

Goal 7

Ensure environmental sustainability

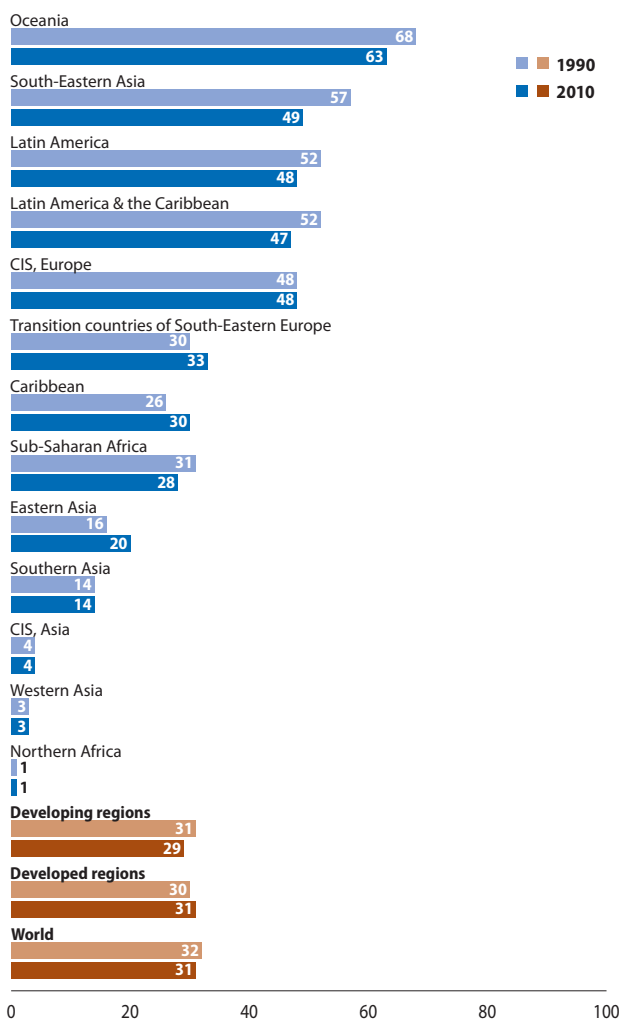


TARGET

Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources

The rate of deforestation shows signs of decreasing, but is still alarmingly high

Forested area as percentage of land area, 1990 and 2010 (Percentage)



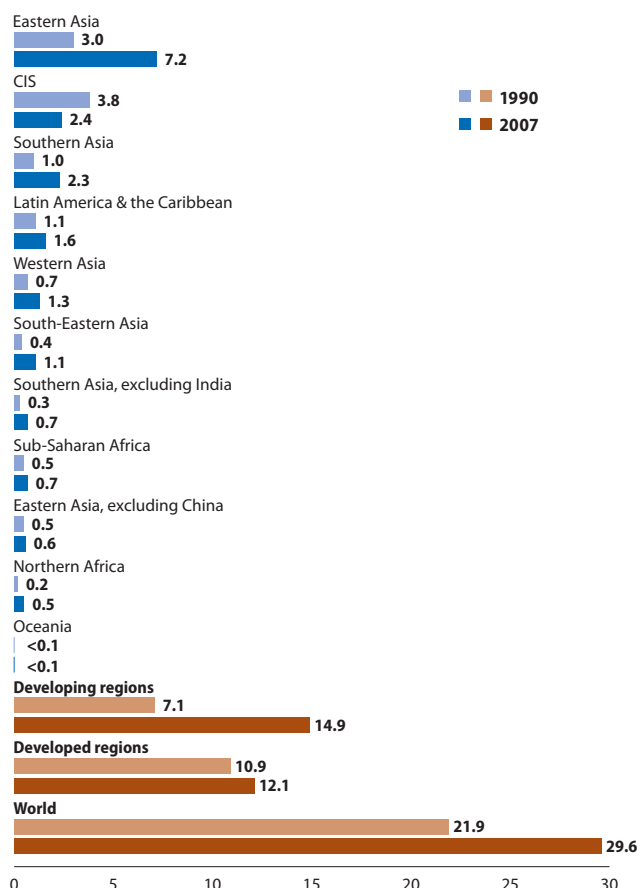
Global deforestation—mainly the conversion of tropical forests to agricultural land—is slowing, but continues at a high rate in many countries. Over the last decade, about 13 million hectares of forest worldwide were converted to other uses or lost through natural causes each year, compared to 16 million hectares per year in the 1990s.

Ambitious tree-planting programmes in several countries, combined with the natural expansion of forests in some regions, have added more than 7 million hectares of new forest annually. As a result, the net loss of forest area over the period 2000–2010 was reduced to 5.2 million hectares per year, down from 8.3 million hectares per year in 1990–2000.

