or severe) by United Nations region: 1990, 2010, 2011**

Region	prevalence estimate (%)			number (million)		
	1990	2010	2011	1990	2010	2011
Africa	7.4 <b>8.7</b> 10.0	7.4 <b>8.5</b> 9.6	7.4 <b>8.5</b> 9.6	8.2 <b>9.6</b> 11.0	11.5 <b>13.2</b> 14.9	11.6 <b>13.4</b> 15.2
Eastern	6.5 <b>8.4</b> 10.8	5.0 <b>6.8</b> 9.1	4.9 <b>6.7</b> 9.2	2.3 <b>3.0</b> 3.8	2.7 <b>3.6</b> 4.8	2.6 <b>3.6</b> 5.0
Middle	6.2 <b>9.9</b> 15.3	7.4 <b>9.3</b> 11.8	7.4 <b>9.3</b> 11.7	0.8 <b>1.3</b> 2.1	1.6 <b>2.0</b> 2.6	1.6 <b>2.1</b> 2.6
Northern	3.1 <b>5.3</b> 8.8	4.6 <b>8.0</b> 13.5	4.7 <b>8.2</b> 13.8	0.7 <b>1.2</b> 1.9	1.1 <b>1.9</b> 3.2	1.1 <b>1.9</b> 3.3
Southern	2.4 <b>4.7</b> 8.9	3.5 <b>5.6</b> 8.9	3.4 <b>5.7</b> 9.3	0.1 <b>0.3</b> 0.5	0.2 <b>0.3</b> 0.5	0.2 <b>0.3</b> 0.6
Western	9.3 <b>11.6</b> 14.4	9.2 <b>10.5</b> 11.9	9.2 <b>10.4</b> 11.9	3.0 <b>3.8</b> 4.7	4.7 <b>5.3</b> 6.1	4.8 <b>5.4</b> 6.2
Asia <sup>1</sup>	10.2 <b>11.4</b> 12.7	8.0 <b>10.2</b> 12.4	7.9 <b>10.1</b> 12.3	39.8 <b>44.6</b> 49.4	28.5 <b>36.2</b> 44.0	28.2 <b>36.1</b> 44.0
Eastern <sup>1</sup>	4.0 <b>4.3</b> 4.6	2.2 <b>2.4</b> 2.5	2.2 <b>2.3</b> 2.4	5.3 <b>5.6</b> 6.0	2.0 <b>2.1</b> 2.2	1.9 <b>2.0</b> 2.2
South-Central	15.5 <b>17.9</b> 20.7	11.3 <b>14.9</b> 19.4	11.1 <b>14.8</b> 19.4	28.0 <b>32.5</b> 37.6	21.2 <b>28.0</b> 36.4	21.0 <b>27.9</b> 36.6
South-Eastern	7.9 <b>9.0</b> 10.1	7.5 <b>9.7</b> 12.4	7.5 <b>9.7</b> 12.6	4.5 <b>5.1</b> 5.8	4.1 <b>5.2</b> 6.7	4.0 <b>5.2</b> 6.7
Western	4.2 <b>6.3</b> 9.3	1.0 <b>3.6</b> 12.1	0.9 <b>3.5</b> 12.5	0.9 <b>1.4</b> 2.0	0.3 <b>1.0</b> 3.2	0.2 <b>0.9</b> 3.3
Latin America & Caribbean	1.9 <b>2.6</b> 3.3	0.9 <b>1.4</b> 1.9	0.9 <b>1.4</b> 1.9	1.1 <b>1.5</b> 1.8	0.5 <b>0.8</b> 1.0	0.5 <b>0.7</b> 1.0
Caribbean	2.6 <b>3.7</b> 5.3	1.7 <b>3.4</b> 6.9	1.6 <b>3.4</b> 7.0	0.1 <b>0.1</b> 0.2	0.1 <b>0.1</b> 0.3	0.1 <b>0.1</b> 0.3
Central America	2.0 <b>3.2</b> 5.1	0.9 <b>1.1</b> 1.4	0.8 <b>1.0</b> 1.3	0.3 <b>0.5</b> 0.8	0.1 <b>0.2</b> 0.2	0.1 <b>0.2</b> 0.2
South America	1.6 <b>2.2</b> 3.2	0.8 <b>1.4</b> 2.3	0.8 <b>1.3</b> 2.3	0.6 <b>0.8</b> 1.2	0.3 <b>0.5</b> 0.8	0.3 <b>0.4</b> 0.8
Oceania <sup>2</sup>	4.2 <b>5.1</b> 6.3	3.1 <b>4.3</b> 6.1	3.0 <b>4.3</b> 6.2	0.0 <b>0.0</b> 0.1	0.0 <b>0.1</b> 0.1	0.0 <b>0.1</b> 0.1
All developing countries	9.1 <b>10.0</b> 10.9	7.5 <b>8.9</b> 10.3	7.4 <b>8.8</b> 10.3	50.6 <b>55.7</b> 60.7	42.3 <b>50.2</b> 58.2	42.1 <b>50.3</b> 58.4
Developed countries	1.6 <b>2.9</b> 5.4	0.9 <b>1.8</b> 3.6	0.8 <b>1.7</b> 3.5	1.2 <b>2.3</b> 4.2	0.6 <b>1.2</b> 2.5	0.6 <b>1.2</b> 2.5
<b>Global</b>	<b>8.3 9.1</b> 10.0	<b>6.8 8.1</b> 9.4	<b>6.8 8.0</b> 9.3	<b>52.8 58.0</b> 63.1	<b>43.5 51.5</b> 59.5	<b>43.3 51.5</b> 59.6

<sup>1</sup> Excluding Japan

<sup>2</sup> Excluding Australia and New Zealand

Prevalence and 95% confidence limits (lower P upper)

**Estimated prevalence and number of children under-five years of age affected by overweight (including obesity) by United Nations region: 1990, 2010, 2011**

Region	prevalence estimate (%)			number (million)		
	1990	2010	2011	1990	2010	2011
Africa	3.4 4.2 5.0	6.0 7.1 8.1	6.2 7.3 8.4	3.8 4.6 5.5	9.3 11.0 12.6	9.8 11.5 13.2
Eastern	3.3 4.4 6.0	3.8 5.0 6.4	3.8 5.0 6.5	1.2 1.6 2.1	2.0 2.6 3.4	2.1 2.7 3.5
Middle	2.1 3.5 5.8	4.0 5.6 7.8	4.1 5.8 8.0	0.3 0.5 0.8	0.9 1.2 1.7	0.9 1.3 1.8
Northern	4.8 7.3 10.9	9.0 12.8 17.8	9.3 13.1 18.2	1.1 1.6 2.4	2.1 3.0 4.2	2.2 3.1 4.3
Southern	4.7 6.1 7.8	8.0 15.6 28.2	8.1 16.3 30.0	0.3 0.4 0.5	0.5 0.9 1.7	0.5 1.0 1.8
Western	1.5 1.9 2.3	4.8 6.2 8.2	5.0 6.6 8.7	0.5 0.6 0.8	2.4 3.2 4.2	2.6 3.4 4.5
Asia <sup>1</sup>	2.8 3.7 4.5	3.7 4.6 5.5	3.7 4.7 5.8	11.1 14.4 17.7	13.2 16.5 19.7	13.3 16.9 20.6
Eastern <sup>1</sup>	6.1 6.8 7.5	4.7 5.6 6.6	4.7 5.5 6.6	8.0 8.8 9.8	4.1 4.9 5.8	4.1 4.9 5.8
South-Central	0.8 2.0 4.7	2.0 3.0 4.5	1.9 3.1 4.8	1.5 3.6 8.5	3.7 5.6 8.4	3.7 5.8 9.1
South-Eastern	1.3 1.8 2.4	3.1 5.8 10.6	3.1 6.1 11.6	0.7 1.0 1.4	1.7 3.1 5.7	1.7 3.3 6.2
Western	2.5 4.4 7.6	7.7 10.8 15.1	7.8 11.3 16.0	0.5 1.0 1.7	2.0 2.8 4.0	2.1 3.0 4.3
Latin America & Caribbean	5.2 6.5 7.7	6.2 7.1 8.0	6.2 7.1 8.0	2.9 3.6 4.3	3.3 3.8 4.3	3.3 3.8 4.3
Caribbean	3.3 4.0 4.9	4.6 7.3 11.4	4.6 7.5 11.9	0.1 0.2 0.2	0.2 0.3 0.4	0.2 0.3 0.4
Central America	3.6 5.1 7.3	5.5 6.4 7.3	5.6 6.4 7.4	0.6 0.8 1.2	0.9 1.0 1.2	0.9 1.0 1.2
South America	5.7 7.3 9.3	6.2 7.4 8.9	6.2 7.4 8.9	2.1 2.6 3.4	2.1 2.5 3.0	2.1 2.5 3.0
Oceania <sup>2</sup>	2.3 2.6 3.0	2.9 3.6 4.6	2.9 3.7 4.7	0.0 0.0 0.0	0.0 0.0 0.1	0.0 0.0 0.1
All developing countries	3.4 4.1 4.7	4.9 5.5 6.2	5.0 5.7 6.4	19.2 22.7 26.1	27.7 31.3 34.9	28.2 32.3 36.3
Developed countries	4.9 7.4 11.0	9.4 14.1 20.4	9.7 14.5 21.1	3.8 5.7 8.5	6.6 9.9 14.4	6.9 10.3 15.0
<b>Global</b>	<b>3.8 4.5 5.1</b>	<b>5.7 6.5 7.3</b>	<b>5.8 6.6 7.5</b>	<b>24.3 28.4 32.4</b>	<b>36.2 41.2 46.2</b>	<b>37.2 42.6 48.0</b>

