

WORLD POPULATION PROSPECTS: THE 2006 REVISION

POPULATION AGEING

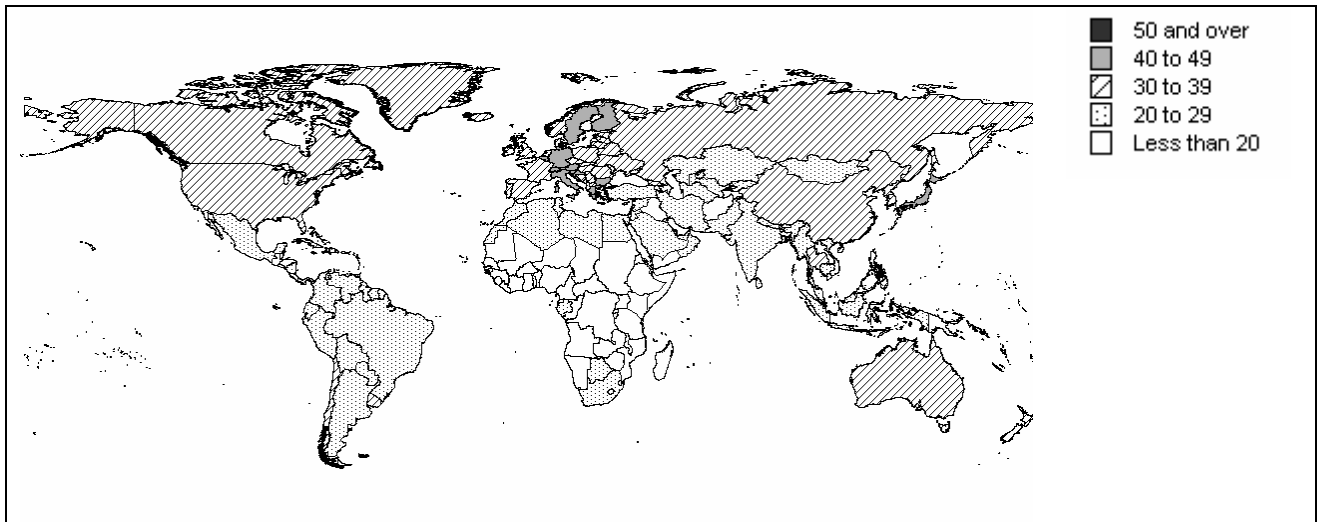
The *2006 Revision* confirms that the world population is in the midst of an unprecedented transformation brought about by the transition from a regime of high mortality and high fertility to one of low mortality and low fertility. This demographic transition is responsible for the rapid and accelerating growth that the world population experienced in the twentieth century as well as for the slowing down of that growth and for the changes in the age distribution associated with those developments. The demographic transition starts usually with a reduction of mortality, which results in longer survival, particularly of children who typically benefit the most from the reduction of the very high risks of death that they experience when mortality is high. As a consequence, population growth accelerates and the proportion of children in the population increases, leading to a rejuvenation of the population's age structure. Partly in response to these changes, fertility decreases because parents realize that they can have fewer children to ensure the survival of the number they desire. Sustained reductions of fertility slow down population growth and produce eventual reductions in the number of births and hence in the proportion of children in the population, thus triggering the process of population ageing. As time elapses, if the reductions of fertility and mortality continue, they reinforce the ageing process because, over time, sustained fertility decline leads not only to decreasing numbers of births and declining proportions of children but also of young people and eventually of adults of working age. Furthermore, increases in longevity accelerate the growth of the proportion of older persons more than those of young people or adults.

Today most countries in the world are already well into the demographic transition but there is considerable diversity with respect to the stage of the transition that each has reached. Developed countries are starting the third stage of the transition and many have populations that are among the oldest in the world. In Europe, all but three countries (Albania, Ireland and the Republic of Moldova) have currently a median age higher than 34 years and 12 countries or areas in the continent have median ages higher than 40 (figure 1). Japan has the oldest population in the world, with a median age of nearly 43 years in 2005. By 2050, all developed countries are expected to have median ages higher than 40 years according to the medium variant (figure 2) and the population of Japan is projected to remain the oldest in the world with a median age of 55 years in 2050.