South America and Africa continue to show the largest net losses of forests, at just under 4 million and 3.4 million hectares per year, respectively, over the period 2000–2010. In the developed regions, Australia experienced a large loss, partly due to severe drought and fires since 2000. Asia, on the other hand, registered a net gain of some 2.2 million hectares annually in the last decade, mainly because of large-scale afforestation programmes in China, India and Viet Nam. These three countries have expanded their forest area by a total of nearly 4 million hectares annually in the last five years. However, rapid conversion of forested lands to other uses continued in many other countries in the region.

A decisive response to climate change is urgently needed

**Emissions of carbon dioxide (CO₂), 1990 and 2007
(Billions of metric tons)**



In 2007, global emissions of carbon dioxide (CO₂) again rose, reaching 30 billion metric tons, an increase of 3.2 per cent from the previous year. This represents a 35 per cent increase above the 1990 level. Per capita emissions remain highest in the developed regions—about 12 metric tons of CO₂ per person per year in 2007, compared to about 3 metric tons on average per person in the developing regions and 0.9 metric tons in sub-Saharan Africa, the lowest regional value. Since 1990, emissions per unit of economic output fell by more than 26 per cent in the developed regions and by about 11 per cent in the developing regions.

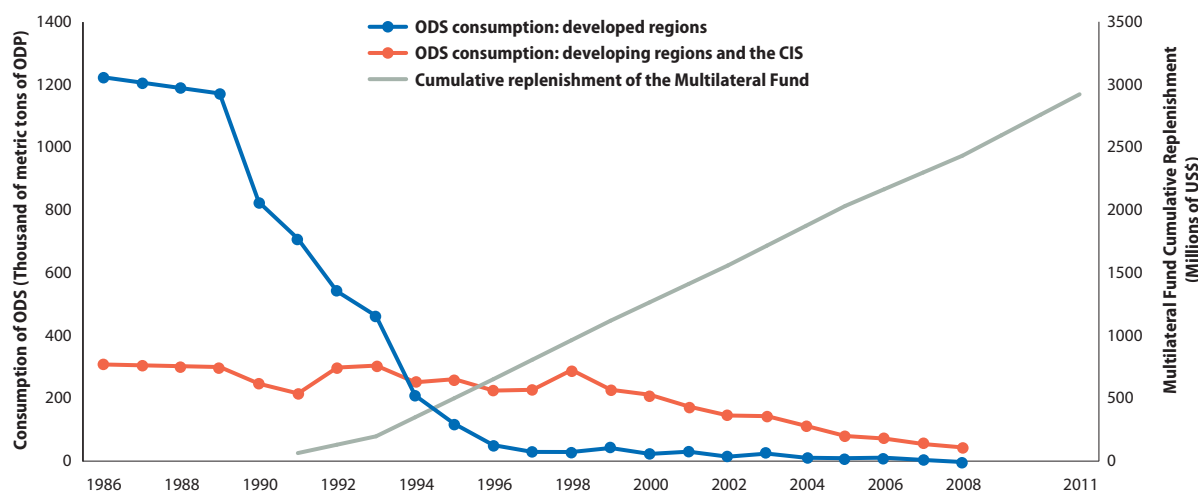
Figures for 2008 are expected to show a slight shift in the trend: according to the 2009 edition of the *World Energy Outlook*, published by the International Energy Agency, the rate of growth in global CO₂ emissions is expected to have declined in 2008 as a result of the global financial crisis, and global emissions may even have fallen between 2008 and

2009. But the same estimates also suggest that the decline will be short-lived: following economic recovery, the agency predicts, global emissions will soon restart their growth and, under a 'reference scenario', are projected to exceed the 1990 level by about 65 per cent by 2020. Such growth is unsustainable and would further increase the risk of profound and adverse effects on the global climate system.

Strengthening international action on climate change remains relevant and urgent. And the window of opportunity afforded by the short-term dip in emissions should be used to the fullest extent. Last year's negotiations under the UN Framework Convention on Climate Change yielded some results, but much remains to be done in order to formulate and put in place a decisive response to the climate change problem by the international community.

The unparalleled success of the Montreal Protocol shows that action on climate change is within our grasp

Consumption of all ozone-depleting substances (ODSs), 1986-2008 (Thousands of metric tons of ozone-depleting potential) and Montreal Protocol's Multilateral Fund replenishment, 1991-2011 (Millions of US dollars)



By 16 September 2009, 196 parties had signed the Montreal Protocol, making it the first treaty of any kind to achieve universal ratification. All the world's governments are now legally obligated to phase out ozone-depleting substances (ODSs) under the schedules defined by the Protocol. This year—2010—marks the beginning of a world virtually free of the most widely used ODSs, including chlorofluorocarbons and halons.