<sup>1</sup> Excluding Japan

<sup>2</sup> Excluding Australia and New Zealand

Prevalence and 95% confidence limits (lower P upper)

**Estimated prevalence and number of children under-five years of age affected by stunting (moderate or severe) by MDG region: 1990, 2010, 2011**

Region	prevalence estimate (%)			number (million)		
	1990	2010	2011	1990	2010	2011
Northern Africa	24.1 29.2 34.9	16.6 20.0 24.0	16.2 19.7 23.7	4.2 5.1 6.1	2.8 3.4 4.1	2.8 3.4 4.1
Sub-Saharan Africa	42.4 47.2 52.1	37.8 40.0 42.2	37.5 39.6 41.8	39.2 43.6 48.1	52.2 55.2 58.3	52.7 55.8 58.8
Latin America & Caribbean	17.8 22.6 28.2	7.8 12.2 18.6	7.5 11.8 18.3	9.9 12.6 15.7	4.2 6.6 10.0	4.0 6.3 9.7
Eastern Asia	35.0 36.7 38.5	8.6 9.2 9.9	7.9 8.5 9.2	45.6 47.8 50.1	7.5 8.1 8.7	7.0 7.5 8.1
Southern Asia	55.6 60.0 64.4	32.8 38.3 44.2	31.6 37.3 43.3	96.7 104.5 112.0	59.4 69.4 80.1	57.6 68.0 79.0
South-Eastern Asia	38.2 47.3 56.6	23.4 28.6 34.5	22.5 27.8 33.8	21.8 27.0 32.3	12.6 15.4 18.6	12.0 14.8 18.0
Western Asia	22.6 29.9 38.4	10.6 18.3 29.8	10.1 17.9 29.6	4.4 5.8 7.4	2.6 4.4 7.2	2.5 4.4 7.3
Oceania	21.9 37.8 56.8	19.8 33.4 50.6	19.7 33.2 50.3	0.2 0.4 0.5	0.3 0.4 0.7	0.3 0.4 0.7
Caucasus & Central Asia	22.1 37.3 55.5	13.1 18.1 24.3	12.2 17.3 24.1	2.0 3.4 5.0	1.0 1.4 1.9	1.0 1.4 1.9
Developed	2.6 3.6 5.0	2.9 4.2 6.1	2.9 4.2 6.2	2.0 2.8 3.9	2.0 3.0 4.3	2.1 3.0 4.4
<b>Global<sup>1</sup></b>	<b>38.1 39.9 41.8</b>	<b>24.1 26.3 28.4</b>	<b>23.5 25.7 27.9</b>	<b>241.4 253.1 264.9</b>	<b>153.5 167.1 180.7</b>	<b>150.8 164.8 178.8</b>

**Estimated prevalence and number of children under-five years of age affected by underweight (moderate or severe) by MDG region: 1990, 2010, 2011**

Region	prevalence estimate (%)			number (million)		
	1990	2010	2011	1990	2010	2011
Northern Africa	9.0 9.8 10.6	4.3 5.4 6.8	4.1 5.3 6.7	1.6 1.7 1.9	0.7 0.9 1.2	0.7 0.9 1.2
Sub-Saharan Africa	24.2 29.0 34.4	18.8 21.8 25.0	18.5 21.4 24.7	22.3 26.8 31.7	26.0 30.1 34.6	26.1 30.2 34.7
Latin America & Caribbean	5.3 7.3 9.9	2.4 3.2 4.2	2.3 3.1 4.1	3.0 4.0 5.5	1.3 1.7 2.3	1.2 1.6 2.2
Eastern Asia	13.9 15.0 16.1	3.1 3.4 3.7	2.9 3.1 3.4	18.1 19.5 20.9	2.7 2.9 3.2	2.5 2.7 3.0
Southern Asia	44.1 50.4 56.6	25.3 32.2 39.9	24.4 31.3 39.2	76.8 87.7 98.5	45.9 58.3 72.3	44.6 57.2 71.5
South-Eastern Asia	27.4 31.3 35.4	14.8 17.4 20.3	14.3 16.8 19.7	15.6 17.8 20.2	8.0 9.4 10.9	7.6 9.0 10.5
Western Asia	10.2 15.1 21.8	1.8 5.0 13.2	1.6 4.7 13.0	2.0 2.9 4.2	0.4 1.2 3.2	0.4 1.2 3.2
Oceania	13.3 18.5 25.0	9.6 13.9 19.7	9.5 13.7 19.5	0.1 0.2 0.2	0.1 0.2 0.3	0.1 0.2 0.3
Caucasus & Central Asia	7.0 14.4 27.4	2.3 4.1 7.1	2.1 3.8 7.0	0.6 1.3 2.5	0.2 0.3 0.5	0.2 0.3 0.5
Developed	0.7 1.0 1.4	1.4 1.6 1.8	1.5 1.6 1.8	0.6 0.8 1.1	1.0 1.1 1.3	1.1 1.2 1.3
<b>Global<sup>1</sup></b>	<b>22.7 25.1 27.5</b>	<b>13.4 16.1 18.8</b>	<b>13.0 15.7 18.4</b>	<b>144.2 159.1 174.0</b>	<b>85.3 102.3 119.4</b>	<b>83.3 100.7 118.0</b>

<sup>1</sup> Numbers of children affected may not sum to Global total due to differences in constituent countries that comprise region classification.

Prevalence and 95% confidence limits (lower P upper)

**Estimated prevalence and number of children under-five years of age affected by wasting (moderate or severe) by MDG region: 1990, 2010, 2011**

Region	prevalence estimate (%)			number (million)		
	1990	2010	2011	1990	2010	2011
Northern Africa	3.2 3.9 4.8	4.8 6.9 9.8	4.9 7.1 10.3	0.6 0.7 0.8	0.8 1.2 1.7	0.8 1.2 1.8
Sub-Saharan Africa	8.2 10.3 12.9	7.7 9.4 11.5	7.6 9.4 11.5	7.6 9.5 11.9	10.6 13.0 15.9	10.7 13.2 16.1
Latin America & Caribbean	2.0 3.2 5.0	1.1 1.6 2.3	1.0 1.5 2.2	1.1 1.8 2.8	0.6 0.8 1.2	0.6 0.8 1.2
Eastern Asia	4.0 4.3 4.6	2.2 2.4 2.5	2.2 2.3 2.4	5.3 5.6 6.0	2.0 2.1 2.2	1.9 2.0 2.2
Southern Asia	16.3 18.4 20.7	12.1 15.4 19.4	11.9 15.3 19.4	28.4 32.0 36.0	21.9 27.9 35.3	21.7 27.8 35.4
South-Eastern Asia	7.9 8.9 10.0	7.6 9.8 12.4	7.6 9.8 12.6	4.5 5.1 5.7	4.1 5.2 6.7	4.0 5.2 6.7
Western Asia	4.2 6.5 9.9	0.9 3.5 12.4	0.9 3.4 12.8	0.8 1.2 1.9	0.2 0.9 3.0	0.2 0.8 3.1
Oceania	4.5 5.2 6.0	3.8 4.3 4.9	3.8 4.3 4.8	0.0 0.0 0.1	0.1 0.1 0.1	0.1 0.1 0.1
Caucasus & Central Asia	4.5 9.3 18.3	3.4 4.2 5.2	3.2 4.1 5.2	0.4 0.8 1.7	0.3 0.3 0.4	0.3 0.3 0.4
Developed	0.6 0.9 1.4	0.3 0.7 1.5	0.3 0.7 1.6	0.5 0.7 1.1	0.2 0.5 1.1	0.2 0.5 1.1
<b>Global<sup>1</sup></b>	<b>8.3 9.1 10.0</b>	<b>6.8 8.1 9.4</b>	<b>6.8 8.0 9.3</b>	<b>52.8 58.0 63.1</b>	<b>43.5 51.5 59.5</b>	<b>43.3 51.5 59.6</b>

