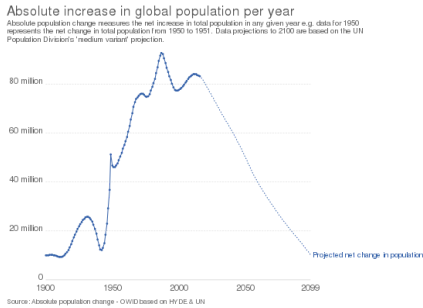


Population growth

Population growth is the increase in the number of individuals in a population. Global human population growth amounts to around 83 million annually,^[2] or 1.1% per year. The global population has grown from 1 billion in 1800 to 7.616 billion^[3] in 2018. It is expected to keep growing, and estimates have put the total population at 8.6 billion by mid-2030, 9.8 billion by mid-2050 and 11.2 billion by 2100.^[4] Many nations with rapid population growth have low standards of living, whereas many nations with low rates of population growth have high standards of living.^[5]



Absolute increase in global human population per year^[1]

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Population ^[6]		
Years passed	Year	Billion
—	1800	1
127	1927	2
33	1960	3
14	1974	4
13	1987	5
12	1999	6
13	2012	7
12	2023*	8
14	2037*	9
18	2055*	10
33	2088*	11
*World Population Prospects 2017 (United Nations Population Division)		

History

World population has been rising continuously since the end of the Black Death, around the year 1350.^[7] Population began growing rapidly in the Western world during the industrial revolution. The most significant increase in the world's population has been since the 1950s, mainly due to medical advancements^[8] and increases in agricultural productivity.^[9]

Haber process

Due to its dramatic impact on the human ability to grow food, the Haber process served as the "detonator of the population explosion", enabling the global population to increase from 1.6 billion in 1900 to 7.7 billion by November 2019.^[10]

Thomas McKeown hypotheses

Some of the reasons for the "Modern Rise of Population"^[11] were particularly investigated by the British health scientist Thomas McKeown (1912-1988). In his publications, McKeown challenged four theories about the population growth:

- McKeown stated that the growth in Western population, particularly surging in the 19th century, was not so much caused by an increase in fertility, but largely by a decline of mortality particularly of childhood mortality followed by infant mortality.^{[12][13]}
- The decline of mortality could largely be attributed to rising standards of living, whereby McKeown put most emphasis on improved nutritional status,
- His most controversial idea, at least his most disputed idea, was that he questioned the effectiveness of public health measures, including sanitary reforms, vaccination and quarantine.^[14]
- The sometime fierce disputes that his publication provoked around the "McKeown thesis", have overshadowed his more important and largely unchallenged argument that curative medicine measures played little role in mortality decline, not only prior to the mid-20th century^[12] but also until well into the 20th century.^[15]

Although the McKeown thesis has been heavily disputed, recent studies have confirmed the value of his ideas.^[16] His work is pivotal for present day thinking about population growth, birth control, public health and medical care. McKeown had a major influence on many population researchers, such as health economists and Nobel prize winners Robert W. Fogel (1993) and Angus Deaton (2015). The latter considered McKeown as "the founder of social medicine".^[17]

Population growth rate

The "population growth rate" is the rate at which the number of individuals in a population increases in a given time period, expressed as a fraction of the initial population. Specifically, population growth rate refers to the change in population over a unit time period, often expressed as a percentage of the number of individuals in the population at the beginning of that period. This can be written as the formula, valid for a sufficiently small time interval:

$$\text{Population growth rate} = \frac{P(t_2) - P(t_1)}{P(t_1)(t_2 - t_1)}$$

A positive growth rate indicates that the population is increasing, while a negative growth rate indicates that the population is decreasing. A growth ratio of zero indicates that there were the same number of individuals at the beginning and end of the period—a growth rate may be zero even when there are significant changes in the birth rates, death rates, immigration rates, and age distribution between the two times.^[18]

A related measure is the net reproduction rate. In the absence of migration, a net reproduction rate of more than 1 indicates that the population of females is increasing, while a net reproduction rate less than one (sub-replacement fertility) indicates that the population of females is decreasing.

Most populations do not grow exponentially, rather they follow a logistic model. Once the population has reached its carrying capacity, it will stabilize and the exponential curve will level off towards the carrying capacity, which is usually when a population has depleted most its natural resources.^[19]

Logistic equation

The growth of a population can often be modelled by the logistic equation^[20]

$$\frac{dP}{dt} = rP \left(1 - \frac{P}{K} \right),$$

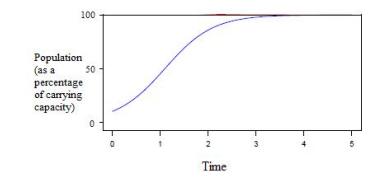
where

- $P(t)$ = the population after time t ;
- t = time a population grows;
- r = the relative growth rate coefficient;
- K = the carrying capacity of the population; defined by ecologists as the maximum population size that a particular environment can sustain.^[19]

As it is a separable differential equation, the population may be solved explicitly, producing a logistic function:

$$P(t) = \frac{K}{1 + Ae^{-rt}},$$

where $A = \frac{K - P_0}{P_0}$ and P_0 is the initial population at time 0.



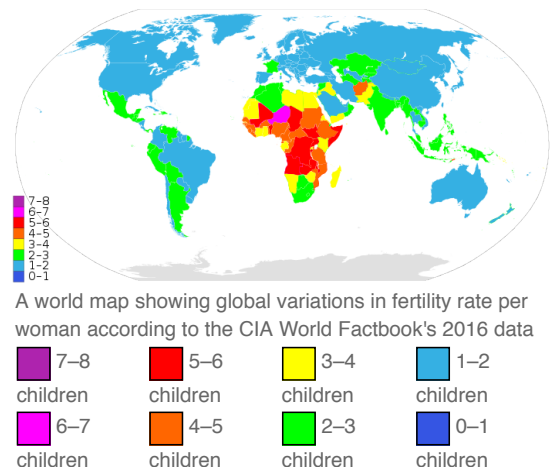
The logistic growth of a population.

Human population growth rate

In 2017, the estimated annual growth rate was 1.1%.^[21] The CIA World Factbook gives the world annual birthrate, mortality rate, and growth rate as 1.86%, 0.78%, and 1.08% respectively.^[22] The last 100 years have seen a massive fourfold increase in the population, due to medical advances, lower mortality rates, and an increase in agricultural productivity^[23] made possible by the Green Revolution.