Throughout the process, developing countries have demonstrated that, with the right kind of assistance, they are willing, ready and able to become full partners in global efforts to protect the environment. In fact, many

developing countries have exceeded the reduction targets for phasing out ODSs, with the support of the Montreal Protocol Multilateral Fund.

Between 1986 and 2008, global consumption of ODSs was reduced by 98 per cent. Furthermore, from 1990 to 2010, the Montreal Protocol's control measures on production and consumption of such substances will have reduced greenhouse gas emissions by the equivalent of 135 gigatons of CO₂. This is equivalent to 11 gigatons a year, four to five times the reductions targeted in the first commitment period of the Kyoto Protocol, the agreement linked to the UN Framework Convention on Climate Change. Parties to the Montreal Protocol are now examining ways to use the treaty's vigorous implementation regime to promote even greater climate change benefits.

Without the action prompted by the Montreal Protocol and its Vienna Convention, atmospheric levels of ozone-depleting substances would grow 10-fold by 2050. The resulting exposure to the sun's ultraviolet radiation would likely have led to up to 20 million additional cases of skin cancer and 130 million more cases of eye cataracts; it would also have caused damage to human immune systems, wildlife and agriculture. For much of the world, the time it takes to get sunburned would have been dramatically reduced, due to a 500-per cent increase in DNA-damaging ultraviolet radiation.

TARGET

Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss

The world has missed the 2010 target for biodiversity conservation, with potentially grave consequences

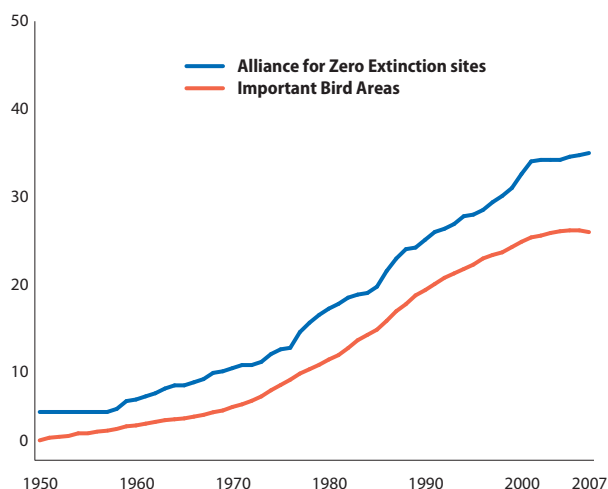
Though some success in biodiversity conservation has been achieved, and the situation may well have been worse without the 2010 target, the loss of biodiversity continues—unrelentingly. Nearly 17,000 species of plants and animals are known to be threatened with extinction. Based on current trends, the loss of species will continue throughout this century, with increasing risk of dramatic shifts in ecosystems and erosion of benefits for society. Despite increased investment in conservation planning and action, the major drivers of biodiversity loss—including high rates of consumption, habitat loss, invasive species, pollution and climate change—are not yet being sufficiently addressed.

Biodiversity is vitally important for human well-being since it underpins a wide range of ecosystem services on which life depends. Billions of people, including many of the poorest, rely directly on diverse species of plants and animals for their livelihoods and often for their very survival. The irreparable loss of biodiversity will also hamper efforts to meet other MDGs, especially those related to poverty, hunger and health, by increasing the vulnerability of the poor and reducing their options for development.



Key habitats for threatened species are not being adequately protected

Proportion of key biodiversity areas protected, 1950-2007
(Percentage)



Note: Data refer to 10,993 Important Bird Areas (IBAs) and 561 Alliance for Zero Extinction sites (AZEs).

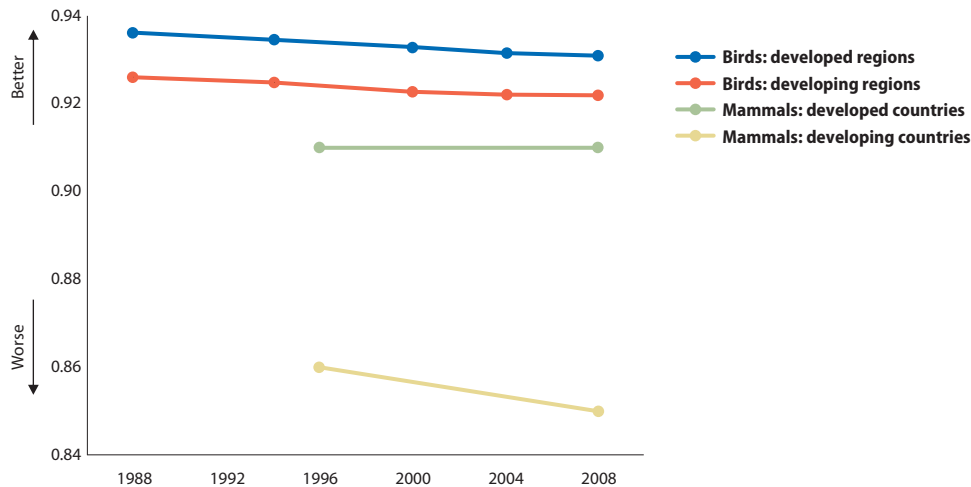
Although nearly 12 per cent of the planet's land area and nearly 1 per cent of its sea area are currently under protection, other areas critical to the earth's biodiversity are not yet adequately safeguarded. In 2009, only half of the world's 821 terrestrial ecoregions—large areas with characteristic combinations of habitats, species, soils and landforms—had more than 10 per cent of their area protected. Under the Convention on Biological Diversity, one tenth of the areas of all these ecoregions should have been under protection by 2010.