**Estimated prevalence and number of children under-five years of age affected by overweight (including obesity) by MDG region: 1990, 2010, 2011**

Region	prevalence estimate (%)			number (million)		
	1990	2010	2011	1990	2010	2011
Northern Africa	8.6 9.6 10.7	14.1 16.1 18.3	14.4 16.5 18.7	1.5 1.7 1.9	2.4 2.8 3.1	2.5 2.8 3.2
Sub-Saharan Africa	2.6 3.2 4.0	4.6 6.8 9.9	4.7 7.0 10.4	2.4 3.0 3.7	6.3 9.3 13.7	6.5 9.9 14.7
Latin America & Caribbean	5.7 6.7 7.9	6.5 7.2 8.1	6.5 7.3 8.1	3.2 3.7 4.4	3.5 3.9 4.3	3.5 3.9 4.3
Eastern Asia	6.4 6.9 7.4	5.4 5.8 6.2	5.3 5.7 6.2	8.3 8.9 9.6	4.7 5.1 5.4	4.7 5.1 5.5
Southern Asia	0.9 2.1 4.5	1.9 2.7 3.8	1.9 2.7 4.0	1.6 3.6 7.9	3.5 4.9 6.9	3.4 5.0 7.3
South-Eastern Asia	1.3 1.8 2.4	3.1 5.8 10.6	3.2 6.2 11.6	0.7 1.0 1.4	1.7 3.1 5.7	1.7 3.3 6.2
Western Asia	2.4 4.5 8.2	6.9 9.9 14.1	7.0 10.3 15.0	0.5 0.9 1.6	1.7 2.4 3.4	1.7 2.5 3.7
Oceania	2.5 2.6 2.8	3.4 3.6 3.9	3.4 3.7 4.0	0.0 0.0 0.0	0.0 0.0 0.1	0.0 0.0 0.1
Caucasus & Central Asia	2.4 7.1 19.3	9.2 13.2 18.8	8.9 13.6 20.4	0.2 0.6 1.8	0.7 1.0 1.4	0.7 1.1 1.6
Developed	4.3 5.4 6.7	7.4 10.2 13.8	7.6 10.5 14.3	3.4 4.2 5.2	5.3 7.2 9.8	5.5 7.5 10.3
<b>Global<sup>1</sup></b>	<b>3.8 4.5 5.1</b>	<b>5.7 6.5 7.3</b>	<b>5.8 6.6 7.5</b>	<b>24.3 28.4 32.4</b>	<b>36.2 41.2 46.2</b>	<b>37.2 42.6 48.0</b>

<sup>1</sup> Numbers of children affected may not sum to Global total due to differences in constituent countries that comprise region classification.

Prevalence and 95% confidence limits (lower P<sub>upper</sub>)

**Estimated prevalence and number of children under-five years of age affected by stunting (moderate or severe) by UNICEF region: 1990, 2010, 2011**

Region	prevalence estimate (%)			number (million)		
	1990	2010	2011	1990	2010	2011
Africa	38.5 <b>41.6</b> 44.6	33.6 <b>35.9</b> 38.2	33.3 <b>35.6</b> 38.0	42.3 <b>45.7</b> 49.0	52.2 <b>55.8</b> 59.4	52.5 <b>56.3</b> 60.0
Sub-Saharan Africa	42.4 <b>47.2</b> 52.1	37.8 <b>40.0</b> 42.2	37.5 <b>39.6</b> 41.8	39.2 <b>43.6</b> 48.1	52.2 <b>55.2</b> 58.3	52.7 <b>55.8</b> 58.8
Eastern & Southern Africa	42.5 <b>51.6</b> 60.7	36.5 <b>40.3</b> 44.3	36.0 <b>39.8</b> 43.6	18.5 <b>22.5</b> 26.4	22.7 <b>25.1</b> 27.6	22.8 <b>25.2</b> 27.6
West & Central Africa	39.4 <b>44.0</b> 48.7	36.6 <b>39.3</b> 42.0	36.4 <b>39.1</b> 41.8	17.4 <b>19.5</b> 21.5	25.4 <b>27.3</b> 29.2	25.8 <b>27.7</b> 29.6
Middle East & North Africa	25.3 <b>30.8</b> 36.8	14.1 <b>20.6</b> 28.9	13.6 <b>20.1</b> 28.6	11.2 <b>13.6</b> 16.2	6.7 <b>9.8</b> 13.8	6.6 <b>9.7</b> 13.8
Asia	45.6 <b>48.4</b> 51.1	24.2 <b>27.7</b> 31.3	23.2 <b>26.8</b> 30.5	178.1 <b>188.7</b> 199.3	85.8 <b>98.4</b> 111.1	82.8 <b>95.8</b> 108.8
South Asia	57.6 <b>61.3</b> 64.8	36.9 <b>40.0</b> 43.3	35.6 <b>39.0</b> 42.5	94.9 <b>101.0</b> 106.8	64.6 <b>70.1</b> 75.8	62.8 <b>68.7</b> 74.9
East Asia & Pacific	33.5 <b>42.4</b> 51.8	7.4 <b>13.1</b> 22.3	6.7 <b>12.2</b> 21.1	63.1 <b>79.8</b> 97.4	10.5 <b>18.6</b> 31.7	9.6 <b>17.4</b> 30.2
Latin America & Caribbean	17.6 <b>22.4</b> 28.1	7.8 <b>12.1</b> 18.5	7.4 <b>11.7</b> 18.2	9.8 <b>12.5</b> 15.6	4.2 <b>6.5</b> 10.0	3.9 <b>6.3</b> 9.7
CEE/CIS	20.3 <b>27.1</b> 35.1	9.5 <b>12.1</b> 15.4	9.1 <b>11.6</b> 14.8	7.4 <b>9.9</b> 12.8	2.7 <b>3.4</b> 4.3	2.6 <b>3.3</b> 4.3
<b>Global<sup>1</sup></b>	<b>38.1 39.9 41.8</b>	<b>24.1 26.3 28.4</b>	<b>23.5 25.7 27.9</b>	<b>241.4 253.1 264.9</b>	<b>153.5 167.1 180.7</b>	<b>150.8 164.8 178.8</b>

**Estimated prevalence and number of children under-five years of age affected by underweight (moderate or severe) by UNICEF region: 1990, 2010, 2011**

Region	prevalence estimate (%)			number (million)		
	1990	2010	2011	1990	2010	2011
Africa	20.0 <b>22.7</b> 25.4	15.9 <b>17.9</b> 19.9	15.7 <b>17.7</b> 19.7	22.0 <b>24.9</b> 27.9	24.7 <b>27.8</b> 30.9	24.7 <b>27.9</b> 31.1
Sub-Saharan Africa	24.2 <b>29.0</b> 34.4	18.8 <b>21.8</b> 25.0	18.5 <b>21.4</b> 24.7	22.3 <b>26.8</b> 31.7	26.0 <b>30.1</b> 34.6	26.1 <b>30.2</b> 34.7
Eastern & Southern Africa	19.2 <b>27.3</b> 37.1	14.1 <b>18.8</b> 24.6	13.8 <b>18.4</b> 24.1	8.4 <b>11.9</b> 16.1	8.8 <b>11.7</b> 15.3	8.8 <b>11.7</b> 15.3
West & Central Africa	25.5 <b>30.6</b> 36.2	21.5 <b>23.7</b> 26.0	21.2 <b>23.4</b> 25.7	11.3 <b>13.5</b> 16.0	14.9 <b>16.4</b> 18.0	15.0 <b>16.5</b> 18.2
Middle East & North Africa	9.8 <b>14.2</b> 20.2	4.9 <b>8.2</b> 13.4	4.8 <b>8.0</b> 13.2	4.3 <b>6.3</b> 8.9	2.3 <b>3.9</b> 6.4	2.3 <b>3.9</b> 6.4
Asia	29.2 <b>32.9</b> 36.7	15.2 <b>20.0</b> 24.7	14.6 <b>19.3</b> 24.1	114.0 <b>128.5</b> 143.1	54.1 <b>70.8</b> 87.6	52.1 <b>69.1</b> 86.1
South Asia	47.2 <b>51.9</b> 56.6	29.3 <b>34.0</b> 39.0	28.4 <b>33.2</b> 38.4	77.8 <b>85.5</b> 93.2	51.4 <b>59.6</b> 68.4	49.9 <b>58.5</b> 67.7
East Asia & Pacific	13.1 <b>20.1</b> 29.6	2.5 <b>5.8</b> 13.1	2.3 <b>5.5</b> 12.5	24.6 <b>37.8</b> 55.6	3.5 <b>8.3</b> 18.6	3.2 <b>7.8</b> 17.9
Latin America & Caribbean	5.2 <b>7.2</b> 9.8	2.4 <b>3.2</b> 4.2	2.3 <b>3.1</b> 4.1	2.9 <b>4.0</b> 5.5	1.3 <b>1.7</b> 2.3	1.2 <b>1.6</b> 2.2
CEE/CIS	9.3 <b>13.3</b> 18.6	1.3 <b>1.9</b> 2.8	1.1 <b>1.7</b> 2.6	3.4 <b>4.9</b> 6.8	0.4 <b>0.5</b> 0.8	0.3 <b>0.5</b> 0.7
<b>Global<sup>1</sup></b>	<b>22.7 25.1 27.5</b>	<b>13.4 16.1 18.8</b>	<b>13.0 15.7 18.4</b>	<b>144.2 159.1 174.0</b>	<b>85.3 102.3 119.4</b>	<b>83.3 100.7 118.0</b>

<sup>1</sup> Numbers of children affected may not sum to Global total due to differences in constituent countries that comprise region classification.