Most countries in Asia or in Latin America and the Caribbean find themselves in the second stage of the transition where the population of working age (from 15 to 59 years) is still growing as a proportion of the whole population. However, because fertility reductions in those major areas have been rapid, their populations are expected to age more rapidly than the populations of developed countries. Thus, in 37 of the 49 developing countries in Asia, the median age is expected to rise by at least 12 years between 2005 and 2050. By 2050, the median age is expected to be above 40 years in 23 countries in Asia, including China. In Latin America and the Caribbean, the median age is projected to increase by over 12 years in 32 of the 37 countries in this major area, and by 2050, 21 countries in the region are expected to have a median age higher than 40, including Brazil and Mexico.

In contrast to countries in other major areas, most countries in Africa are either still at the first stage of the transition or just entering the second stage and their populations are still young. Assuming that fertility in African countries declines as fast as projected in the medium variant of the *2006 Revision*, they are poised to enter a period characterized by a beneficial age distribution, that is, one in which the proportion of adults of working age increases relative to

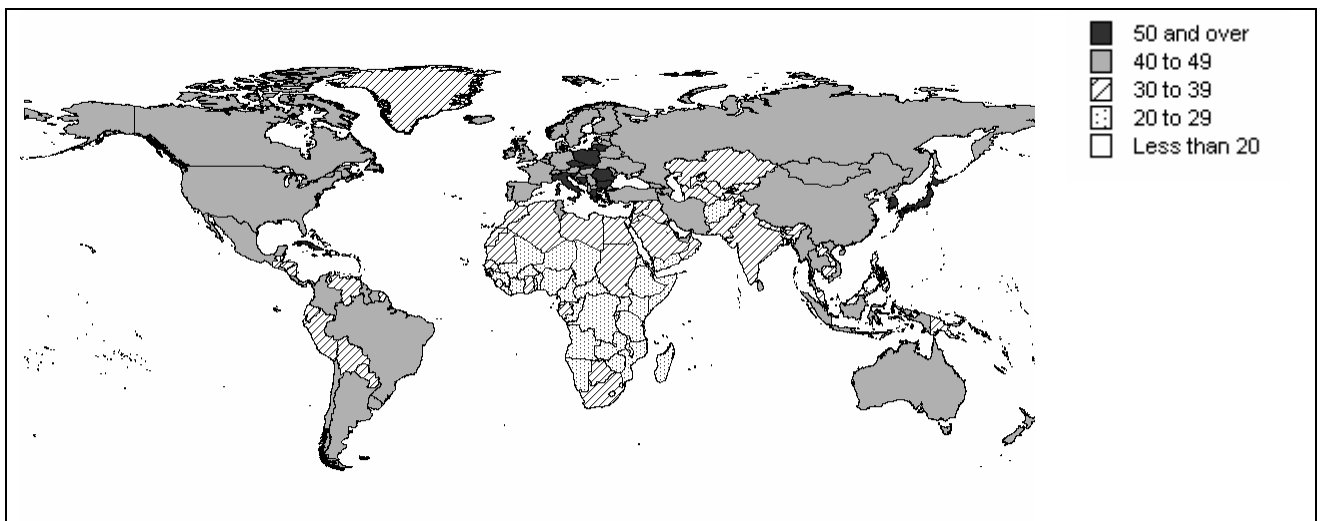
Figure 1. Median age in 2005, medium variant (years)



Source: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects DEMOBASE extract, 2007.

NOTE: The boundaries shown on the present map do not imply official endorsement or acceptance by the United Nations.

Figure 2. Median age in 2050, medium variant (years)



Source: United Nations, Department of Economic and Social Affairs, Population Division: World Population Prospects DEMOBASE extract, 2007.

NOTE: The boundaries shown on the present map do not imply official endorsement or acceptance by the United Nations.

that of dependents (children and elderly taken together). Population ageing in Africa is projected to be moderate: only 11 of the 54 countries in the continent are expected to see their median ages rise by at least 12 years and most of them are located in Northern Africa. Furthermore, in 2005, 42 countries out of the 54 in Africa had median ages below age 20 and even by 2050, 34 countries are projected to have median ages lower than 30. Only three countries in Africa, Mauritius, Réunion and Tunisia, are projected to have a median age higher than 40 in 2050.