Progress in key areas of biodiversity has been made, but not fast enough. By 2007, 35 per cent of 561 Alliance for Zero Extinction sites and 26 per cent of 10,993 Important Bird Areas were completely protected, a significant increase from 25 per cent and 19 per cent, respectively, in 1990. Alliance for Zero Extinction sites are home to over 95 per cent of the world population of a 'critically endangered' or 'endangered' species, as defined by the International Union for Conservation of Nature's (IUCN's) Red List of Threatened Species. Important Bird Areas are critical sites for the conservation of the world's birds. Protecting all of these areas would significantly contribute to the Convention on Biological Diversity's target to safeguard areas of particular importance. However, at present, more than two thirds of these sites are unprotected or only partially protected. In addition, while certain areas may be officially 'protected', this does not mean that they are adequately managed or that the coverage provided is sufficient to effectively conserve critical habitats and species.



The number of species facing extinction is growing by the day, especially in developing countries

Proportion of species expected to remain extant in the near future in the absence of additional conservation action (IUCN Red List Index of species survival for birds, 1988-2008, and mammals, 1996-2008)



Note: A Red List Index value of 1.0 means that all species are categorized as of 'least concern', and hence none are expected to go extinct in the near future. A value of zero indicates that all species have gone extinct.

The IUCN's Red List Index—which charts the proportion of species expected to remain in existence in the near future in the absence of additional conservation action—shows that more species are being driven towards extinction than are improving in status. Mammals are more threatened than birds. And for both groups, species in the developing regions are more threatened and deteriorating as fast as, or faster than, species in the developed regions.

Overexploitation of global fisheries has stabilized, but steep challenges remain to ensure their sustainability

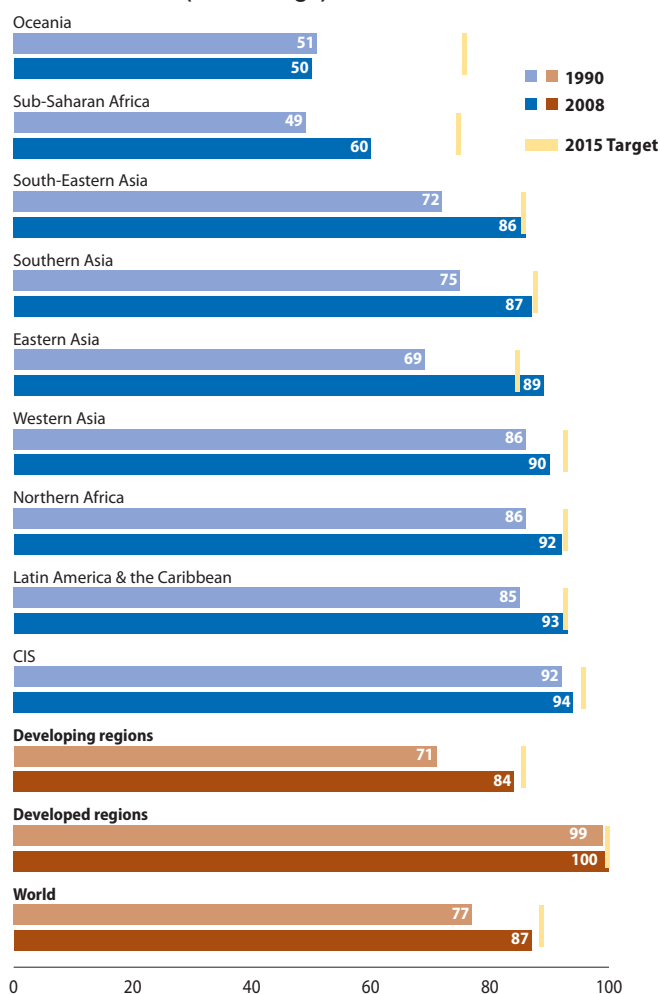
Global production of marine capture fisheries peaked in 1997 at 88.4 million metric tons and has since declined slightly, to about 83.5 million metric tons in 2006. The proportion of overexploited, depleted and recovering stocks has remained relatively stable over the last 10 years, at about 28 per cent. However, the proportion of underexploited and moderately exploited stocks has declined continuously, indicating that the negative impact of fisheries is increasing. Only about 20 per cent of fish stocks were moderately exploited or underexploited, with the possibility of producing more.