Prevalence and 95% confidence limits (<sub>lower</sub>P<sub>upper</sub>)

**Estimated prevalence and number of children under-five years of age affected by wasting (moderate or severe) by UNICEF region: 1990, 2010, 2011**

Region	prevalence estimate (%)			number (million)		
	1990	2010	2011	1990	2010	2011
Africa	7.4 <b>8.7</b> 10.0	7.4 <b>8.5</b> 9.6	7.4 <b>8.5</b> 9.6	8.2 <b>9.6</b> 11.0	11.5 <b>13.2</b> 14.9	11.6 <b>13.4</b> 15.2
Sub-Saharan Africa	8.2 <b>10.3</b> 12.9	7.7 <b>9.4</b> 11.5	7.6 <b>9.4</b> 11.5	7.6 <b>9.5</b> 11.9	10.6 <b>13.0</b> 15.9	10.7 <b>13.2</b> 16.1
Eastern & Southern Africa	6.0 <b>7.7</b> 9.9	5.1 <b>7.0</b> 9.4	5.0 <b>6.9</b> 9.5	2.6 <b>3.3</b> 4.3	3.2 <b>4.3</b> 5.9	3.2 <b>4.4</b> 6.0
West & Central Africa	10.7 <b>12.9</b> 15.5	10.2 <b>11.5</b> 13.0	10.2 <b>11.5</b> 12.9	4.7 <b>5.7</b> 6.9	7.1 <b>8.0</b> 9.0	7.2 <b>8.1</b> 9.1
Middle East & North Africa	3.7 <b>5.7</b> 8.6	6.3 <b>9.0</b> 12.6	6.4 <b>9.2</b> 13.0	1.6 <b>2.5</b> 3.8	3.0 <b>4.3</b> 6.0	3.1 <b>4.4</b> 6.3
Asia	10.2 <b>11.4</b> 12.7	8.0 <b>10.2</b> 12.4	7.9 <b>10.1</b> 12.3	39.8 <b>44.6</b> 49.4	28.5 <b>36.2</b> 44.0	28.2 <b>36.1</b> 44.0
South Asia	17.4 <b>18.8</b> 20.4	13.3 <b>16.1</b> 19.4	13.1 <b>16.0</b> 19.3	28.7 <b>31.0</b> 33.5	23.3 <b>28.2</b> 33.9	23.1 <b>28.1</b> 34.0
East Asia & Pacific	3.7 <b>5.9</b> 9.3	1.9 <b>3.7</b> 7.1	1.8 <b>3.6</b> 7.0	7.0 <b>11.1</b> 17.5	2.7 <b>5.2</b> 10.2	2.6 <b>5.1</b> 10.0
Latin America & Caribbean	2.1 <b>3.2</b> 4.8	1.1 <b>1.6</b> 2.2	1.1 <b>1.6</b> 2.2	1.1 <b>1.8</b> 2.7	0.6 <b>0.9</b> 1.2	0.6 <b>0.8</b> 1.2
CEE/CIS	5.7 <b>8.1</b> 11.2	0.7 <b>1.5</b> 3.5	0.6 <b>1.4</b> 3.3	2.1 <b>2.9</b> 4.1	0.2 <b>0.4</b> 1.0	0.2 <b>0.4</b> 1.0
<b>Global<sup>1</sup></b>	<b>8.3 9.1 10.0</b>	<b>6.8 8.1 9.4</b>	<b>6.8 8.0 9.3</b>	<b>52.8 58.0 63.1</b>	<b>43.5 51.5 59.5</b>	<b>43.3 51.5 59.6</b>

**Estimated prevalence and number of children under-five years of age affected by overweight (including obesity) by UNICEF region: 1990, 2010, 2011**

Region	prevalence estimate (%)			number (million)		
	1990	2010	2011	1990	2010	2011
Africa	3.4 <b>4.2</b> 5.0	6.0 <b>7.1</b> 8.1	6.2 <b>7.3</b> 8.4	3.8 <b>4.6</b> 5.5	9.3 <b>11.0</b> 12.6	9.8 <b>11.5</b> 13.2
Sub-Saharan Africa	2.6 <b>3.2</b> 4.0	4.6 <b>6.8</b> 9.9	4.7 <b>7.0</b> 10.4	2.4 <b>3.0</b> 3.7	6.3 <b>9.3</b> 13.7	6.5 <b>9.9</b> 14.7
Eastern & Southern Africa	3.1 <b>4.3</b> 5.9	3.2 <b>4.8</b> 7.3	3.2 <b>4.9</b> 7.4	1.3 <b>1.9</b> 2.6	2.0 <b>3.0</b> 4.5	2.0 <b>3.1</b> 4.7
West & Central Africa	2.2 <b>2.8</b> 3.6	5.8 <b>8.3</b> 11.9	6.0 <b>8.8</b> 12.7	1.0 <b>1.2</b> 1.6	4.0 <b>5.8</b> 8.3	4.3 <b>6.2</b> 9.0
Middle East & North Africa	4.3 <b>6.3</b> 9.0	8.4 <b>11.2</b> 14.6	8.7 <b>11.5</b> 15.0	1.9 <b>2.8</b> 4.0	4.0 <b>5.3</b> 7.0	4.2 <b>5.5</b> 7.2
Asia	2.8 <b>3.7</b> 4.5	3.7 <b>4.6</b> 5.5	3.7 <b>4.7</b> 5.8	11.1 <b>14.4</b> 17.7	13.2 <b>16.5</b> 19.7	13.3 <b>16.9</b> 20.6
South Asia	0.9 <b>2.0</b> 4.5	1.9 <b>2.6</b> 3.5	1.9 <b>2.6</b> 3.7	1.4 <b>3.3</b> 7.4	3.4 <b>4.6</b> 6.2	3.3 <b>4.7</b> 6.5
East Asia & Pacific	3.0 <b>5.1</b> 8.4	4.2 <b>5.2</b> 6.3	4.3 <b>5.2</b> 6.3	5.7 <b>9.5</b> 15.8	6.0 <b>7.4</b> 9.0	6.1 <b>7.4</b> 9.0
Latin America & Caribbean	5.7 <b>6.7</b> 7.9	6.5 <b>7.2</b> 8.1	6.5 <b>7.3</b> 8.1	3.2 <b>3.7</b> 4.4	3.5 <b>3.9</b> 4.3	3.5 <b>3.9</b> 4.3
CEE/CIS	3.0 <b>5.5</b> 9.8	10.8 <b>15.0</b> 20.4	11.2 <b>15.7</b> 21.5	1.1 <b>2.0</b> 3.6	3.0 <b>4.2</b> 5.7	3.2 <b>4.5</b> 6.2
<b>Global<sup>1</sup></b>	<b>3.8 4.5 5.1</b>	<b>5.7 6.5 7.3</b>	<b>5.8 6.6 7.5</b>	<b>24.3 28.4 32.4</b>	<b>36.2 41.2 46.2</b>	<b>37.2 42.6 48.0</b>

<sup>1</sup> Numbers of children affected may not sum to Global total due to differences in constituent countries that comprise region classification.