Overall, the population of Europe is today the oldest, with a median age of 39 years. It is followed by the population of Northern America, with a median age of 36 years and then by Oceania whose median age is 32 years. The population of Asia has a median age slightly lower than 28 years and that of Latin America and the Caribbean is 26 years. Only Africa's population still has a median age below 20. But, as table 1 indicates, population ageing is inevitable if the size of the population is to remain within reasonable limits. Even under the high projection variant, which leads to a world population of 10.8 billion in 2050, the median age of the world population increases from 28 in 2005 to over 33 years in 2050. Under that variant, the median age of Africa surpasses 25 years by 2050. Under the medium variant ageing is more marked, with all regions but Africa and Europe attaining median ages ranging between 40 and 42 years. Under that variant the median age for the population of Africa reaches 28 years in 2050 and that of the population of Europe surpasses 47 years (table 1).

Table 1. Median age for the world, the development groups and major areas, 1950, 1975, 2005 and 2050 by variant

<i>Major area</i>	<i>Median age (years)</i>			<i>Median age in 2050</i>			
	<i>1950</i>	<i>1975</i>	<i>2005</i>	<i>Low</i>	<i>Medium</i>	<i>High</i>	<i>Constant</i>
World	23.9	22.4	28.0	43.3	38.1	33.4	30.3
More developed regions	29.0	31.1	38.6	51.7	45.7	39.8	46.4
Less developed regions	21.5	19.4	25.5	41.9	36.9	32.4	28.5
Least developed countries	19.5	17.6	19.0	31.2	27.9	25.2	18.8
Other less developed countries	21.8	19.6	26.6	45.0	39.4	34.3	32.0
Africa	19.1	17.5	19.0	31.2	28.0	25.3	18.7
Asia	22.2	20.2	27.6	45.8	40.2	35.0	33.1
Europe	29.7	32.1	38.9	53.4	47.3	40.8	49.6
Latin America and the Caribbean	20.0	19.3	26.0	46.3	40.1	34.5	33.4
Northern America	29.8	28.7	36.3	47.2	41.5	36.4	40.2
Oceania	28.0	25.6	32.3	45.2	40.0	35.2	35.1

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat (2007). *World Population Prospects: The 2006 Revision. Highlights*. New York: United Nations.

Changes in the median age are the result of changes in the share of the population in different age groups. As figure 3 illustrates, in Europe the number of persons aged 60 or over has surpassed the number of children (persons under age 15), whereas in Africa, children still outnumber older persons by a wide margin and are expected to continue doing so for the foreseeable future (figure 4). Furthermore, whereas in Africa the population aged 15 to 59 is expected to keep on growing over the coming decades, the working age population in Europe reached a maximum in 2005 and is expected to decrease steadily in the future.