TARGET

Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation

The world is on track to meet the drinking water target, though much remains to be done in some regions

Proportion of population using an improved water source, 1990 and 2008 (Percentage)



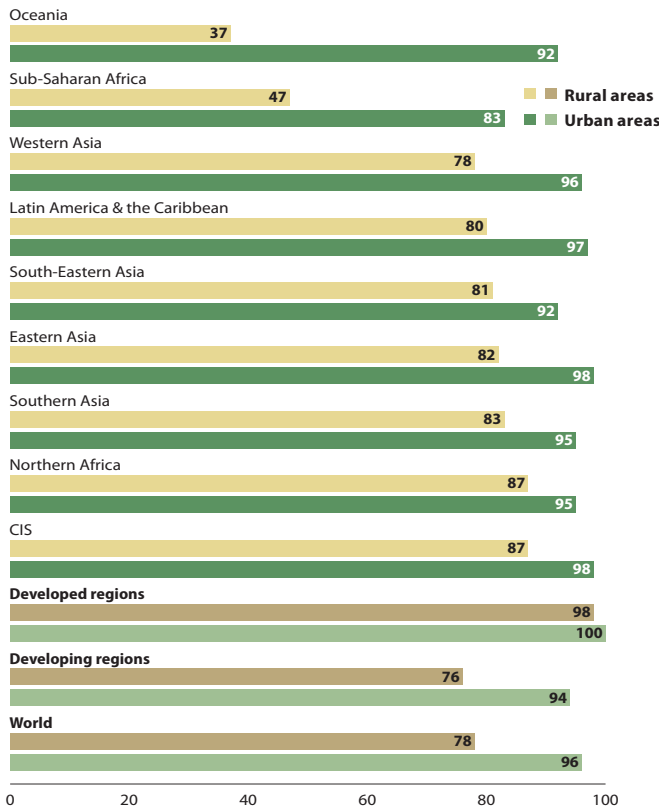
The most progress was made in Eastern Asia, where access to drinking water improved by almost 30 per cent over the period 1990–2008. Although coverage also expanded in sub-Saharan Africa—by 22 per cent over the same period—it remains very low, with only 60 per cent of the population served. Oceania saw no progress over the nearly 20-year period, and coverage remains very low, at about 50 per cent.

In all regions, progress was made primarily in rural areas. In the developing regions as a whole, drinking water coverage in urban areas, which stood at 94 per cent in 2008, has remained almost unchanged since 1990. At the same time, rural drinking water coverage increased from 60 per cent in 1990 to 76 per cent in 2008, narrowing the gap between rural and urban areas.

If current trends continue, the world will meet or even exceed the MDG drinking water target by 2015. By that time, an estimated 86 per cent of the population in developing regions will have gained access to improved sources of drinking water. Four regions, Northern Africa, Latin America and the Caribbean, Eastern Asia and South-Eastern Asia, have already met the target.

Accelerated and targeted efforts are needed to bring drinking water to all rural households

Proportion of population using an improved water source, rural and urban areas, 2008 (Percentage)



Despite overall progress in drinking water coverage and narrowing of the urban-rural gap, rural areas remain at a disadvantage in all developing regions. The largest disparities are in Oceania and sub-Saharan Africa, but significant differences between urban and rural areas are found even in regions that have achieved relatively high coverage, such as Western Asia and Latin America and the Caribbean.

The rural-urban gap is much wider when only households having a piped drinking water supply on premises are considered. The proportion of people who enjoy the health and economic benefits of piped water is more than twice as high in urban areas than in rural areas—79 per cent versus 34 per cent. Disparities are particularly evident in Oceania and sub-Saharan Africa, where rural coverage of piped water remains very low at 37 per cent and 47 per cent, respectively, as compared to 91 per cent and 83 per cent in urban areas.

Globally, eight out of 10 people who are still without access to an improved drinking water source live in rural areas.