Prevalence and 95% confidence limits (<sub>lower</sub> P <sub>upper</sub>)

**Estimated prevalence and number of children under-five years of age affected by stunting (moderate or severe) by WHO region: 1990, 2010, 2011**

Region	prevalence estimate (%)			number (million)		
	1990	2010	2011	1990	2010	2011
Africa	44.3 <b>48.6</b> 53.0	38.9 <b>41.3</b> 43.8	38.5 <b>40.9</b> 43.4	40.0 <b>43.9</b> 47.9	51.8 <b>55.1</b> 58.4	52.3 <b>55.6</b> 59.0
Americas	7.3 <b>14.9</b> 28.2	4.5 <b>8.4</b> 15.2	4.4 <b>8.2</b> 14.8	5.5 <b>11.4</b> 21.5	3.5 <b>6.5</b> 11.7	3.3 <b>6.2</b> 11.3
Eastern Mediterranean	31.2 <b>40.4</b> 50.4	19.3 <b>27.8</b> 38.3	18.8 <b>27.2</b> 37.7	19.6 <b>25.4</b> 31.7	13.9 <b>20.0</b> 27.6	13.8 <b>20.0</b> 27.7
Europe	10.7 <b>19.9</b> 33.9	4.1 <b>8.2</b> 15.7	3.9 <b>7.8</b> 15.1	6.9 <b>12.8</b> 21.8	2.2 <b>4.5</b> 8.5	2.2 <b>4.3</b> 8.3
South-East Asia	54.7 <b>59.3</b> 63.8	30.8 <b>36.7</b> 43.1	29.6 <b>35.7</b> 42.2	97.3 <b>105.5</b> 113.5	55.4 <b>66.1</b> 77.6	53.2 <b>64.1</b> 75.9
Western Pacific	33.9 <b>38.8</b> 43.9	7.6 <b>10.8</b> 15.0	7.0 <b>10.0</b> 14.1	54.1 <b>61.9</b> 70.1	8.9 <b>12.6</b> 17.6	8.2 <b>11.8</b> 16.6
<b>Global<sup>1</sup></b>	<b>38.1 39.9 41.8</b>	<b>24.1 26.3 28.4</b>	<b>23.5 25.7 27.9</b>	<b>241.4 253.1 264.9</b>	<b>153.5 167.1 180.7</b>	<b>150.8 164.8 178.8</b>

**Estimated prevalence and number of children under-five years of age affected by underweight (moderate or severe) by WHO region: 1990, 2010, 2011**

Region	prevalence estimate (%)			number (million)		
	1990	2010	2011	1990	2010	2011
Africa	28.3 <b>34.0</b> 40.2	21.2 <b>25.6</b> 30.6	20.8 <b>25.2</b> 30.3	25.5 <b>30.7</b> 36.3	28.2 <b>34.2</b> 40.9	28.3 <b>34.3</b> 41.1
Americas	2.2 <b>4.6</b> 9.6	1.4 <b>2.3</b> 3.8	1.4 <b>2.2</b> 3.6	1.7 <b>3.5</b> 7.4	1.1 <b>1.8</b> 2.9	1.0 <b>1.7</b> 2.8
Eastern Mediterranean	13.9 <b>22.6</b> 34.5	7.9 <b>14.7</b> 25.9	7.7 <b>14.4</b> 25.5	8.7 <b>14.2</b> 21.7	5.7 <b>10.6</b> 18.6	5.6 <b>10.6</b> 18.7
Europe	6.5 <b>10.8</b> 17.3	1.1 <b>1.6</b> 2.4	1.0 <b>1.5</b> 2.2	4.2 <b>6.9</b> 11.1	0.6 <b>0.9</b> 1.3	0.5 <b>0.8</b> 1.2
South-East Asia	38.0 <b>47.1</b> 56.3	19.6 <b>28.4</b> 39.4	18.8 <b>27.6</b> 38.6	67.6 <b>83.7</b> 100.1	35.2 <b>51.2</b> 70.9	33.8 <b>49.7</b> 69.4
Western Pacific	12.5 <b>17.5</b> 24.0	2.5 <b>4.4</b> 7.5	2.3 <b>4.1</b> 7.1	20.0 <b>28.0</b> 38.3	2.9 <b>5.1</b> 8.8	2.7 <b>4.8</b> 8.3
<b>Global<sup>1</sup></b>	<b>22.7 25.1 27.5</b>	<b>13.4 16.1 18.8</b>	<b>13.0 15.7 18.4</b>	<b>144.2 159.1 174.0</b>	<b>85.3 102.3 119.4</b>	<b>83.3 100.7 118.0</b>

<sup>1</sup> Numbers of children affected may not sum to Global total due to differences in constituent countries that comprise region classification.

Prevalence and 95% confidence limits (lower P upper)

**Estimated prevalence and number of children under-five years of age affected by wasting (moderate or severe) by WHO region: 1990, 2010, 2011**

Region	prevalence estimate (%)			number (million)		
	1990	2010	2011	1990	2010	2011
Africa	8.5 11.3 14.9	8.0 10.4 13.4	8.0 10.4 13.4	7.7 10.2 13.4	10.7 13.9 17.9	10.8 14.1 18.1
Americas	1.0 2.1 4.5	0.6 1.1 2.1	0.6 1.1 2.0	0.8 1.6 3.4	0.5 0.9 1.6	0.4 0.8 1.6
Eastern Mediterranean	5.2 9.6 17.0	7.9 10.0 12.6	8.0 10.1 12.6	3.3 6.0 10.7	5.7 7.2 9.1	5.9 7.4 9.3
Europe	5.0 7.1 10.1	0.7 1.4 2.8	0.6 1.3 2.7	3.2 4.6 6.5	0.4 0.8 1.5	0.3 0.7 1.5
South-East Asia	12.1 16.3 21.6	10.4 14.5 19.8	10.3 14.4 19.7	21.5 29.0 38.4	18.7 26.0 35.6	18.5 25.8 35.5
Western Pacific	3.7 4.9 6.6	1.9 2.9 4.3	1.9 2.8 4.2	5.9 7.9 10.4	2.3 3.4 5.0	2.2 3.3 4.9
<b>Global<sup>1</sup></b>	<b>8.3 9.1 10.0</b>	<b>6.8 8.1 9.4</b>	<b>6.8 8.0 9.3</b>	<b>52.8 58.0 63.1</b>	<b>43.5 51.5 59.5</b>	<b>43.3 51.5 59.6</b>

**Estimated prevalence and number of children under-five years of age affected by overweight (including obesity) by WHO region: 1990, 2010, 2011**

Region	prevalence estimate (%)			number (million)		
	1990	2010	2011	1990	2010	2011
Africa	2.8 3.7 4.8	5.0 7.6 11.4	5.1 7.9 12.0	2.5 3.3 4.3	6.7 10.1 15.2	6.9 10.7 16.3
Americas	5.5 6.4 7.5	6.7 7.5 8.3	6.8 7.6 8.4	4.2 4.9 5.7	5.2 5.8 6.4	5.2 5.8 6.5
Eastern Mediterranean	4.3 5.6 7.2	5.3 8.0 12.0	5.3 8.1 12.3	2.7 3.5 4.5	3.8 5.8 8.6	3.9 6.0 9.0
Europe	2.9 5.1 8.7	7.8 12.0 18.0	8.0 12.5 19.0	1.9 3.3 5.6	4.3 6.5 9.8	4.4 6.9 10.5
South-East Asia	0.5 1.5 4.2	1.8 3.1 5.4	1.8 3.3 5.9	1.0 2.7 7.4	3.3 5.6 9.7	3.2 5.8 10.6
Western Pacific	4.1 5.9 8.4	3.9 5.2 6.7	3.9 5.1 6.6	6.5 9.4 13.4	4.6 6.0 7.8	4.6 6.0 7.8
<b>Global<sup>1</sup></b>	<b>3.8 4.5 5.1</b>	<b>5.7 6.5 7.3</b>	<b>5.8 6.6 7.5</b>	<b>24.3 28.4 32.4</b>	<b>36.2 41.2 46.2</b>	<b>37.2 42.6 48.0</b>

<sup>1</sup> Numbers of children affected may not sum to Global total due to differences in constituent countries that comprise region classification.

Prevalence and 95% confidence limits (lower P upper)

**Estimated prevalence and number of children under-five years of age affected by stunting (moderate or severe) by World Bank income group: 1990, 2010, 2011**

Income group	prevalence estimate (%)			number (million)		
	1990	2010	2011	1990	2010	2011
Low & middle income	37.8 45.3 52.9	25.1 28.6 32.4	24.4 27.9 31.7	214.2 256.5 299.4	143.0 163.2 184.7	139.2 159.5 181.1
Low income	50.5 59.3 67.6	36.2 39.2 42.2	34.9 38.2 41.6	43.7 51.3 58.5	41.5 44.9 48.4	40.5 44.4 48.3
Lower middle income	44.4 52.8 60.9	31.4 36.6 42.2	30.7 35.9 41.4	112.2 133.3 154.0	87.5 102.2 117.9	85.8 100.1 115.5
Upper middle income	25.6 31.6 38.3	7.9 9.1 10.5	7.3 8.5 9.9	58.2 71.8 87.0	14 16.1 18.4	12.9 14.9 17.3
High income	2.3 3.9 6.6	2.4 3.5 5.2	2.3 3.5 5.3	1.5 2.5 4.3	1.6 2.3 3.4	1.5 2.3 3.4
<b>Global<sup>1</sup></b>	<b>38.1 39.9 41.8</b>	<b>24.1 26.3 28.4</b>	<b>23.5 25.7 27.9</b>	<b>241.4 253.1 264.9</b>	<b>153.5 167.1 180.7</b>	<b>150.8 164.8 178.8</b>