The annual increase in the number of living humans peaked at 88.0 million in 1989, then slowly declined to 73.9 million in 2003, after which it rose again to 75.2 million in 2006. In 2017, the human population increased by 83 million.^[21] Generally, developed nations have seen a decline in their growth rates in recent decades, though annual growth rates remain above 2% in poverty-stricken countries of the Middle East and Sub-Saharan Africa, and also in South Asia, Southeast Asia, and Latin America.^[24]

In some countries the population is declining, especially in Eastern Europe, mainly due to low fertility rates, high death rates and emigration. In Southern Africa, growth is slowing due to the high number of AIDS-related deaths. Some Western Europe countries might also experience population decline.^[25] Japan's population began decreasing in 2005.^[26]



A world map showing global variations in fertility rate per woman according to the CIA World Factbook's 2016 data

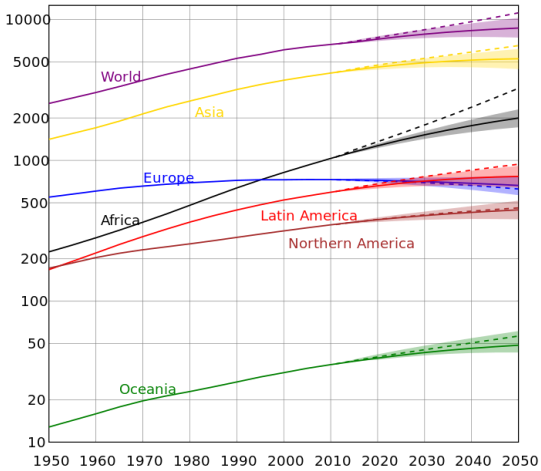
7–8 children	5–6 children	3–4 children	1–2 children
6–7 children	4–5 children	2–3 children	0–1 children

The United Nations Population Division projects world population to reach 11.2 billion by the end of the 21st century, but Sanjeev Sanyal has argued that global fertility will fall below the replacement rate in the 2020s and that world population will peak below 9 billion by 2050, followed by a long decline.^[27] A 2014 study in *Science* concludes that the global population will reach 11 billion by 2100, with a 70% chance of continued growth into the 22nd century.^[28]

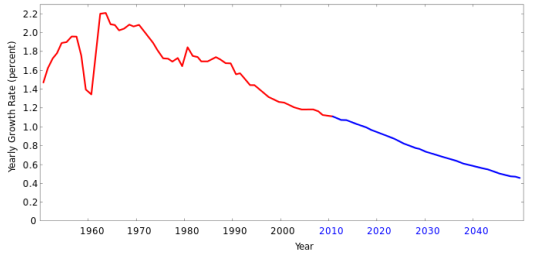
For further information regarding Human Population Growth, see the works of Dr(s) Al Bartlett, Hans Rosling, John Lovelock, Paul Ehrlich as well as Cleric Thomas Robert Malthus.

Growth by country

According to United Nations population statistics, the world population grew by 30%, or 1.6 billion humans, between 1990 and 2010.^[29] In number of people the increase was highest in India (350 million) and China (196 million). Population growth was among highest in the United Arab Emirates (315%) and Qatar (271%).^[29]



Estimates of population evolution in different continents between 1950 and 2050 according to the United Nations. The vertical axis is logarithmic and is in millions of people.



World population growth rates between 1950–2050

Growth rates of the world's most populous countries

Rank	Country	Population 1990	Population 2010	Estimated population 2018 ^[30]	Growth (%) 1990–2010	Growth (%) 2010–2018
	<u>World</u>	5,306,425,000	6,895,889,000	7,503,828,180	30.0%	
1	<u>China</u>	1,139,060,000	1,341,335,000	1,384,688,986	17.1%	3.23%
2	<u>India</u>	873,785,000	1,224,614,000	1,296,834,042	40.2%	5.90%
3	<u>United States</u>	253,339,000	310,384,000	329,256,465	22.5%	6.08%
4	<u>Indonesia</u>	184,346,000	239,871,000	262,787,403	30.1%	9.55%
5	<u>Brazil</u>	149,650,000	194,946,000	208,846,892	30.3%	7.13%
6	<u>Pakistan</u>	111,845,000	173,593,000	207,862,518	55.3%	19.74%
7	<u>Nigeria</u>	97,552,000	158,423,000	203,452,505	62.4%	28.42%
8	<u>Bangladesh</u>	105,256,000	148,692,000	159,453,001	41.3%	7.24%
9	<u>Russia</u>	148,244,000	142,958,000	142,122,776	-3.6%	-0.58%
10	<u>Japan</u>	122,251,000	128,057,000	126,168,156	4.7%	-1.48%

Many of the world's countries, including many in Sub-Saharan Africa, the Middle East, South Asia and South East Asia, have seen a sharp rise in population since the end of the Cold War. The fear is that high population numbers are putting further strain on natural resources, food supplies, fuel supplies, employment, housing, etc. in some of the less fortunate countries. For example, the population of Chad has ultimately grown from 6,279,921 in 1993 to 10,329,208 in 2009,^[31] further straining its resources. Vietnam, Mexico, Nigeria, Egypt, Ethiopia, and the DRC are witnessing a similar growth in population.

The following table gives some example countries:

Example nation	1967 population	1990 population	1994 population	2002 population	2008 population	Life expectancy in years (2008)	Total population growth from 1960s to 2007- 2011
Eritrea *	N/A*	N/A*	3,437,000 ^[32]	4,298,269	5,673,520 ^[33]	61 ^{[34][34]}	2,236,520
Ethiopia *	23,457,000* ^[35]	50,974,000* ^[36]	54,939,000 ^[32]	67,673,031 (2003)	79,221,000 ^[37]	55 ^[34]	55,764,000
Sudan	14,355,000† ^[35]	25,204,000† ^[36]	27,361,000† ^[32]	38,114,160 (2003)†	42,272,000† ^[33]	50† ^[34]	27,917,000
Chad	3,410,000 ^[35]	5,679,000 ^[36]	6,183,000 ^[32]	9,253,493(2003)	10,329,208 (2009) ^[31]	47 ^[34]	6,919,205
Niger	3,546,000 ^[35]	7,732,000 ^[36]	8,846,000 ^[32]	10,790,352 (2001)	15,306,252 (2009) ^[38]	44 ^[34]	11,760,252
Nigeria	61,450,000 ^[35]	88,500,000 ^[36]	108,467,000 ^[32]	129,934,911	158,259,000 ^[33]	47 ^[34]	96,809,000
Mali	4,745,000 ^[35]	8,156,000 ^[36]	10,462,000 ^[32]	11,340,480	14,517,176(2010) ^[39]	50 ^[34]	9,772,176
Mauritania	1,050,000 ^[35]	2,025,000 ^[36]	2,211,000 ^[32]	2,667,859 (2003)	3,291,000 (2009) ^[31]	54 ^[34]	2,241,000
Senegal	3,607,000 ^[35]	7,327,000 ^[36]	8,102,000 ^[32]	9,967,215	13,711,597 (2009) ^[40]	57 ^[34]	10,104,597
Gambia	343,000 ^[35]	861,000 ^[36]	1,081,000 ^[32]	1,367,124 (2000)	1,705,000 ^[33]	55 ^[34]	1,362,000
Algeria	11,833,126 (1966) ^[35]	25,012,000 ^[36]	27,325,000 ^[32]	32,818,500 (2003)	34,895,000 ^{[37][41]}	74 ^[34]	23,061,874
The DRC/Zaire	16,353,000 ^[35]	35,562,000 ^[36]	42,552,000 ^[32]	55,225,478 (2003)	70,916,439 ^{[37][42]}	54 ^[34]	54,563,439
Egypt	30,083,419 (1966) ^[35]	53,153,000 ^[36]	58,326,000 ^[32]	70,712,345 (2003)	79,089,650 ^{[37][43][43]}	72 ^[34]	49,006,231
Réunion (overseas region of France)	418,000 ^[35]	N/A ^[36]	N/A ^[32]	720,934 (2003)	827,000 (2009) ^[33]	N/A ^[34]	409,000
The Falkland Islands (British Overseas Territory)	2,500 ^[35]	N/A ^[36]	N/A ^[32]	2,967 (2003)	3,140(2010) ^[44]	N/A ^[34]	640
Chile	8,935,500 ^[35]	13,173,000 ^[36]	13,994,000 ^[32]	15,116,435	17,224,200 (2011)	77 ^[34]	8,288,700
Colombia	19,191,000 ^[35]	32,987,000 ^[36]	34,520,000 ^[32]	41,088,227	45,925,397 (2010) ^[45]	73 ^[34]	26,734,397
Brazil	85,655,000 ^[35]	150,368,000 ^[36]	153,725,000 ^[32]	174,468,575 (2000)	190,732,694 (2010) ^[46]	72 ^[34]	105,077,694
Mexico	45,671,000 ^[35]	86,154,000 ^[36]	93,008,000 ^[32]	103,400,165 (2000)	112,322,757 (2010) ^[47]	76 ^[34]	66,651,757
Fiji	476,727 (1966) ^[35]	765,000 ^[36]	771,000 ^[32]	844,330 (2001)	849,000 ^[41] (2010)	70 ^[34]	372,273
Nauru	6,050 (1966) ^[35]	10,000 ^[36]	N/A ^[32]	12,329	9,322 (2011) ^[48]	N/A ^[34]	3,272
Jamaica	1,876,000 ^[35]	2,420,000 ^[36]	2,429,000 ^[32]	2,695,867 (2003)	2,847,232 ^[49] (2010)	74 ^[34]	971,232
Australia	11,540,764 (1964) ^[35]	17,086,000 ^[36]	17,843,000 ^[32]	19,546,792 (2003)	25,490,538 ^[50] (2010)	82 ^[34]	10,066,508
Albania	1,965,500 (1964) ^[35]	3,250,000 ^[36]	3,414,000 ^[32]	3,510,484	2,986,952 (July 2010 est.) ^{[31][51]}	78 ^[34]	1,021,452
Poland	31,944,000 ^[35]	38,180,000 ^[36]	38,554,000 ^[32]	38,626,349 (2001)	38,192,000 (2010) ^[52]	75 ^[34]	6,248,000
Hungary	10,212,000 ^[35]	10,553,000 ^[36]	10,261,000 ^[32]	10,106,017	9,979,000 (2010) ^[53]	73 ^[34]	-142,000
Bulgaria	8,226,564 (1965) ^[35]	8,980,000 ^[36]	8,443,000 ^[32]	7,707,495(2000)	7,351,234 (2011) ^[54]	73 ^[34]	-875,330
United Kingdom	55,068,000 (1966) ^[35]	57,411,000 ^[36]	58,091,000 ^[32]	58,789,194	62,008,048 (2010) ^[55]	79 ^[34]	7,020,048
Ireland	2,884,002 (1966) ^[35]	3,503,000 ^[36]	3,571,000 ^[32]	3,840,838 (2000)	4,470,700 ^[56] (2010)	78 ^[34]	1,586,698
People's Republic of China	720,000,000 ^[35]	1,139,060,000 ^[36]	1,208,841,000 ^[32]	1,286,975,468 (2004)	1,339,724,852 (2010) ^[57]	73 ^[34]	619,724,852