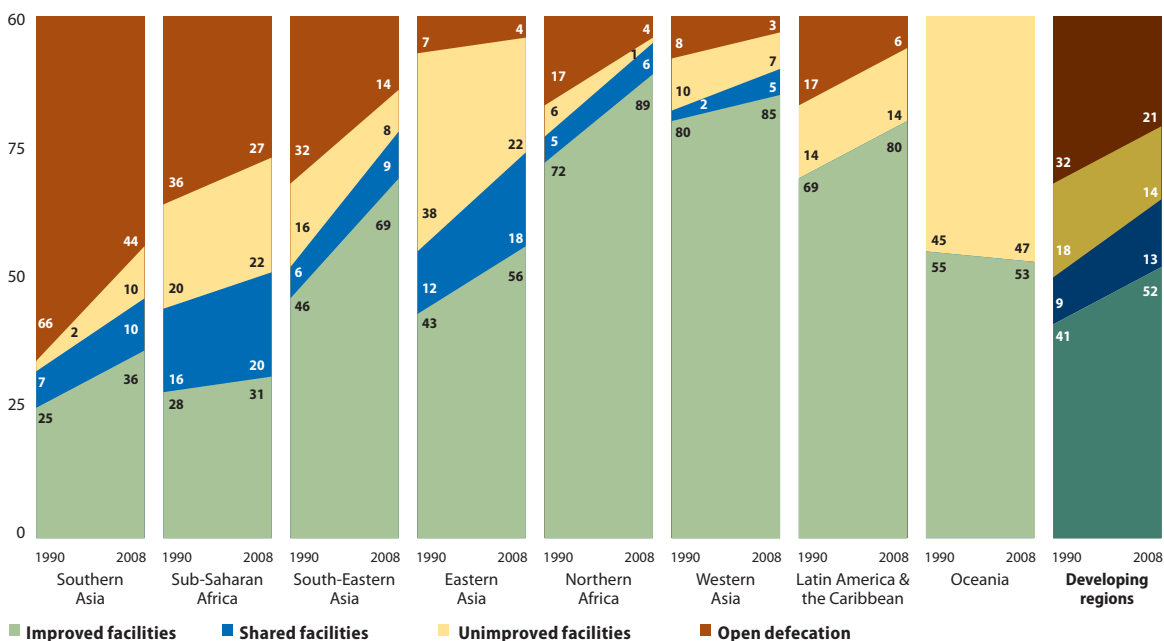
Safe water supply remains a challenge in many parts of the world

During the last decade, expanded activity in agriculture and manufacturing has not only increased the demand for water, but has also contributed to the pollution of surface and ground water. Moreover, problems of contamination with naturally occurring inorganic arsenic, in particular in Bangladesh and other parts of Southern Asia, or fluoride in a number of countries, including China and India, have affected the safety of water supplies.

In the future, water quality will need to be considered when setting targets for access to safe water. Despite efforts to compile global water quality data, measuring the safety of water can be difficult; in developing regions, it has been attempted so far only in pilot surveys. Rapid, reliable and cost-effective ways of measuring water quality locally and reporting findings at the global level will need to be identified to overcome the current technical and logistic constraints, along with the high cost.

With half the population of developing regions without sanitation, the 2015 target appears to be out of reach

Proportion of population by sanitation practices, 1990 and 2008 (Percentage)



Note: Data for Latin America & the Caribbean and Oceania are not sufficient to provide regionally representative estimates of the proportion of the population who use shared sanitation facilities.



At the current rate of progress, the world will miss the target of halving the proportion of people without access to basic sanitation. In 2008, an estimated 2.6 billion people around the world lacked access to an improved sanitation facility. If the trend continues, that number will grow to 2.7 billion by 2015.

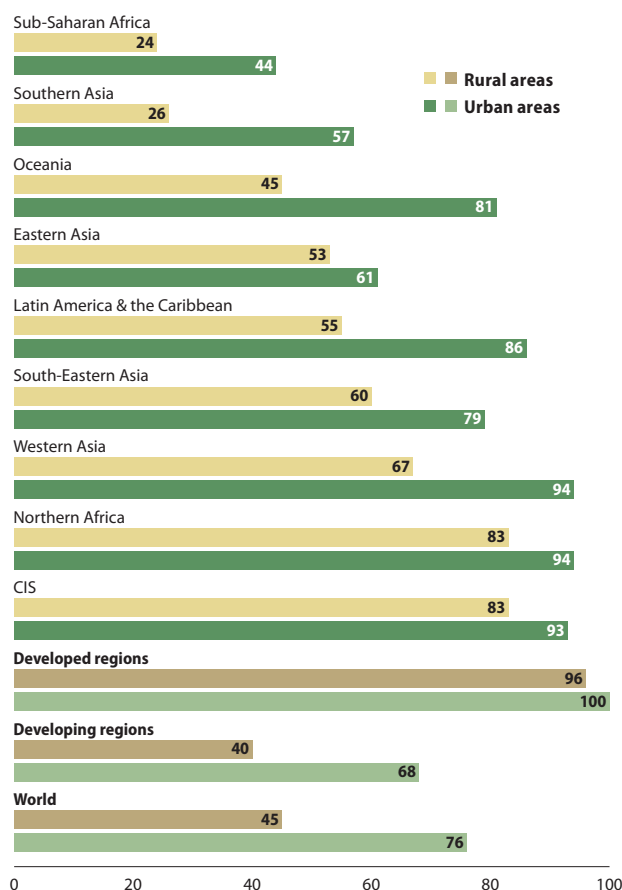
In 2008, 48 per cent of the population in developing regions were without basic sanitation. The two regions facing the greatest challenges are sub-Saharan Africa and Southern Asia, where 69 per cent and 64 per cent of the population, respectively, lack access.