**Estimated prevalence and number of children under-five years of age affected by underweight (moderate or severe) by World Bank income group: 1990, 2010, 2011**

Income group	prevalence estimate (%)			number (million)		
	1990	2010	2011	1990	2010	2011
Low & middle income	19.8 28.0 37.4	12.7 17.8 24.5	12.3 17.4 23.9	112.4 158.9 212.2	72.1 101.5 139.6	70.3 99.1 136.6
Low income	29.8 40.1 51.3	20.2 23.0 26.1	19.7 22.3 25.2	25.8 34.7 44.4	23.2 26.4 29.9	22.8 25.9 29.3
Lower middle income	25.7 38.1 52.2	15.8 25.0 37.1	15.4 24.4 36.4	64.9 96.2 131.9	44.1 69.7 103.5	43.0 68.1 101.6
Upper middle income	9.5 12.3 15.8	2.7 3.1 3.5	2.5 2.9 3.3	21.7 28.0 35.8	4.8 5.5 6.2	4.5 5.1 5.8
High income	0.6 1.3 2.7	1.4 1.7 2.1	1.4 1.7 2.1	0.4 0.8 1.8	0.9 1.1 1.4	0.9 1.1 1.4
<b>Global<sup>1</sup></b>	<b>22.7 25.1 27.5</b>	<b>13.4 16.1 18.8</b>	<b>13.0 15.7 18.4</b>	<b>144.2 159.1 174.0</b>	<b>85.3 102.3 119.4</b>	<b>83.3 100.7 118.0</b>

<sup>1</sup> Numbers of children affected may not sum to Global total due to differences in constituent countries that comprise region classification.

Prevalence and 95% confidence limits (lower P upper)

**Estimated prevalence and number of children under-five years of age affected by wasting (moderate or severe) by World Bank income group: 1990, 2010, 2011**

Income group	prevalence estimate (%)			number (million)		
	1990	2010	2011	1990	2010	2011
Low & middle income	7.0 <b>9.6</b> 13.1	6.7 <b>8.9</b> 11.7	6.6 <b>8.8</b> 11.6	39.6 <b>54.3</b> 74.1	38.0 <b>50.5</b> 66.8	37.8 <b>50.3</b> 66.5
Low income	9.4 <b>11.7</b> 14.4	7.7 <b>9.2</b> 10.9	7.6 <b>9.1</b> 10.8	8.1 <b>10.1</b> 12.4	8.8 <b>10.5</b> 12.5	8.8 <b>10.5</b> 12.5
Lower middle income	9.0 <b>13.6</b> 20.1	9.2 <b>12.9</b> 17.8	9.2 <b>12.8</b> 17.7	22.8 <b>34.5</b> 50.8	25.6 <b>35.9</b> 49.7	25.6 <b>35.8</b> 49.4
Upper middle income	3.8 <b>4.3</b> 4.8	2.0 <b>2.3</b> 2.7	2.0 <b>2.2</b> 2.6	8.6 <b>9.7</b> 10.9	3.6 <b>4.1</b> 4.7	3.4 <b>3.9</b> 4.5
High income	0.6 <b>0.9</b> 1.3	0.2 <b>0.8</b> 2.4	0.2 <b>0.8</b> 2.5	0.4 <b>0.6</b> 0.8	0.2 <b>0.5</b> 1.6	0.1 <b>0.5</b> 1.6
<b>Global<sup>1</sup></b>	<b>8.3 9.1 10.0</b>	<b>6.8 8.1 9.4</b>	<b>6.8 8.0 9.3</b>	<b>52.8 58.0 63.1</b>	<b>43.5 51.5 59.5</b>	<b>43.3 51.5 59.6</b>

**Estimated prevalence and number of children under-five years of age affected by overweight (including obesity) by World Bank income group: 1990, 2010, 2011**

Income group	prevalence estimate (%)			number (million)		
	1990	2010	2011	1990	2010	2011
Low & middle income	3.7 <b>4.4</b> 5.4	3.5 <b>5.1</b> 8.0	3.5 <b>5.2</b> 8.2	21.0 <b>24.8</b> 30.5	19.9 <b>29.3</b> 45.5	20.1 <b>29.8</b> 47.1
Low income	0.5 <b>1.5</b> 4.1	3.2 <b>4.2</b> 5.6	3.4 <b>4.4</b> 5.8	0.5 <b>1.3</b> 3.5	3.6 <b>4.8</b> 6.4	4.0 <b>5.2</b> 6.7
Lower middle income	2.5 <b>3.1</b> 3.8	2.3 <b>4.7</b> 9.3	2.3 <b>4.8</b> 9.8	6.3 <b>7.8</b> 9.7	6.4 <b>13.1</b> 26.0	6.3 <b>13.3</b> 27.3
Upper middle income	6.2 <b>6.9</b> 7.6	5.6 <b>6.5</b> 7.4	5.6 <b>6.4</b> 7.4	14.2 <b>15.7</b> 17.3	9.9 <b>11.4</b> 13.0	9.8 <b>11.3</b> 13.1
High income	2.6 <b>4.2</b> 6.6	5.8 <b>8.2</b> 11.4	6.0 <b>8.4</b> 11.8	1.7 <b>2.7</b> 4.3	3.8 <b>5.3</b> 7.4	3.9 <b>5.5</b> 7.7
<b>Global<sup>1</sup></b>	<b>3.8 4.5 5.1</b>	<b>5.7 6.5 7.3</b>	<b>5.8 6.6 7.5</b>	<b>24.3 28.4 32.4</b>	<b>36.2 41.2 46.2</b>	<b>37.2 42.6 48.0</b>

<sup>1</sup> Numbers of children affected may not sum to Global total due to differences in constituent countries that comprise region classification.

Prevalence and 95% confidence limits (lower P upper)

# Annex

## Regional Classifications

The regional classifications that are referred to in the report and for which aggregate data are provided are shown below. Aggregates presented for UNICEF, WHO and the World Bank may differ as regions with the same names in different agencies may include different countries.

Country name	UN sub-region	UNICEF region <sup>1</sup>	WHO region <sup>2</sup>	MDG region	WB income group <sup>3</sup>
Afghanistan	South-Central Asia	SA	EMR	Southern Asia	Low income
Albania	Southern Europa	CEE-CIS	EUR	Developed regions	Lower middle income
Algeria	Northern Africa	MENA	AFR	Northern Africa	Upper middle income
American Samoa	Polynesia				Upper middle income
Andorra	Southern Europa	Dev	EUR	Developed regions	High income
Angola	Middle Africa	ESA	AFR	sub-Saharan Africa	Upper middle income
Anguilla	Caribbean			Caribbean	
Antigua and Barbuda	Caribbean	TAC	AMR	Caribbean	Upper middle income
Argentina	South America	TAC	AMR	Latin America	Upper middle income
Aruba	Caribbean				High income
Armenia	Western Asia	CEE-CIS	EUR	Caucasus and Central Asia	Lower middle income
Australia	Australia	Dev	WPR	Developed regions	High income
Austria	Western Europe	Dev	EUR	Developed regions	High income
Azerbaijan	Western Asia	CEE-CIS	EUR	Caucasus and Central Asia	Upper middle income
Bahamas	Caribbean	TAC	AMR	Caribbean	High income
Bahrain	Western Asia	MENA	EMR	Western Asia	High income
Bangladesh	South-Central Asia	SA	SEAR	Southern Asia	Low income
Barbados	Caribbean	TAC	AMR	Caribbean	High income
Belarus	Eastern Europe	CEE-CIS	EUR	Developed regions	Upper middle income
Belgium	Western Europe	Dev	EUR	Developed regions	High income
Belize	Central America	TAC	AMR	Latin America	Lower middle income
Benin	Western Africa	WCA	AFR	sub-Saharan Africa	Low income
Bermuda	Northern America			Developed regions	High income
Bhutan	South-Central Asia	SA	SEAR	Southern Asia	Lower middle income
Bolivia (Plurinational State of)	South America	TAC	AMR	Latin America	Lower middle income
Bosnia and Herzegovina	Southern Europa	CEE-CIS	EUR	Developed regions	Upper middle income
Botswana	Southern Africa	ESA	AFR	sub-Saharan Africa	Upper middle income
Brazil	South America	TAC	AMR	Latin America	Upper middle income
British Virgin Islands	Caribbean			Caribbean	High income
Brunei Darussalam	South-Eastern Asia	EAP	WPR	South-Eastern Asia	High income
Bulgaria	Eastern Europe	CEE-CIS	EUR	Developed regions	Upper middle income
Burkina Faso	Western Africa	WCA	AFR	sub-Saharan Africa	Low income
Burundi	Eastern Africa	ESA	AFR	sub-Saharan Africa	Low income
Cambodia	South-Eastern Asia	EAP	WPR	South-Eastern Asia	Low income
Cameroon	Middle Africa	WCA	AFR	sub-Saharan Africa	Lower middle income
Canada	Northern America	Dev	AMR	Developed regions	High income
Cape Verde	Western Africa	WCA	AFR	sub-Saharan Africa	Lower middle income
Cayman Islands	Caribbean			Caribbean	High income
Central African Republic (The)	Middle Africa	WCA	AFR	sub-Saharan Africa	Low income
Chad	Middle Africa	WCA	AFR	sub-Saharan Africa	Low income
Chile	South America	TAC	AMR	Latin America	Upper middle income
China	Eastern Asia	EAP	WPR	Eastern Asia	Upper middle income
Colombia	South America	TAC	AMR	Latin America	Upper middle income
Comoros (The)	Eastern Africa	ESA	AFR	sub-Saharan Africa	Low income