Example nation	1967 population	1990 population	1994 population	2002 population	2008 population	Life expectancy in years (2008)	Total population growth from 1960s to 2007- 2011
<u>Japan</u> ‡	98,274,961 (1965) ^[35]	123,537,000 ^[36]	124,961,000 ^[32]	127,333,002	127,420,000 (2010) ^[58]	82 ^[34]	28,123,865
<u>Ryukyu Islands</u> (Once occupied by the United States)‡	934,176 (1965) ^[35]	N/A	N/A	N/A	N/A	N/A	N/A
<u>India</u> #	511,115,000 ^[35]	843,931,000 ^[36]	918,570,000 ^[32]	1,028,610,328 (2001)	1,210,193,422 (2011) ^[59]	69 ^[34]	699,078,422
<u>Singapore</u>	1,956,000 (1967) ^[35]	3,003,000 (1990) ^[36]	2,930,000 (1994) ^[32]	4,452,732 (2002)	5,076,700 (2010) ^[60]	82 (2008) ^[34]	3,120,700
<u>Sikkim</u> #	183,000 (1967) ^[35]	N/A	N/A	N/A	N/A	N/A	N/A
<u>Monaco</u>	24,000 (1967) ^[35]	29,000 (1990) ^[36]	N/A (1994) ^[32]	31,842 (2000)	35,586 ^[61] (2010)	(2008) ^[34]	11,586
<u>Greece</u>	8,716,000 (1967) ^[35]	10,123,000 (1990) ^[36]	10,426,000 (1994) ^[32]	10,964,020 (2001) ^[62]	11,305,118 (2011) ^[63]	N/A (2008) ^[34]	2,589,118
<u>Faroe Islands</u> (Danish dependency)	38,000 (1967) ^[35]	N/A (1990) ^[36]	N/A (1994) ^[32]	46,345 (2000)	48,917 (2010) ^[64]	N/A (2008) ^[34]	18,917
<u>Liechtenstein</u>	20,000 (1967) ^[35]	29,000 (1990) ^[36]	N/A (1994) ^[32]	33,307 (2000)	35,789 (2009) ^[65]	(2008) ^[34]	15,789
<u>South Korea</u>	29,207,856 (1966) ^[35]	42,793,000 (1990) ^[36]	44,453,000 (1994) ^[32]	48,324,000 (2003)	48,875,000 (2010) ^[66]	(2008) ^[34]	19,667,144
<u>North Korea</u>	12,700,000 (1967) ^[35]	21,773,000 (1990) ^[36]	23,483,000 (1994) ^[32]	22,224,195 (2002)	24,051,218 (2010) ^[67]	(2008) ^[34]	11,351,218
<u>Brunei</u>	107,200 (1967) ^[35]	266,000 (1990) ^[36]	280,000 (1994) ^[32]	332,844 (2001)	401,890 (2011) ^[68]	76 (2008) ^[34]	306,609
<u>Malaysia</u>	10,671,000 (1967) ^[35]	17,861,000 (1990) ^[36]	19,489,000 (1994) ^[32]	21,793,293 (2002)	27,565,821 (2010) ^[69]	(2008) ^[34]	16,894,821
<u>Thailand</u>	32,680,000 (1967) ^[35]	57,196,000 (1990) ^[36]	59,396,000 (1994) ^[32]	60,606,947 (2000) ^[70]	63,878,267 (2011) ^[71]	(2008) ^[34]	31,198,267
<u>Lebanon</u>	2,520,000 (1967) ^[35]	2,701,000 (1990) ^[36]	2,915,000 (1994) ^[32]	3,727,703 ^[72] (2003)	4,224,000 ^[33] (2009)	- (2008) ^[34]	
<u>Syria</u>	5,600,000 (1967) ^[35]	12,116,000 (1990) ^[36]	13,844,000 (1994) ^[32]	17,585,540 (2003)	22,457,763 (2011) ^[73]	-(2008) ^[34]	
<u>Bahrain</u>	182,00 (1967) ^[35]	503,000 (1990) ^[36]	549,000 (1994) ^[32]	667,238 (2003)	1,234,596 ^[74] (2010)	75 (2008) ^[34]	
<u>Sri Lanka</u>	11,741,000 (1967) ^[35]	16,993,000 (1990) ^[36]	17,685,000 (1994) ^[32]	19,607,519 (2002)	20,238,000 ^[41] (2009)	- (2008) ^[34]	
<u>Switzerland</u>	6,050,000 (1967) ^[35]	6,712,000 (1990) ^[36]	6,994,000 (1994) ^[32]	7,261,200 (2002)	7,866,500 ^[75] (2010)	- (2008) ^[34]	
<u>Luxembourg</u>	335,000 (1967) ^[35]	381,000 (1990) ^[36]	401,000 (1994) ^[32]	439,539 (2001)	511,840 (2011) ^[76]	- (2008) ^[34]	
<u>Romania</u>	19,105,056 (1966) ^[35]	23,200,000 (1990) ^[36]	22,736,000 (1994) ^[32]	21,680,974 (2002)	21,466,174 ^[77] (2011)	- (2008) ^[34]	
<u>Niue</u> (associated state of New Zealand)	1,900 (1966) ^[35]	N/A (1990) ^[36]	N/A (1994) ^[32]	2,134 (2002)	1,398 (2009) ^[78]	N/A (2008) ^[34]	-502
<u>Tokelau</u> (New Zealand territory)	5,194 (1966) ^[35]	N/A (1990) ^[36]	N/A (1994) ^[32]	1,445 (2001)	1,416 (2009)	N/A (2008) ^[34]	-3,778
<u>Jamaica</u>	1,876,000 (1967) ^[35]	2,420,000 (1990) ^[36]	2,429,000 (1994) ^[32]	2,695,867 (2003)	2,847,232 ^[49] (2010)	74 (2008) ^[34]	971,232
<u>Argentina</u>	32,031,000 (1967) ^[35]	32,322,000 (1990) ^[36]	34,180,000 (1994) ^[32]	37,812,817 (2002)	40,091,359 (2010)	74 (2008) ^[34]	8,060,359