Among sanitation practices, the one that poses the greatest threat to human health is open defecation. It is encouraging that this practice has declined in all developing regions. However, the largest relative decline was in two regions where open defecation was already practised the least—Northern Africa and Western Asia. In contrast, the least progress (a decrease of 25 per cent) was made in sub-Saharan Africa, where rates of open defecation are high. Southern Asia, which has the highest rate of open defecation in the world (44 per cent of the population), made only limited progress.

The practice of open defecation by 1.1 billion people is an affront to human dignity. Moreover, indiscriminate defecation is the root cause of faecal-oral transmission of disease, which can have lethal consequences for the most vulnerable members of society—young children. If open defecation rates continue to decline, the impact on reducing child deaths could be enormous, primarily by preventing diarrhoeal diseases and the stunting and undernutrition that tend to follow. Success stories among some of the poorest and most disadvantaged groups in society show that behaviours can change. What is required is the political will to mobilize the resources needed to stop open defecation, which represents the greatest obstacle to tackling the sanitation problem.

Disparities in urban and rural sanitation coverage remain daunting

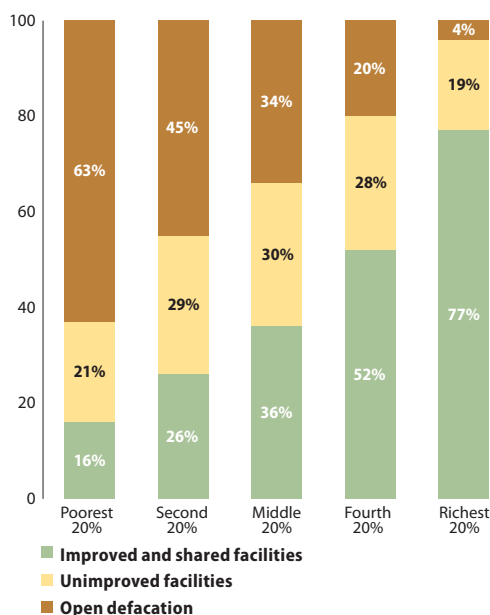
Proportion of population using an improved sanitation facility in urban and rural areas, 2008 (Percentage)



Most progress in sanitation has occurred in rural areas. Over the period 1990-2008, sanitation coverage for the whole of the developing regions increased by only 5 per cent in urban areas and by 43 per cent in rural areas. In Southern Asia, coverage rose from 56 per cent to 57 per cent of the urban population—a mere 1 per cent increase—while doubling in rural areas, from 13 per cent to 26 per cent. The gap between rural and urban areas, however, remains huge, especially in Southern Asia, sub-Saharan Africa and Oceania.

Improvements in sanitation are bypassing the poor

Sanitation practices by wealth quintile, sub-Saharan Africa, 2005/2008



An analysis of household surveys conducted during 2005–2008 shows that the richest 20 per cent of the population in sub-Saharan Africa are almost five times more likely to use an improved sanitation facility than the poorest 20 per cent. These same findings show that open defecation is practised by 63 per cent of the population in the poorest quintile and by only 4 per cent of the richest quintile.

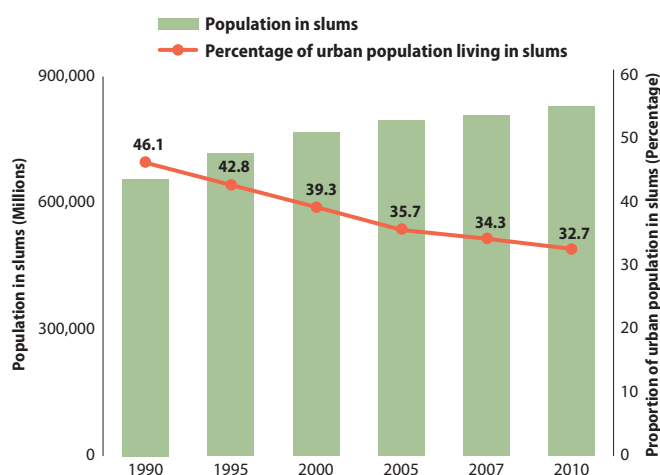
Sanitation and drinking water are often relatively low priorities for domestic budget allocations and official development assistance, despite the huge benefits for public health, gender equity, poverty reduction and economic growth. And in many instances, interventions are not targeted to the population most in need.