Country name	UN sub-region	UNICEF region <sup>1</sup>	WHO region <sup>2</sup>	MDG region	WB income group <sup>3</sup>
Congo (The)	Middle Africa	WCA	AFR	sub-Saharan Africa	Lower middle income
Cook Islands	Polynesia	EAP	WPR	Oceania	
Costa Rica	Central America	TAC	AMR	Latin America	Upper middle income
Cote d'Ivoire	Western Africa	WCA	AFR	sub-Saharan Africa	Lower middle income
Croatia	Southern Europa	CEE-CIS	EUR	Developed regions	High income
Cuba	Caribbean	TAC	AMR	Caribbean	Upper middle income
Cyprus	Western Asia	MENA	EUR	Developed regions	High income
Czech Republic (The)	Eastern Europe	Dev	EUR	Developed regions	High income
Democratic People's Rep. of Korea (The)	Eastern Asia	EAP	SEAR	Eastern Asia	Low income
Democratic Rep. of the Congo (The)	Middle Africa	WCA	AFR	sub-Saharan Africa	Low income
Denmark	Northern Europe	Dev	EUR	Developed regions	High income
Djibouti	Eastern Africa	MENA	EMR	sub-Saharan Africa	Lower middle income
Dominica	Caribbean	TAC	AMR	Caribbean	Upper middle income
Dominican Republic (The)	Caribbean	TAC	AMR	Caribbean	Upper middle income
Ecuador	South America	TAC	AMR	Latin America	Upper middle income
Egypt	Northern Africa	MENA	EMR	Northern Africa	Lower middle income
El Salvador	Central America	TAC	AMR	Latin America	Lower middle income
Equatorial Guinea	Middle Africa	WCA	AFR	sub-Saharan Africa	High income
Eritrea	Eastern Africa	ESA	AFR	sub-Saharan Africa	Low income
Estonia	Northern Europe	Dev	EUR	Developed regions	High income
Ethiopia	Eastern Africa	ESA	AFR	sub-Saharan Africa	Low income
Falkland Islands (Malvinas)	South America			Latin America	
Fiji	Melanesia	EAP	WPR	Oceania	Lower middle income
Finland	Northern Europe	Dev	EUR	Developed regions	High income
France	Western Europe	Dev	EUR	Developed regions	High income
French Guiana	South America			Latin America	
French Polynesia	Polynesia			Oceania	High income
Gabon	Middle Africa	WCA	AFR	sub-Saharan Africa	Upper middle income
Gambia (The)	Western Africa	WCA	AFR	sub-Saharan Africa	Low income
Georgia	Western Asia	CEE-CIS	EUR	Caucasus and Central Asia	Lower middle income
Germany	Western Europe	Dev	EUR	Developed regions	High income
Ghana	Western Africa	WCA	AFR	sub-Saharan Africa	Lower middle income
Gibraltar	Southern Europa				
Greece	Southern Europa	Dev	EUR	Developed regions	High income
Greenland	Northern Europe		EUR	Developed regions	High income
Grenada	Caribbean	TAC	AMR	Caribbean	Upper middle income
Guadeloupe	Caribbean			Caribbean	
Guam	Micronesia			Oceania	High income
Guatemala	Central America	TAC	AMR	Latin America	Lower middle income
Guinea	Western Africa	WCA	AFR	sub-Saharan Africa	Low income
Guinea-Bissau	Western Africa	WCA	AFR	sub-Saharan Africa	Low income
Guyana	South America	TAC	AMR	Latin America	Lower middle income
Haiti	Caribbean	TAC	AMR	Caribbean	Low income
Honduras	Central America	TAC	AMR	Latin America	Lower middle income
Hungary	Eastern Europe	Dev	EUR	Developed regions	High income
Iceland	Northern Europe	Dev	EUR	Developed regions	High income
India	South-Central Asia	SA	SEAR	Southern Asia	Lower middle income
Indonesia	South-Eastern Asia	EAP	SEAR	South-Eastern Asia	Lower middle income
Iran (Islamic Republic of)	South-Central Asia	MENA	EMR	Southern Asia	Upper middle income
Iraq	Western Asia	MENA	EMR	Western Asia	Lower middle income
Ireland	Northern Europe	Dev	EUR	Developed regions	High income
Israel	Western Asia	Dev	EUR	Developed regions	High income
Italy	Southern Europa	Dev	EUR	Developed regions	High income

<b>Country name</b>	<b>UN sub-region</b>	<b>UNICEF region<sup>1</sup></b>	<b>WHO region<sup>2</sup></b>	<b>MDG region</b>	<b>WB income group<sup>3</sup></b>
Jamaica	Caribbean	TAC	AMR	Caribbean	Upper middle income
Japan	Eastern Asia	Dev	WPR	Developed regions	High income
Jordan	Western Asia	MENA	EMR	Western Asia	Upper middle income
Kazakhstan	South-Central Asia	CEE-CIS	EUR	Caucasus and Central Asia	Upper middle income
Kenya	Eastern Africa	ESA	AFR	sub-Saharan Africa	Low income
Kiribati	Micronesia	EAP	WPR	Oceania	Lower middle income
Kuwait	Western Asia	MENA	EMR	Western Asia	High income
Kyrgyzstan	South-Central Asia	CEE-CIS	EUR	Caucasus and Central Asia	Low income
Lao People's Democratic Rep. (The)	South-Eastern Asia	EAP	WPR	South-Eastern Asia	Lower middle income
Latvia	Northern Europe	Dev	EUR	Developed regions	Upper middle income
Lebanon	Western Asia	MENA	EMR	Western Asia	Upper middle income
Lesotho	Southern Africa	ESA	AFR	sub-Saharan Africa	Lower middle income
Liberia	Western Africa	WCA	AFR	sub-Saharan Africa	Low income
Libya	Northern Africa	MENA	EMR	Northern Africa	Upper middle income
Lithuania	Northern Europe	Dev	EUR	Developed regions	Upper middle income
Liechtenstein	Western Europe	Dev		Developed regions	High income
Luxembourg	Western Europe	Dev	EUR	Developed regions	High income
Madagascar	Eastern Africa	ESA	AFR	sub-Saharan Africa	Low income
Malawi	Eastern Africa	ESA	AFR	sub-Saharan Africa	Low income
Malaysia	South-Eastern Asia	EAP	WPR	South-Eastern Asia	Upper middle income
Maldives	South-Central Asia	SA	SEAR	Southern Asia	Upper middle income
Mali	Western Africa	WCA	AFR	sub-Saharan Africa	Low income
Malta	Southern Europe	Dev	EUR	Developed regions	High income
Marshall Islands	Micronesia	EAP	WPR	Oceania	Lower middle income
Martinique	Caribbean			Caribbean	
Mauritania	Western Africa	WCA	AFR	sub-Saharan Africa	Low income
Mauritius	Eastern Africa	ESA	AFR	sub-Saharan Africa	Upper middle income
Mexico	Central America	TAC	AMR	Latin America	Upper middle income
Micronesia (Federated States of)	Micronesia	EAP	WPR	Oceania	Lower middle income
Monaco	Western Europe	Dev	EUR	Developed regions	High income
Mongolia	Eastern Asia	EAP	WPR	Eastern Asia	Lower middle income
Montenegro	Southern Europe	CEE-CIS	EUR	Developed regions	Upper middle income
Montserrat	Caribbean			Caribbean	
Morocco	Northern Africa	MENA	EMR	Northern Africa	Lower middle income
Mozambique	Eastern Africa	ESA	AFR	sub-Saharan Africa	Low income
Myanmar	South-Eastern Asia	EAP	SEAR	South-Eastern Asia	Low income
Namibia	Southern Africa	ESA	AFR	sub-Saharan Africa	Upper middle income
Nauru	Micronesia	EAP	WPR	Oceania	
Nepal	South-Central Asia	SA	SEAR	Southern Asia	Low income
Netherlands	Western Europe	Dev	EUR	Developed regions	High income
Netherlands Antilles	Caribbean			Caribbean	
New Caledonia	Melanesia			Oceania	High income
New Zealand	Australia	Dev	WPR	Developed regions	High income
Nicaragua	Central America	TAC	AMR	Latin America	Lower middle income
Niger (The)	Western Africa	WCA	AFR	sub-Saharan Africa	Low income
Nigeria	Western Africa	WCA	AFR	sub-Saharan Africa	Lower middle income
Niue	Polynesia	EAP	WPR	Oceania	
Norway	Northern Europe	Dev	EUR	Developed regions	High income
Oman	Western Asia	MENA	EMR	Western Asia	High income
Pakistan	South-Central Asia	SA	EMR	Southern Asia	Lower middle income
Palau	Micronesia	EAP	WPR	Oceania	Upper middle income
Panama	Central America	TAC	AMR	Latin America	Upper middle income
Papua New Guinea	Melanesia	EAP	WPR	Oceania	Lower middle income
Paraguay	South America	TAC	AMR	Latin America	Lower middle income
Peru	South America	TAC	AMR	Latin America	Upper middle income
Philippines (The)	South-Eastern Asia	EAP	WPR	South-Eastern Asia	Lower middle income