Example nation	1967 population	1990 population	1994 population	2002 population	2008 population	Life expectancy in years (2008)	Total population growth from 1960s to 2007- 2011
<u>France</u>	49,890,660 (1967) ^[35]	56,440,000 (1990) ^[36]	57,747,000 (1994) ^[32]	59,551,000 (2001)	63,136,180 (2011) ^[79]	81 (2008) ^[34]	
<u>Italy</u>	52,334,000 (1967) ^[35]	57,662,000 (1990) ^[36]	57,193,000 (1994) ^[32]	56,995,744 (2002)	60,605,053 ^[80] (2011)	80 (2008) ^[34]	
<u>Mauritius</u>	774,000 (1967) ^[35]	1,075,000 (1990) ^[36]	1,104,000 (1994) ^[32]	1,179,137 (2000)	1,288,000 (2009) ^[41]	75 (2008) ^[34]	514,000
<u>Guatemala</u>	4,717,000 (1967) ^[35]	9,197,000 (1990) ^[36]	10,322,000 (1994) ^[32]	12,974,361 (2000)	13,276,517 (2009)	70 (2008) ^[34]	8,559,517
<u>Cuba</u>	8,033,000 (1967) ^[35]	10,609,000 (1990) ^[36]	10,960,000 (1994) ^[32]	11,177,743 (2002)	11,239,363 (2009) ^[81]	77 (2008) ^[34]	
<u>Barbados</u>	246,000 (1967) ^[35]	255,000 (1990) ^[36]	261,000 (1994) ^[32]	250,012 (2001)	284,589 (2010) ^[31]	73 (2008) ^[34]	18,589
<u>Samoa</u>	131,377 (1967) ^[35]	164,000 (1990) ^[36]	164,000 (1994) ^[32]	178,173 (2003)	179,000 (2009) ^[33]	N/A (2008) ^[34]	
<u>Sweden</u>	7,765,981 (1967) ^[35]	8,559,000 (1990) ^[36]	8,794,000 (1994) ^[32]	8,920,705 (2002)	9,354,462 (2009)	81 (2008) ^[34]	
<u>Finland</u>	4,664,000 (1967) ^[35]	4,986,000 (1990) ^[36]	5,095,000 (1994) ^[32]	5,175,783 (2002)	5,374,781 (2010)	N/A (2008) ^[34]	
<u>Portugal</u>	9,440,000 (1967) ^[35]	10,525,000 (1990) ^[36]	9,830,000 (1994) ^[32]	10,355,824 (2001)	10,647,763 ^[82] (2011)	N/A (2008) ^[34]	
<u>Austria</u>	7,323,981 (1967) ^[35]	7,712,000 (1990) ^[36]	8,031,000 (1994) ^[32]	8,032,926 (2001)	8,404,252 (2011)	N/A (2008) ^[34]	
<u>Libya</u>	1,738,000 (1967) ^[35]	4,545,000 (1990) ^[36]	5,225,000(1994) ^[32]	5,499,074 (2002)	6,420,000 (2009) ^[33]	77 (2008) ^[34]	
<u>Peru</u>	12,385,000 (1967) ^[35]	21,550,000 (1990) ^[36]	23,080,000(1994) ^[32]	27,949,639 (2002)	29,496,000 (2010)	70 (2008) ^[34]	
<u>Guinea Bissau</u>	528,000 (1967) ^[35]	965,000 (1990) ^[36]	1,050,000 (1994) ^[32]	1,345,479 (2002)	1,647,000 ^[33] (2009)	48 (2008) ^[34]	
<u>Angola</u>	5,203,066 (1967) ^[35]	10,020,000 (1990) ^[36]	10,674,000 (1994) ^[32]	10,766,500 (2003)	18,498,000 ^[41] ^[83] (2009)	38 (2008) ^[34]	
<u>Equatorial Guinea</u>	277,000 (1967) ^[35]	348,000 (1990) ^[36]	389,000 (1994) ^[32]	474,214 (2000)	676,000 (2009) ^[41]	61 (2008) ^[34]	
<u>Benin</u>	2,505,000 (1967) ^[35]	4,736,000 (1990) ^[36]	5,246,000 (1994) ^[32]	8,500,500 (2002)	8,791,832 (2009)	59 (2008) ^[34]	
<u>Laos</u>	2,770,000 (1967) ^[35]	4,139,000 (1990) ^[36]	4,742,000 (1994) ^[32]	5,635,967 (2002)	6,800,000 ^[84] (2011)	56 (2008) ^[34]	
<u>Nepal</u>	10,500,000 (1967) ^[35]	18,961,000 (1990) ^[36]	21,360,000 (1994) ^[32]	25,284,463 (2002)	29,331,000 ^[41] (2009)	- (2008) ^[34]	
<u>Iran</u>	25,781,090 (1966) ^[35]	54,608,000 (1990) ^[36]	59,778,000 (1994) ^[32]	66,622,704 (2002)	75,330,000 (2010) ^[85]	71 (2008) ^[34]	49,548,910
<u>Canada</u>	20,014,880 (1966) ^[35]	26,603,000 (1990) ^[36]	29,248,000(1994) ^[32]	31,081,900 (2001)	32,623,490 (2011) ^[86]	81 (2008) ^[34]	
<u>United States</u>	199,118,000 (1967) ^[35]	249,995,000 (1990) ^[36]	260,650,00(1994) ^[32]	281,421,906 (2000)	308,745,538 (2010) ^[87]	78 (2008) ^[34]	
<u>Uganda</u>	7,931,000 (1967) ^[35]	18,795,000 (1990) ^[36]	20,621,000 (1994) ^[32]	24,227,297 (2002)	32,369,558 (2009)	52 (2008) ^[34]	

Notes

- * Eritrea left Ethiopia in 1991.
- † Split into the nations of Sudan and South Sudan during 2011.
- ‡ Japan and the Ryukyu Islands merged in 1972.
- # India and Sikkim merged in 1975.