Figure 3. Evolution of the population of Europe by broad age groups

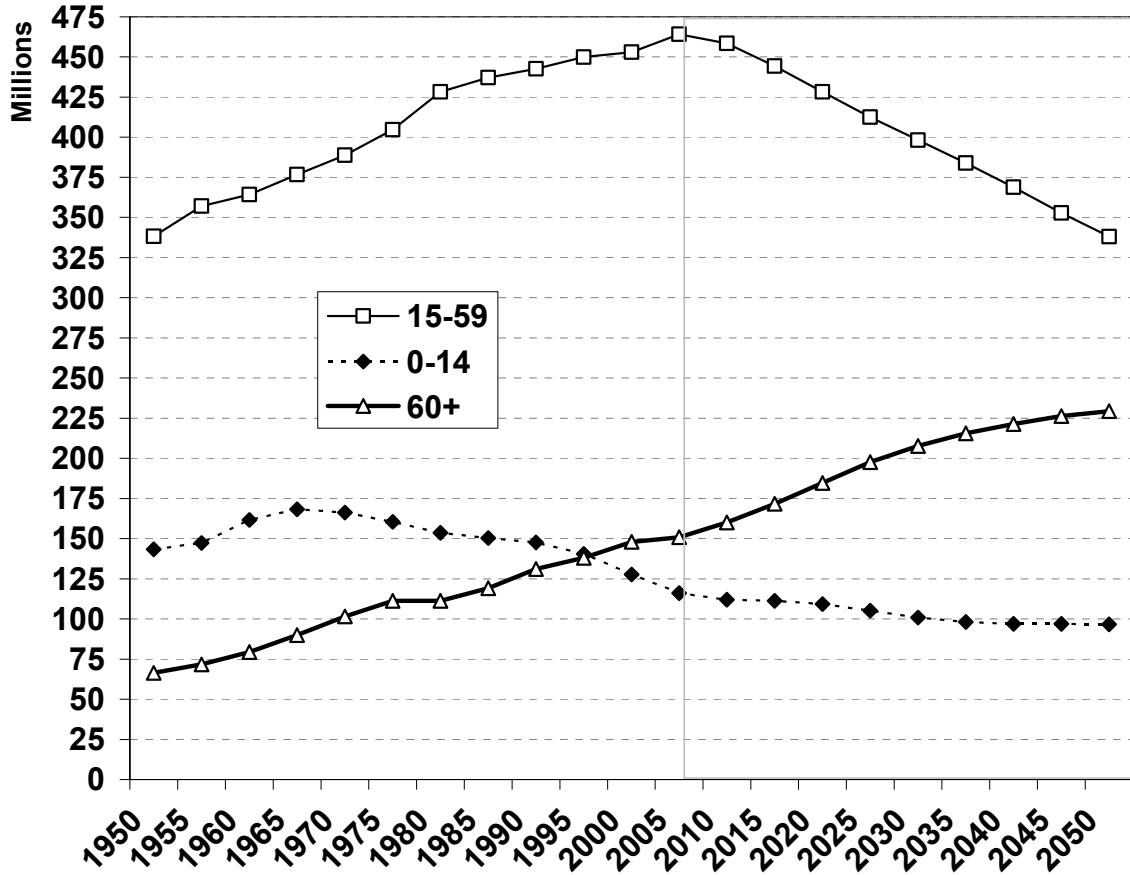
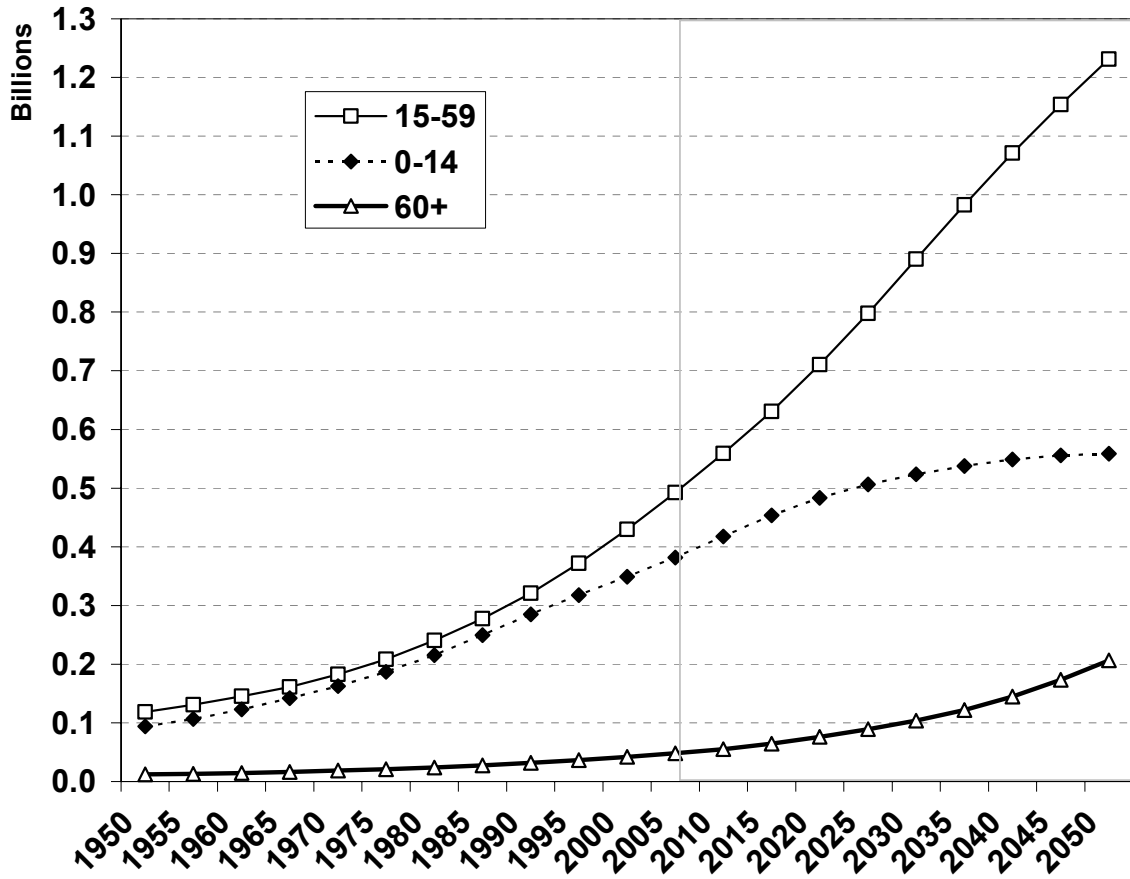