Country name	UN sub-region	UNICEF region <sup>1</sup>	WHO region <sup>2</sup>	MDG region	WB income group <sup>3</sup>
Poland	Eastern Europe	Dev	EUR	Developed regions	High income
Portugal	Southern Europa	Dev	EUR	Developed regions	High income
Puerto Rico	Caribbean			Caribbean	High income
Qatar	Western Asia	MENA	EMR	Western Asia	High income
Republic of Korea	Eastern Asia	EAP	WPR	Eastern Asia	High income
Reunion	Eastern Africa			sub-Saharan Africa	
Republic of Moldova (The)	Eastern Europe	CEE-CIS	EUR	Developed regions	Lower middle income
Romania	Eastern Europe	CEE-CIS	EUR	Developed regions	Upper middle income
Russian Federation (The)	Eastern Europe	CEE-CIS	EUR	Developed regions	Upper middle income
Rwanda	Eastern Africa	ESA	AFR	sub-Saharan Africa	Low income
Saint Kitts and Nevis	Caribbean	TAC	AMR	Caribbean	High income
Saint Lucia	Caribbean	TAC	AMR	Caribbean	Upper middle income
Saint Vincent and the Grenadines	Caribbean	TAC	AMR	Caribbean	Upper middle income
Samoa	Polynesia	EAP	WPR	Oceania	Lower middle income
San Marino	Southern Europa	Dev	EUR	Developed regions	High income
Sao Tome and Principe	Middle Africa	WCA	AFR	sub-Saharan Africa	Lower middle income
Saudi Arabia	Western Asia	MENA	EMR	Western Asia	High income
Senegal	Western Africa	WCA	AFR	sub-Saharan Africa	Lower middle income
Serbia	Southern Europa	CEE-CIS	EUR	Developed regions	Upper middle income
Seychelles	Eastern Africa	ESA	AFR	sub-Saharan Africa	Upper middle income
Sierra Leone	Western Africa	WCA	AFR	sub-Saharan Africa	Low income
Singapore	South-Eastern Asia	EAP	WPR	South-Eastern Asia	High income
Slovakia	Eastern Europe	Dev	EUR	Developed regions	High income
Slovenia	Eastern Europe	Dev	EUR	Developed regions	High income
Solomon Islands	Melanesia	EAP	WPR	Oceania	Lower middle income
Somalia	Eastern Africa	ESA	EMR	sub-Saharan Africa	Low income
South Africa	Southern Africa	ESA	AFR	sub-Saharan Africa	Upper middle income
South Sudan <sup>4</sup>	Northern Africa	ESA	EMR	sub-Saharan Africa	Lower middle income
Spain	Southern Europa	Dev	EUR	Developed regions	High income
Sri Lanka	South-Central Asia	SA	SEAR	Southern Asia	Lower middle income
Sudan (The)	Northern Africa	MENA	EMR	sub-Saharan Africa	Lower middle income
Suriname	South America	TAC	AMR	Latin America	Upper middle income
Swaziland	Southern Africa	ESA	AFR	sub-Saharan Africa	Lower middle income
Sweden	Northern Europe	Dev	EUR	Developed regions	High income
Switzerland	Western Europe	Dev	EUR	Developed regions	High income
Syrian Arab Republic (The)	Western Asia	MENA	EMR	Western Asia	Lower middle income
Tajikistan	South-Central Asia	CEE-CIS	EUR	Caucasus and Central Asia	Low income
Thailand	South-Eastern Asia	EAP	SEAR	South-Eastern Asia	Upper middle income
The Former Yugoslav Republic of Macedonia	Southern Europa	CEE-CIS	EUR	Developed regions	Upper middle income
Timor-Leste	South-Eastern Asia	EAP	SEAR	South-Eastern Asia	Lower middle income
Togo	Western Africa	WCA	AFR	sub-Saharan Africa	Low income
Tokelau	Polynesia			Oceania	
Tonga	Polynesia	EAP	WPR	Oceania	Lower middle income
Trinidad and Tobago	Caribbean	TAC	AMR	Caribbean	High income
Tunisia	Northern Africa	MENA	EMR	Northern Africa	Upper middle income
Turkey	Western Asia	CEE-CIS	EUR	Western Asia	Upper middle income
Turkmenistan	South-Central Asia	CEE-CIS	EUR	Caucasus and Central Asia	Upper middle income
Turks and Caicos Islands	Caribbean			Caribbean	High income
Tuvalu	Polynesia	EAP	WPR	Oceania	Upper middle income
Uganda	Eastern Africa	ESA	AFR	sub-Saharan Africa	Low income
Ukraine	Eastern Europe	CEE-CIS	EUR	Developed regions	Lower middle income
United Arab Emirates	Western Asia	MENA	EMR	Western Asia	High income
United Kingdom (The)	Northern Europe	Dev	EUR	Developed regions	High income

<b>Country name</b>	<b>UN sub-region</b>	<b>UNICEF region<sup>1</sup></b>	<b>WHO region<sup>2</sup></b>	<b>MDG region</b>	<b>WB income group<sup>3</sup></b>
United Republic of Tanzania (The)	Eastern Africa	ESA	AFR	sub-Saharan Africa	Low income
United States of America (The)	Northern America	Dev	AMR	Developed regions	High income
Uruguay	South America	TAC	AMR	Latin America	Upper middle income
Uzbekistan	South-Central Asia	CEE-CIS	EUR	Caucasus and Central Asia	Lower middle income
Vanuatu	Melanesia	EAP	WPR	Oceania	Lower middle income
Venezuela (Bolivarian Republic of)	South America	TAC	AMR	Latin America	Upper middle income
Viet Nam	South-Eastern Asia	EAP	WPR	South-Eastern Asia	Lower middle income
Virgin Islands (USA)	Caribbean			Caribbean	High income
Wallis and Futuna	Polynesia				
West Bank and Gaza	Western Asia			Western Asia	Lower middle income
Yemen	Western Asia	MENA	EMR	Western Asia	Lower middle income
Zambia	Eastern Africa	ESA	AFR	sub-Saharan Africa	Lower middle income
Zimbabwe	Eastern Africa	ESA	AFR	sub-Saharan Africa	Low income

<sup>1</sup>UNICEF regional abbreviations and full names: Central and Eastern Europe/Commonwealth of Independent States (CEE-CIS), Developed regions (Dev), East Asia and Pacific (EAP), Eastern and Southern Africa (ESA), Middle East and North Africa (MENA), South Asia (SA), West and Central Africa (WCA), The Americas and Caribbean (TAC).

<sup>2</sup> WHO regional abbreviations and full names: Africa (AFR), Americas (AMR), Eastern Mediterranean (EMR), Europe (EUR), South-East Asia (SEAR), Western Pacific (WPR).

<sup>3</sup> The World Bank's income classifications are updated on 1 July each year based on estimates of gross national income (GNI) per capita for the previous year. Income classifications in the table are as of 1 July 2012.

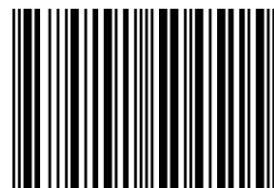
<sup>4</sup> Because of the cession in July 2011 of the Republic of South Sudan by the Republic of the Sudan, and its subsequent admission to the United Nations on 14 July 2011, disaggregated data for the Sudan and South Sudan as separate States were not yet available for this report. Aggregated data presented are for the Sudan precession.



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