Growth by region

Population growth rates vary by world region, with the highest growth rates in Sub-Saharan Africa and the lowest in Europe. For example, from 1950 to 2010, Sub-Saharan Africa grew over three and a half times, from about 186 million to 856 million. On the other hand, Europe only increased by 35%, from 547 million in 1950 to 738 million in 2010. As a result of these varying population

growths, Sub-Saharan Africa changed from 7.4% of world population in 1950 to 12.4% in 2010, while Europe declined from 22% to 11% in the same time period.^[89]

Into the future

According to the UN's 2017 revision to its population projections, world population is projected to reach 11.2 billion by 2100 compared to 7.6 billion in 2017.^{[90][91]} In 2011, Indian economist Sanjeev Sanyal disputed the UN's figures and argued that birth rates will fall below replacement rates in the 2020s. According to his projections, population growth will be only sustained till the 2040s by rising longevity, but will peak below 9 bn by 2050.^[27] Conversely, a 2014 paper by demographers from several universities and the United Nations Population Division projected that the world's population would reach about 10.9 billion in 2100 and continue growing thereafter.^[92] One of its authors, Adrian Raftery, a University of Washington professor of statistics and of sociology, says "The consensus over the past 20 years or so was that world population, which is currently around 7 billion, would go up to 9 billion and level off or probably decline. We found there's a 70 percent probability the world population will not stabilize this century. Population, which had sort of fallen off the world's agenda, remains a very important issue."^[93]

The German Foundation for World Population reported in December 2019 that the global human population grows by 2.6 people every second, and could reach 8 billion by 2023.^[94]

See also

- An Essay on the Principle of Population*
- Human overpopulation
- Human population planning
- Anthropocene
- Baby boom
- Biological exponential growth
- Demographic history
- Demographic transition
- Density dependence
- Doubling time
- Fertility factor (demography)
- Irruptive growth
- List of countries by population growth rate
- Natalism and antinatalism
- Population bottleneck
- Population decline
- Population dynamics
- World population
- World population estimates
- World Scientists' Warning to Humanity

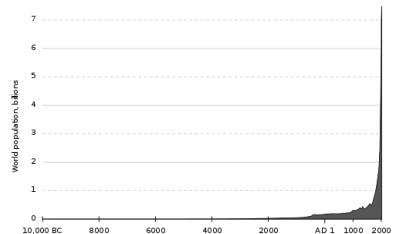
References

- "Absolute increase in global population per year" (<https://ourworldindata.org/grapher/absolute-increase-global-population>). *Our World in Data*. Retrieved 15 February 2020.
- "World Population Prospects 2017" (<http://www.un.org/en/development/desa/population/publications/index.shtml>). Retrieved 2017-11-21.
- "World Population 2017" (<http://worldometers.info/world-population>). Retrieved 2018-04-18.
- "World Population Prospects: The 2017 Revision: Key Findings and Advance Tables" (https://esa.un.org/unpd/wpp/Publications/Files/WPP2017_KeyFindings.pdf) (PDF). United Nations Department of Economic and Social Affairs, Population Division. p. 2. Retrieved 2019-01-05.
- Population Reference Bureau. "2013 World Population Factsheet" (http://www.prb.org/pdf14/2014-world-population-data-sheet_eng.pdf) (PDF). *prb.org*. Population Reference Bureau. Retrieved 5 December 2014.
- United Nations - World Population Prospects 2017 (<https://esa.un.org/unpd/wpp/>)
- "Archived copy" (<http://www.abc.net.au/science/articles/2008/01/29/2149185.htm>). Archived (<https://web.archive.org/web/20161220120404/http://www.abc.net.au/science/articles/2008/01/29/2149185.htm>) from the original on 20 December 2016. Retrieved 2008-11-03.

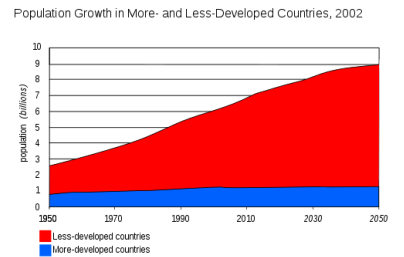
Population growth 1990–2012 (%) ^[88]	
Africa	73.3%
Middle East	68.2%
Asia (excl. China)	42.8%
China	19.0%
OECD Americas	27.9%
Non-OECD Americas	36.6%
OECD Europe	11.5%
OECD Asia Oceania	11.1%
Non-OECD Europe and Eurasia	-0.8%



Thousands of scooters make their way through the city of Hồ Chí Minh, Vietnam.



Estimated size of human population from 10,000 BCE to 2000 CE.



The majority of world population growth today is occurring in less developed countries.

8. "The contribution of vaccination to global health: past, present and future" (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4024226/>). *Philosophical Transactions of the Royal Society*. 19 June 2014.
9. Armelagos, George J., Alan H. Goodman, and Kenneth H. Jacobs. "The origins of agriculture: Population growth during a period of declining health." *Population and Environment* 13.1 (1991): 9–22.
10. Smil, Vaclav (1999). "Detonator of the population explosion" (<http://www.vaclavsmil.com/wp-content/uploads/docs/smil-article-1999-nature7.pdf>) (PDF). *Nature*. 400 (6743): 415. Bibcode:1999Natur.400..415S (<https://ui.adsabs.harvard.edu/abs/1999Natur.400..415S>). doi:10.1038/22672 (<https://doi.org/10.1038%2F22672>).
11. McKeown, Thomas (1976). *The Modern Rise of Population*. London, UK: Edward Arnold. ISBN 9780713159868.
12. McKeown T, Brown RG (1955). "Medical evidence related to English population changes in the eighteenth century". *Population Studies*. 9 (2): 119–141. doi:10.1080/00324728.1955.10404688 (<https://doi.org/10.1080%2F00324728.1955.10404688>). JSTOR 2172162 (<https://www.jstor.org/stable/2172162>).
13. McKeown T, Brown RG, Record RG (1972). "An interpretation of the modern rise of population in Europe". *Population Studies*. 26 (3): 345–382. doi:10.1080/00324728.1972.10405908 (<https://doi.org/10.1080%2F00324728.1972.10405908>). JSTOR 2173815 (<https://www.jstor.org/stable/2173815>).
14. McKeown T, Record RG (1962). "Reasons for the Decline of Mortality in England and Wales during the Nineteenth Century". *Population Studies*. 16 (2): 94–122. doi:10.2307/2173119 (<https://doi.org/10.2307%2F2173119>). JSTOR 2173119 (<https://www.jstor.org/stable/2173119>).
15. McKeown T, Record RG, Turner RD (1975). "An Interpretation of the Decline of Mortality in England and Wales during the Twentieth Century". *Population Studies*. 29 (3): 391–422. doi:10.1080/00324728.1975.10412707 (<https://doi.org/10.1080%2F00324728.1975.10412707>). JSTOR 2173935 (<https://www.jstor.org/stable/2173935>). PMID 11630508 (<https://pubmed.ncbi.nlm.nih.gov/11630508>).
16. Korotayev, A. V.; Malkov, A. S. (2016). "Compact Mathematical Model of the World System Economic and Demographic Growth, 1 CE–1973 CE" (<https://www.academia.edu/35548090>). *International Journal of Mathematical Models and Methods in Applied Sciences*. 10: 200–209.
17. Deaton, Angus (2013). *The Great Escape. Health, wealth, and the origins of inequality*. Princeton and Oxford: Princeton University Press. pp. 91–93. ISBN 978-0-691-15354-4. "McKeown's views, updated to modern circumstances, are still important today in debates between those who think that health is primarily determined by medical discoveries and medical treatment and those who look to the background social conditions of life."
18. Association of Public Health Epidemiologists in Ontario (<http://www.apheo.ca/index.php?pid=61>) Archived (<https://web.archive.org/web/20080522092307/http://www.apheo.ca/index.php?pid=61>) 2008-05-22 at the Wayback Machine
19. Reece, Jane; Urry, Lisa; Cain, Michael; Wasserman, Steven; Minorsky, Peter; Jackson, Robert (2014). *Campbell Biology*. Pearson.
20. Stewart, James; Clegg, Daniel (2012). *Brief Applied Calculus*. Brooks/Cole Cengage Learning.
21. "World Population Prospects 2017" (<https://web.archive.org/web/20170711042851/http://www.un.org/en/development/desa/population/publications/index.shtml>). Archived from the original (<http://www.un.org/en/development/desa/population/publications/index.shtml>) on 2017-07-11.
22. "The World Factbook" (<https://www.cia.gov/library/publications/the-world-factbook/geos/xx.html>). 20 November 2015. Retrieved 4 January 2016.
23. "BBC NEWS - South Asia - The end of India's green revolution?" (http://news.bbc.co.uk/1/hi/world/south_asia/4994590.stm). 2006-05-29.
24. "International Programs" (<https://web.archive.org/web/20090701122431/http://www.census.gov/ipc/www/idb/worldpop.php>). Archived from the original (<https://www.census.gov/ipc/www/idb/worldpop.php>) on 2009-07-01.
25. UN population projections (<http://esa.un.org/unpp/index.asp?panel=2>) Archived (<https://www.webcitation.org/5tpNJ6FqS?url=http://esa.un.org/unpp/index.asp?panel=2>) 2010-10-28 at WebCite
26. "Japan sees biggest population fall" (<https://www.theguardian.com/world/2009/jan/02/japan-population>). *the Guardian*. Associated Press. 2009-01-02.
27. Sanjeev Sanyal (2011-10-30). "Sanjeev Sanyal on The End of Population Growth - Project Syndicate" (<http://www.project-syndicate.org/commentary/the-end-of-population-growth>). *Project Syndicate*.
28. Carrington, Damien (September 18, 2014). "World population to hit 11bn in 2100 – with 70% chance of continuous rise" (<https://www.theguardian.com/environment/2014/sep/18/world-population-new-study-11bn-2100>). *The Guardian*. Retrieved December 19, 2016.