Figure 4. Evolution of the population of Africa by broad age groups



These changes are reflected in the declining shares of children in the population and in the increasing shares of the older population. As is shown in table 2, according to the medium variant, the proportion of children (persons aged 0 to 14 years) is projected to decrease in all major areas and such reduction is expected to be larger in the less developed regions, particularly in Africa. At the same time, the proportion of persons aged 60 or over is expected to increase markedly in all regions, doubling in Africa and increasing more than two-fold in Asia and Latin America and the Caribbean. By 2050, it is expected that about a quarter of the population in Asia, Latin America and the Caribbean, Northern America and Oceania will be aged 60 or over. In Europe the older population is expected to account for about 35 per cent of the population, while in Africa its share will be slightly above 10 per cent.

Table 2. Percentage distribution by broad age group for the world, development groups and major areas, 2005 and 2050 (medium variant)

<i>Major area</i>	<i>Percentage distribution in 2005</i>				<i>Percentage distribution in 2050</i>			
	<i>0-14</i>	<i>15-59</i>	<i>60+</i>	<i>80+</i>	<i>0-14</i>	<i>15-59</i>	<i>60+</i>	<i>80+</i>
World	28.3	61.4	10.3	1.3	19.8	58.3	21.8	4.4
More developed regions	17.0	62.9	20.1	3.7	15.2	52.2	32.6	9.4
Less developed regions	30.9	61.0	8.1	0.8	20.6	59.3	20.1	3.6
Least developed countries	41.5	53.4	5.1	0.4	28.2	61.5	10.3	1.1
Other less developed countries	29.1	62.3	8.6	0.9	18.4	58.7	22.9	4.3
Africa	41.4	53.4	5.2	0.4	28.0	61.7	10.4	1.1
Asia	28.0	62.7	9.2	1.0	18.0	58.3	23.7	4.5
Europe	15.9	63.5	20.6	3.5	14.6	50.9	34.5	9.6
Latin America and the Caribbean	29.8	61.2	9.0	1.2	18.0	57.8	24.3	5.2
Northern America	20.5	62.7	16.7	3.5	17.1	55.6	27.3	7.8
Oceania	24.9	61.0	14.1	2.6	18.4	56.9	24.8	6.8

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat (2007). *World Population Prospects: The 2006 Revision. Highlights*. New York: United Nations.

It is noteworthy that the proportion of the population of working age (15 to 59) is expected to decrease between 2005 and 2050 in every major area except Africa. This reduction is part of the process whereby the beneficial ratio of workers to dependants starts decreasing in all major areas except Africa. In fact, the support ratio, calculated as the ratio of persons aged 15 to 64 over the sum of the number of children and of persons aged 65 or over, is expected to begin declining after 2010 in Europe, Northern America and Oceania, after 2015 in Asia and after 2025 in Latin America and the Caribbean. By 2050, Europe is expected to have the lowest support ratio, at 14 persons of working age for every 10 dependants. Other regions are expected to have support ratios ranging from 16 in Northern America to 19 in Africa.

Although the oldest populations in the world are found in developed countries, 64 per cent of the older persons alive in 2005 lived in developing countries and by 2050 nearly 80 per cent of those aged 60 years or over are expected to live in developing countries (table 3).

Table 3. Population of the world, major development groups and major areas by broad age group, 2005 and 2050 (medium variant)