TARGET

By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers

Slum improvements, though considerable, are failing to keep pace with the growing ranks of the urban poor

Population living in urban slums and proportion of urban population living in slums, developing regions, 1990–2010



Over the past 10 years, the share of the urban population living in slums in the developing world has declined significantly: from 39 per cent in 2000 to 33 per cent in 2010. On a global scale, this is cause for optimism. The fact that more than 200 million slum dwellers have gained access to either improved water, sanitation or durable and less crowded housing shows that countries and municipal governments have made serious attempts to improve slum conditions, thereby enhancing the prospects of millions of people to escape poverty, disease and illiteracy.

However, in absolute terms, the number of slum dwellers in the developing world is actually growing, and will continue to rise in the near future. The progress made on the slum target has not been sufficient to offset the growth of informal settlements in the developing world, where the number of urban residents living in slum conditions is now estimated at some 828 million, compared to 657 million in 1990 and 767 million in 2000. Redoubled efforts will be needed to improve the lives of the growing numbers of urban poor in cities and metropolises across the developing world.

Moreover, the recent housing crisis, which contributed to the larger financial and economic downturn, may offset the

progress that was made since 1990. Although the crisis did not originate in developing regions, it has hit their populations and cities, where millions continue to live in precarious conditions, often characterized by a lack of basic services and serious health threats. In many cases, public authorities have exacerbated the housing crisis through failures on four major counts: lack of land titles and other forms of secure tenure; cutbacks in funds for subsidized housing for the poor; lack of land reserves earmarked for low-income housing; and an inability to intervene in the market to control land and property speculation. Low incomes in the face of rising land prices virtually rule out the possibility that the working poor can ever own land, contributing to the problem of urban slums.

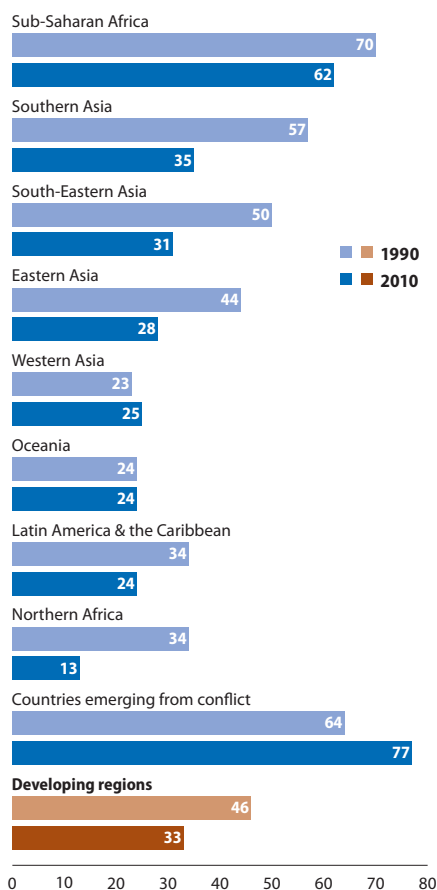
A revised target for slum improvement is needed to spur country-level action

When the international community adopted the Millennium Declaration and endorsed the 'Cities without Slums' target in 2000, experts had underestimated the number of people living in substandard conditions. They had also determined that improving the lives of 100 million slum dwellers was a significant number and a realistic target to be achieved within the next 20 years. Three years later, in 2003, new and improved data sources showed for the first time that 100 million was only a small fraction—about 10 per cent—of the global slum population. In addition, unlike other MDGs, the slum target was not set as a proportion with reference to a specific baseline (generally the year 1990). Instead, the target was set as an absolute number, and for the world as a whole. This makes it difficult, if not impossible, for governments to set meaningful country-specific goals. Clearly, the target will require redefinition if it is to elicit serious commitment from national governments and the donor community—and hold them accountable for continued progress.



Slum prevalence remains high in sub-Saharan Africa and increases in countries affected by conflict

Proportion of urban population living in slum areas, 1990 and 2010 (Percentage)



Note: Countries emerging from conflict included in the aggregate figures are: Angola, Cambodia, Central African Republic, Chad, Democratic Republic of the Congo, Guinea-Bissau, Iraq, Lao People's Democratic Republic, Lebanon, Mozambique, Sierra Leone, Somalia and Sudan.

But the situation is even more critical in conflict-affected countries, where the proportion of urban populations living in slums increased from 64 per cent to 77 per cent between 1990 and 2010. The impact of conflict is also reflected in the increased proportion of slum dwellers in Western Asia, largely due to the deterioration of living conditions in Iraq. There, the proportion of urban residents living in slums has more than tripled—from 17 per cent in 2000 (2.9 million people) to an estimated 53 per cent in 2010 (10.7 million people).

Among developing regions, sub-Saharan Africa is estimated to have the highest prevalence of urban slums, followed by Southern Asia. Less than a third of the populations of other developing regions are living in slums. Despite the efforts of some sub-Saharan African countries and cities to expand basic services and improve urban housing conditions, inaction by others has prevented overall progress from keeping pace with rapidly expanding urban populations.