29. "World Population Prospects - Population Division - United Nations" (http://esa.un.org/unpd/wpp/unpp/Panel_profiles.htm).
30. "East Asia/Southeast Asia :: China — The World Factbook - Central Intelligence Agency" (<https://www.cia.gov/library/publications/the-world-factbook/geos/ch.html>). *www.cia.gov*. Retrieved 2019-05-15.
31. Barbados: People. (<https://www.cia.gov/library/publications/the-world-factbook/geos/bb.html>) World Factbook of CIA
32. The British *Collins Longman Student Atlas*, the 1996 and in 1998 publications, ISBN 978-0-00-448879-0 for the 1998 edition, ISBN 0-00-448365-0 for the 1996 edition
33. Department of Economic and Social Affairs Population Division (2009). "World Population Prospects, Table A.1" (https://www.un.org/esa/population/publications/wpp2008/wpp2008_text_tables.pdf) (PDF). 2008 revision. United Nations. Retrieved 2009-03-12. NB: The preliminary results of the National population census in Guinea-Bissau put the figure at 1,449,230, according to email information by the Instituto Nacional de Estudos e Pesquisa, Bissau.
34. 'Modern School Atlas (96th edition)', ISBN 978-1-84907-013-3.
35. The British Oxford economic atlas of the World 4th edition, ISBN 0-19-894107-2
36. The British Collins Atlas of the World, the 1993 edition, ISBN 0-00-448038-4
37. Ethiopia Central Statistics Office -- Population Projection for mid-2008 (<http://www.csa.gov.et/surveys/National%20statistics/national%20statistics%202007/Population.pdf>) Archived (<https://web.archive.org/web/20120105033054/http://www.csa.gov.et/surveys/National%20statistics/national%20statistics%202007/Population.pdf>) January 5, 2012, at the Wayback Machine
38. Central Intelligence Agency (2009). "Niger" (<https://www.cia.gov/library/publications/the-world-factbook/geos/ng.html>). The World Factbook. Retrieved January 10, 2010.
39. "Mali preliminary 2009 census" (https://web.archive.org/web/20100418055748/http://instat.gov.ml/voir_actu.aspx?lactu=44). Institut National de la Statistique. Archived from the original (http://instat.gov.ml/voir_actu.aspx?lactu=44) on April 18, 2010. Retrieved January 12, 2010.
40. Central Intelligence Agency (2009). "Senegal" (<https://www.cia.gov/library/publications/the-world-factbook/geos/sg.html>). The World Factbook. Retrieved January 10, 2010.
41. Department of Economic and Social Affairs Population Division (2010). "World Population Prospects, Table A.1" (https://www.un.org/esa/population/publications/wpp2010/wpp2010_text_tables.pdf) (PDF). 2008 revision. United Nations. Retrieved 2009-03-12.
42. The World Factbook- Congo, Democratic Republic of the. (<https://www.cia.gov/library/publications/the-world-factbook/geos/cg.html>) Central Intelligence Agency.
43. "Central Agency for Population Mobilisation and Statistics — Population Clock (July 2008)" (<https://web.archive.org/web/20100908090727/http://www.msrintranet.capmas.gov.eg/pls/fdl/tst12e?action=&lname=>). Msrintranet.capmas.gov.eg. Archived from the original (<http://www.msrintranet.capmas.gov.eg/pls/fdl/tst12e?action=&lname=>) on 2010-09-08. Retrieved 2010-08-25.
44. "Falkland Islands (Islas Malvinas)" (<https://www.cia.gov/library/publications/the-world-factbook/geos/fk.html>). The World Factbook. CIA. Retrieved 5 March 2010.
45. "Departamento Administrativo Nacional de Estadística" (https://web.archive.org/web/20150905114224/http://www.dane.gov.co/reloj/reloj_animado.php). Dane.gov.co. Archived from the original (http://www.dane.gov.co/reloj/reloj_animado.php) on 2015-09-05. Retrieved 2010-08-22.
46. IBGE. Censo 2010: população do Brasil é de 190.732.694 pessoas (http://www.ibge.gov.br/home/presidencia/noticias/noticia_visualiza.php?id_noticia=1766&id_pagina=1).
47. "INEGI 2010 Census Statistics" (<http://www.inegi.org.mx/inegi/contenidos/espanol/prensa/comunicados/rpcpyv10.asp>). inegi.org.mx. Retrieved 2010-11-25.
48. Central Intelligence Agency (2011). "Nauru" (<https://www.cia.gov/library/publications/the-world-factbook/geos/nr.html>). The World Factbook. Retrieved 12 February 2011.
49. "The World Factbook" (<https://www.cia.gov/library/publications/the-world-factbook/geos/jm.html>).
50. "Population clock" (<http://www.abs.gov.au/ausstats/abs@.nsf/94713ad445ff1425ca25682000192af2/1647509ef7e25faaca2568a900154b63?OpenDocument>). *Australian Bureau of Statistics website*. Commonwealth of Australia. Retrieved 12 April 2011. The population estimate shown is automatically calculated daily at 00:00 UTC and is based on data obtained from the population clock on the date shown in the citation.
51. "IFs Forecast - Version 7.00-Google Public Data Explorer" (http://www.google.com/publicdata/explore?ds=n4ff2muj8bh2a_&ctype=l&strail=false&nslm=h&met_y=POP&hl=en&dl=en#ctype=l&strail=false&nslm=h&met_y=POP&fdim_y=scenario:1&scale_y=lin&ind_y=false&rdim=world&idim=country:AL&hl=en&dl=en).
52. "Wzrasta liczba ludności Polski - Wiadomości - WP.PL" (<https://web.archive.org/web/20131005093319/http://wiadomosci.wp.pl/kat,1347,title,Wzrasta-liczba-ludnosci-Polski,wid,12502858,wiadomosc.html>). Wiadomosci.wp.pl. 2010-07-23. Archived from the original (<http://wiadomosci.wp.pl/kat,1347,title,Wzrasta-liczba-ludnosci-Polski,wid,12502858,wiadomosc.html>) on 2013-10-05. Retrieved 2010-07-27.