<i>Major area</i>	<i>Population in 2005 (millions)</i>					<i>Population in 2050 (millions)</i>				
	<i>Total population</i>	<i>0-14</i>	<i>15-59</i>	<i>60+</i>	<i>80+</i>	<i>Total population</i>	<i>0-14</i>	<i>15-59</i>	<i>60+</i>	<i>80+</i>
World	6 515	1 845	3 997	673	88	9 191	1 824	5 361	2 006	402
More developed regions	1 216	207	764	245	44	1 245	190	650	406	117
Less developed regions	5 299	1 638	3 233	428	43	7 946	1 635	4 712	1 600	284
Least developed countries	767	318	409	39	3	1 742	491	1 071	179	19
Other less developed countries	4 532	1 320	2 823	389	40	6 204	1 143	3 640	1 421	266
Africa	922	382	492	48	4	1 998	559	1 232	207	22
Asia	3 938	1 104	2 470	363	39	5 266	946	3 071	1 249	238
Europe	731	116	464	151	26	664	97	338	229	64
Latin America and the Caribbean	558	166	341	50	7	769	138	444	187	40
Northern America	332	68	208	56	12	445	76	248	121	35
Oceania	33	8	20	5	1	49	9	28	12	3
			<i>Percentage distribution by major area</i>							
More developed regions	18.7	11.2	19.1	36.3	50.7	13.5	10.4	12.1	20.2	29.2
Less developed regions	81.3	88.8	80.9	63.7	49.3	86.5	89.6	87.9	79.8	70.8
Least developed countries	11.8	17.3	10.2	5.8	3.5	19.0	26.9	20.0	8.9	4.6
Other less developed countries	69.6	71.5	70.6	57.9	45.8	67.5	62.7	67.9	70.8	66.2
Africa	14.2	20.7	12.3	7.1	4.4	21.7	30.6	23.0	10.3	5.4
Asia	60.4	59.8	61.8	54.0	44.1	57.3	51.8	57.3	62.3	59.2
Europe	11.2	6.3	11.6	22.4	29.3	7.2	5.3	6.3	11.4	15.8
Latin America and the Caribbean	8.6	9.0	8.5	7.5	7.9	8.4	7.6	8.3	9.3	10.0
Northern America	5.1	3.7	5.2	8.3	13.4	4.8	4.2	4.6	6.1	8.7
Oceania	0.5	0.5	0.5	0.7	1.0	0.5	0.5	0.5	0.6	0.8

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat (2007). *World Population Prospects: The 2006 Revision. Highlights*. New York: United Nations.

China, alone, had 144 million persons aged 60 or over in 2005 and is expected to have 438 million by 2050.

A notable aspect of population ageing is the progressive demographic ageing of the older population itself. In most countries, the population aged 80 or over (oldest-old) is growing faster than any other segment of the population. Globally, the number of oldest-old will likely increase more than four-fold, from 88 million in 2005 to 402 million in 2050. In Africa, Asia and Latin America and the Caribbean, the population aged 80 or over is projected to increase at least six-fold over the same period. The most important increase in absolute terms will occur in Asia (a gain of 199 million oldest-old persons). As a result, there will be an increasing concentration of people aged 80 or over in Asia: 59 per cent will live there in 2050, up from 44 per cent in 2005. Such increase will occur at the expense of the developed countries, whose share of the oldest-old population is expected to drop from 51 per cent today to 29 per cent in 2050 (table 3).

Women account for 55 per cent of the population aged 60 or over in the world and for 64 per cent of that aged 80 or over (table 4). That is, women outnumber men two to one at ages 80 or over. Europe today has the highest proportions of women at older ages: they account for 59 per cent of the older population and for nearly 70 per cent of the oldest-old. In the less developed regions, the proportions of women at older ages are lower (53 per cent among older persons and 59 per cent among the oldest-old) but during 2005-2050, the percentage of women at older ages is expected to decrease in developed countries and increase somewhat in developing countries, although women will continue to outnumber men at the higher ages in all regions.

Table 4. Proportion female among the older population for the world, the development groups and major areas, 2005 and 2050, medium variant

<i>Major area</i>	<i>60+</i>		<i>80+</i>	
	<i>2005</i>	<i>2050</i>	<i>2005</i>	<i>2050</i>
World	54.7	54.1	63.5	61.4
More developed regions	58.1	56.1	68.4	63.4
Less developed regions	52.8	53.6	58.6	60.5
Least developed countries	54.2	53.3	57.5	59.7
Other less developed countries	52.6	53.6	58.7	60.6
Africa	54.7	53.2	59.0	60.9
Asia	52.5	53.4	59.8	60.5
Europe	59.3	57.0	70.0	64.5
Latin America and the Caribbean	54.9	55.8	60.3	61.9
Northern America	56.3	54.7	65.1	61.5
Oceania	53.5	53.7	63.0	59.4

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat (2007). *World Population Prospects: The 2006 Revision. Highlights*. New York: United Nations.