53. Hungarian Central Statistical Office (http://portal.ksh.hu/pls/ksh/docs/hun/xstadat/xstada_t_evkozi/e_wdsd001a.html). Retrieved 25 July 2010.
54. <http://www.nsi.bg/EPDOCS/Census2011pr.pdf>
55. "Total population at 1 January" (<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&language=en&pcode=tps00001&tableSelection=1&footnotes=yes&labeling=labels&plugin=1>). Eurostat. 11 March 2011. Retrieved 29 April 2011.
56. "CSO – Population and Migration Estimates April 2010" (<http://www.cso.ie/releasespublications/documents/population/current/popmig.pdf>) (PDF). September 2010. Retrieved 21 September 2010.
57. Communiqué of the National Bureau of Statistics of People's Republic of China on Major Figures of the 2010 Population Census (http://www.stats.gov.cn/english/newsandcomingevents/t20110428_402722244.htm) Archived (https://web.archive.org/web/20131108022004/http://www.stats.gov.cn/english/newsandcomingevents/t20110428_402722244.htm) November 8, 2013, at the Wayback Machine
58. "Statistics Bureau Home Page/Population Estimates Monthly Report" (<http://www.stat.go.jp/english/data/jinsui/tsuki/index.htm>).
59. "Provisional Population Totals - Census 2011" (<http://www.censusindia.gov.in/2011-prov-results/indiaatglance.html>). Indian Census Bureau 2011. Retrieved 2011-03-29.
60. "Time Series on Population (Mid-Year Estimates)" (<https://web.archive.org/web/20090221030353/http://www.singstat.gov.sg/stats/keyind.html#popnarea>). 31 Aug 2010. Statistics Singapore. 2010. Archived from the original (<http://www.singstat.gov.sg/stats/keyind.html#popnarea>) on 2009-02-21.
61. Monaco (<https://www.cia.gov/library/publications/the-world-factbook/geos/mn.html>), The World Factbook, Central Intelligence Agency. Retrieved 7 June 2010.
62. "Πίνακας 1. Πληθυσμός κατά φύλο και ηλικία" (https://web.archive.org/web/20090325012639/http://www.statistics.gr/gr_tables/S1101_SAP_09_TB_DC_01_01_Y.pdf) (PDF). National Statistical Service of Greece: Population census of 18 March 2001. Archived from the original (http://www.statistics.gr/gr_tables/S1101_SAP_09_TB_DC_01_01_Y.pdf) (PDF) on March 25, 2009.
63. "Total population" (<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&language=en&pcode=tps00001&tableSelection=1&footnotes=yes&labeling=labels&plugin=1>). Eurostat. 1 January 2010. Retrieved 8 January 2010.
64. "Archived copy" (https://web.archive.org/web/20131210030515/http://www.hagstova.fo/portal/page/portal/HAGSTOVAN/Hagstova_Foroya). Archived from the original (http://www.hagstova.fo/portal/page/portal/HAGSTOVAN/Hagstova_Foroya) on 2013-12-10. Retrieved 2015-12-10. (Faroese)
65. Bevölkerungsstatistik 30. Juni 2009 (http://www.llv.li/amtstellen/llv-as-bevoelkerung/llv-as-bevoelkerung-bevoelkerungsstatistik_per_30_juni.htm) Archived (https://web.archive.org/web/20131114083836/http://www.llv.li/amtstellen/llv-as-bevoelkerung/llv-as-bevoelkerung-bevoelkerungsstatistik_per_30_juni.htm) 2013-11-14 at the Wayback Machine, Landesverwaltung Liechtenstein.
66. "총인구, 인구성장률 : 지표상세화면" (http://www.index.go.kr/egams/stts/jsp/potal/stts/PO_S_TTS_idxMain.jsp?idx_cd=1009&bbs=INDX_001). Index.go.kr. Retrieved 2010-10-29.
67. UNFPA (2009-10-01). 한반도 인구 7천400만명 시대 임박 (<https://web.archive.org/web/20100417102924/http://news.joins.com/article/6864109686.html>) (in Korean). United Nations. Archived from the original (<http://news.joins.com/article/6864109686.html>) on 2010-04-17. Retrieved 2010-04-14.
68. "Brunei" (<https://www.cia.gov/library/publications/the-world-factbook/geos/bx.html>). CIA World Factbook. 2011. Retrieved 2011-01-13.
69. "Laporan Kiraan Permulaan 2010" (<https://web.archive.org/web/20110708202650/http://www.statistics.gov.my/ccount12/click.php?id=2127>). Jabatan Perangkaan Malaysia. p. iii. Archived from the original (<http://www.statistics.gov.my/ccount12/click.php?id=2127>) on July 8, 2011. Retrieved 31 January 2011.
70. "Population and Housing Census 2000, National Statistical Office" (http://web.nso.go.th/eng/en/pop2000/prelim_e.htm). Web.nso.go.th. 2000-04-01. Retrieved 2010-04-25.
71. "Archived copy" (https://web.archive.org/web/20110716001724/http://203.113.86.149/stat/pk/pk53/pk_53.pdf) (PDF). Archived from the original (http://203.113.86.149/stat/pk/pk53/pk_53.pdf) (PDF) on 2011-07-16. Retrieved 2011-07-16.
72. "Central Intelligence Agency. March 2011 est" (<http://www.cia.gov/library/publications/the-world-factbook/geos/le.html>). Cia.gov. Retrieved 2011-04-23.
73. "Central Intelligence Agency. March 2011 est" (<https://www.cia.gov/library/publications/the-world-factbook/geos/sy.html>). Cia.gov. Retrieved 2011-04-23.
74. "REMARKABLE GROWTH EXPATS OUTNUMBER BAHRAINIS IN 2010 CENSUS" (https://web.archive.org/web/20110219111201/http://www.census2010.gov.bh/news/news_en26.html). Bahraini Census 2010. 2010-11-28. Archived from the original (http://www.census2010.gov.bh/news/news_en26.html) on February 19, 2011. Retrieved 14 February 2011.

75. "Population size and population composition" (<https://web.archive.org/web/20160628063919/http://www.bfs.admin.ch/bfs/portal/en/index/themen/01/02/blank/key/bevoelkerungssstand.html>). *Swiss Federal Statistical Office*. Swiss Federal Statistical Office, Neuchâtel. 2010. Archived from the original (<http://www.bfs.admin.ch/bfs/portal/en/index/themen/01/02/blank/key/bevoelkerungssstand.html>) on 2016-06-28. Retrieved 2011-04-29.
76. "Population: 511 840 habitants au 1er janvier 2011" (<http://www.statistiques.public.lu/fr/actualites/population/population/2011/05/20110503/index.html>), *Le Portail des statistiques: Grand-Duché de Luxembourg*, 3 May 2011. (in French) Retrieved 4 May 2011.
77. "Romania - Population" (<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&language=en&pcode=tps00001&tableSelection=1&footnotes=yes&labeling=labels&plugin=1>). epp.eurostat.ec.europa.eu. Retrieved 26 May 2011.
78. "Niue" (<https://www.cia.gov/library/publications/the-world-factbook/geos/ne.html>). *The World Factbook*. Central Intelligence Agency. Retrieved 2009-07-20.
79. INSEE, Government of France. "Population totale par sexe et âge au 1er janvier 2011, France métropolitaine" (http://www.insee.fr/fr/themes/detail.asp?reg_id=0&ref_id=bilan-demo&page=donnees-detaillees/bilan-demo/pop_age2.htm) (in French). Retrieved 20 January 2011.
80. "Monthly demographic balance: January–November 2010" (http://www.istat.it/salastampa/comunicati/non_calendario/20110328_00/testointegrale20110328.pdf) (PDF) (in Italian). Istat. 28 March 2011. Retrieved 2 April 2011.
81. Anuario Estadístico de Cuba 2009. Edición 2010 (http://www.one.cu/aec2009/esp/20080618_tabla_cuadro.htm) Archived (https://web.archive.org/web/20100716124826/http://www.one.cu/aec2009/esp/20080618_tabla_cuadro.htm) 2010-07-16 at the Wayback Machine, Oficina Nacional de Estadísticas, República de Cuba. Accessed on November 6, 2010. Note: An exchange rate of 1 CUC to 1.08 USD was used to convert GDP.[1] (<https://www.cia.gov/library/publications/the-world-factbook/geos/cu.html>)
82. Pordata, "Base de Dados Portugal Contemporâneo" (<http://www.pordata.pt/>). Accessed on March 7, 2011.
83. "Population Forecast to 2060 by International Futures hosted by Google Public Data Explorer" (http://www.google.com/publicdata/explore?ds=n4ff2muj8bh2a_&ctype=l&strail=false&nselm=h&met_y=POP&hl=en&dl=en#ctype=l&strail=false&nselm=h&met_y=POP&fdim_y=scenario:1&scale_y=lin&ind_y=false&rdim=world&idim=country:AO&hl=en&dl=en). Retrieved 2011-07-13.
84. "Background notes - Laos" (<https://2009-2017.state.gov/r/pa/ei/bgn/2770.htm>). US Dept. of State. Retrieved 2011-01-20.
85. "Official Iranian Population clock" (<https://web.archive.org/web/20110722015233/http://www.amar.org.ir/default.aspx?tabid=52>). Amar.org.ir. Archived from the original (<http://www.amar.org.ir/default.aspx?tabid=52>) on 2011-07-22. Retrieved 2011-07-13.
86. "Estimated population of Canada, 1605 to present" (<http://www.statcan.gc.ca/pub/98-187-x/4151287-eng.htm#table3>). Statistics Canada. 6 July 2009. Retrieved 2011-04-17.
87. "Resident Population Data – 2010" (<https://web.archive.org/web/20111028061117/http://2010.census.gov/2010census/data/apportionment-dens-text.php>). U.S. Census Bureau. 2010. Archived from the original (<http://2010.census.gov/2010census/data/apportionment-dens-text.php>) on 2011-10-28. Retrieved 2010-12-22.
88. CO2 Emissions from Fuel Combustion (<http://www.iea.org/publications/freepublications/publication/co2-emissions-from-fuel-combustion-highlights-2014.html>) Population 1971–2014 IEA (PDF Page 74, marked page 72)
89. Shackman, Gene; Xun, Wang; Liu, Ya-Lin (2012-06-10). "Brief Review of World Demographic Trends Summary". Elsevier. SSRN 2080860 (<https://ssrn.com/abstract=2080860>).
90. "World Population Prospects - Population Division - United Nations" (<http://esa.un.org/wpp/Documentation/publications.htm>).
91. https://esa.un.org/unpd/wpp/Publications/Files/WPP2017_KeyFindings.pdf
92. Gerland, P.; Raftery, A. E.; Ev Ikova, H.; Li, N.; Gu, D.; Spoorenberg, T.; Alkema, L.; Fosdick, B. K.; Chunn, J.; Lalic, N.; Bay, G.; Buettner, T.; Heilig, G. K.; Wilmoth, J. (September 14, 2014). "World population stabilization unlikely this century" (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4230924>). *Science*. **346** (6206): 234–7. Bibcode 2014Sci...346..234G (<https://ui.adsabs.harvard.edu/abs/2014Sci...346..234G>). doi:10.1126/science.1257469 (<https://doi.org/10.1126/science.1257469>). ISSN 1095-9203 (<https://www.worldcat.org/issn/1095-9203>). PMC 4230924 (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4230924>). PMID 25301627 (<https://pubmed.ncbi.nlm.nih.gov/25301627>).
93. World population to keep growing this century, hit 11 billion by 2100 (<http://www.washington.edu/news/2014/09/18/world-population-to-keep-growing-this-century-hit-11-billion-by-2100/>). UWToday. September 18, 2014
94. Hook, Chris (December 20, 2019). "Earth's population set to soar to 7.75 billion people by New year's Eve" (<https://7news.com.au/news/social/world-population-at-775-bln-by-year-end-c-616688>). *Seven News*. Retrieved January 2, 2019.

External links

- World Population Prospects (<http://esa.un.org/unpd/wpp/index.html>), Website of the United Nations Population Division
- Probabilistic Population Projections, 2nd Revision (<https://web.archive.org/web/20131004212919/http://esa.un.org/unpd/ppp/index.html>), Website of the United Nations Population Division
- 2008 Essays on Population Growth (<https://archive.today/20071009065232/http://www.populationpress.org/publication/index.html>) Blue Planet United — Population Press
- World population growth and trends 1950-2050 (<https://web.archive.org/web/20100707175239/http://www.census.gov/ipc/www/db/worldpopinfo.php>) US Census
- World population: focus on youth (<http://www.worldpopdata.org/chart>), Annual World Population Data Sheet, Population Reference Bureau
- UN University annual "State of the Future" report, including updates on Millennium Project goals including balancing global population growth & resources (<https://web.archive.org/web/20060813212234/http://www.acunu.org/millennium/sof2006.html>)
- Population Growth Rate By Country (<https://web.archive.org/web/20140728063241/http://www.quandl.com/c/society/population-growth-rate-worldbank-by-country>), aggregated time series data from 1960 to present
- BBC News - Birth rate 'harms poverty goals' (<http://news.bbc.co.uk/1/hi/sci/tech/6219922.stm>) - 08/12/06
- Tsirel, S. V. 2004. On the Possible Reasons for the Hyperexponential Growth of the Earth Population (<http://www.mmsed.narod.ru/articles/artTsirel.ps>). *Mathematical Modeling of Social and Economic Dynamics* / Ed. by M. G. Dmitriev and A. P. Petrov, pp. 367–9. Moscow: Russian State Social University, 2004.
- Rosling, Hans (25 January 2009). "What stops population growth?" (<http://www.gapminder.org/videos/what-stops-population-growth/>). *Gapminder*. Retrieved 2009-07-06.
- Nedelman, Michael (9 November 2018). "Fertility rates cut in half since 1950 -- but the population is still growing" (<https://www.cnn.com/2018/11/08/health/global-burden-disease-fertility-study/index.html>). *CNN*. Retrieved 2018-11-17.
- "Human Population Numbers as a Function of Food Supply" (<http://www.oilcrash.com/articles/populatn.htm>). *Russell Hopfenberg* (1 *Duke University, Durham, NC, USA*;) * and David Pimentel (2 *Cornell University, Ithaca, NY, USA*).

Retrieved from "https://en.wikipedia.org/w/index.php?title=Population_growth&oldid=945768282"

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