

# PROGRESS FOR CHILDREN

A REPORT CARD ON WATER AND SANITATION

NUMBER 5, SEPTEMBER 2006

# CONTENTS

- 1 Foreword**  
WATER, SANITATION AND THE MDGs
- 2 Water, Sanitation and Hygiene**  
ESSENTIAL ELEMENTS OF A CHILD SURVIVAL STRATEGY
- 12 West/Central Africa**  
INCREASING NUMBERS WITH NO ACCESS
- 14 Eastern/Southern Africa**  
SLOW PROGRESS AMID EMERGENCIES
- 16 Middle East/North Africa**  
ON TRACK, BUT WATER IS SCARCE
- 18 South Asia**  
TWO IN THREE WITHOUT SANITATION
- 20 East Asia/Pacific**  
THE CHALLENGE OF URBANIZATION
- 22 Latin America/Caribbean**  
PROGRESS, YET PERSISTENT DISPARITIES
- 24 CEE/CIS**  
POOREST CHILDREN LEFT BEHIND
- 26 Industrialized Countries**  
NEED FOR RENEWAL
- 27 About the Data**  
HOW PROGRESS IS MEASURED
- 28 Endnote**  
THE WAY FORWARD
- 30 Table**  
WATER AND SANITATION

# WATER, SANITATION AND THE MDGs

It is estimated that unsafe water and a lack of basic sanitation and hygiene every year claim the lives of more than 1.5 million children under five years old from diarrhoea. This tragic statistic underscores the need for the world to meet its Millennium Development Goal (MDG) commitment on water and sanitation: MDG 7, which aims to halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.

But those who die are by no means the only children affected. Many millions more have their development disrupted and their health undermined by diarrhoeal or water-related disease. In all, more than 1 billion people do not have access to drinking water from improved sources, while 2.6 billion are without basic sanitation – yet these foundations for healthy living are taken for granted by the majority of people on the planet.

Water and sanitation are vital in themselves, but they are also key prerequisites for reducing child and maternal mortality (MDGs 4 and 5) and combating diseases (MDG 6). And they are key to reducing child undernutrition (MDG 1) and achieving

universal primary education (MDG 2). Girls, especially, are likely to spend more time in school when they spend less time fetching water and when adequate sanitation facilities are available on school grounds.

This report card, the fifth in a UNICEF series that monitors progress for children towards the MDGs, measures the world's performance in water and sanitation. It projects that, if current trends continue, the world is on track to meet the target for drinking water – though some countries and regions are lagging behind – but the target for sanitation appears distant.

We cannot be satisfied with current performance. We cannot afford to lose the opportunity represented by the Millennium Agenda to transform the lives of the most vulnerable children. The benefits of improved drinking water and sanitation are evident and could be extended to so many more of the world's people, if only sufficient resources and resolve were dedicated to the task.

It is hard to think of a more potent reason to redouble our efforts than the thought of more than 1.5 million children every year who will not live to see their fifth birthday.



Ann M. Veneman  
Executive Director, UNICEF

# WATER, SANITATION AND HYGIENE: ESSENTIAL ELEMENTS OF A CHILD SURVIVAL STRATEGY

Meeting the MDG targets would save the lives of millions of children.

Water is as fundamental to human life as the air we breathe. Yet, ironically, this essence of life can have an injurious impact if its source is not free from pollution and infection – and the most likely pollutant is human faeces that have not been disposed of and have spread because of a lack of basic sanitation and hygiene.

Young children are more vulnerable than any other age group to the ill effects of unsafe water, insufficient quantities of water, poor sanitation and lack of hygiene. Globally, 10.5 million children under the age of five die every year, with most of these deaths occurring in developing countries. Lack of safe water, sanitation and adequate hygiene contribute to the leading killers of children under five, including diarrhoeal diseases, pneumonia, neonatal disorders and undernutrition.<sup>1</sup>

This means that Millennium Development Goal 7 – to ensure environmental

sustainability – and its associated 2015 targets of reducing by half the proportion of people without sustainable access to safe drinking water and basic sanitation are of vital relevance to children. MDG 7 is also crucial in relation to improving nutrition, education and women’s status, and success in this field will thus play a major role in determining whether the world meets its MDG targets across the board.

Globally, more than 125 million children under five years of age live in households without access to an improved drinking-water source, and more than 280 million children under five live in households without access to improved sanitation facilities. Every one of these children is a unique individual whose rights are infringed and whose health is threatened from birth by the lack of access to safe drinking water and basic sanitation.

Hygiene, as well, is an indispensable part of the equation. The simple act of hand washing can have important implications for children’s health and survival, by reducing morbidity and mortality related to diarrhoea, pneumonia and other infectious diseases.

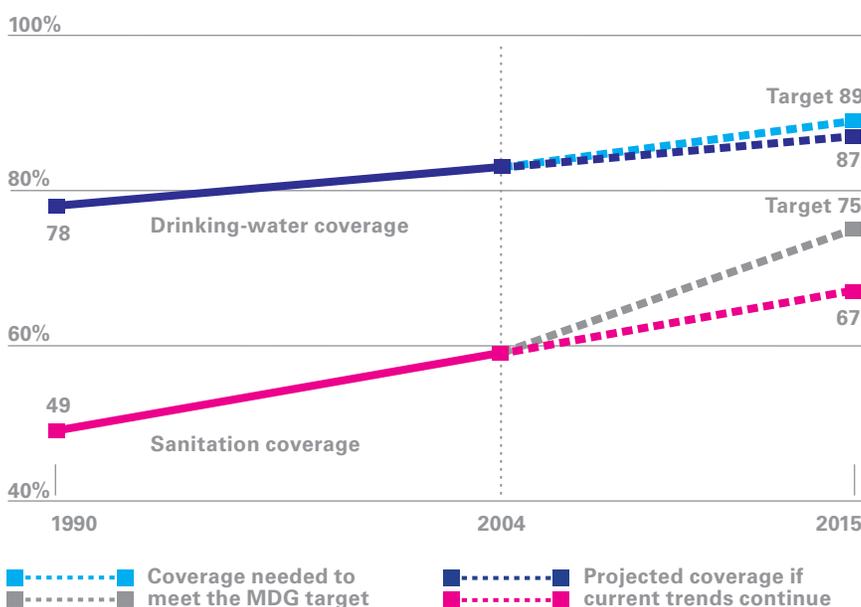
## Drinking water

Those children and adults who depend on water from unprotected dug wells, rivers, lakes or streams for drinking are at risk of infection by waterborne diseases if sanitation is poor. Too few enjoy the safety and convenience of having water that has been treated under managed conditions piped into their homes or compounds.

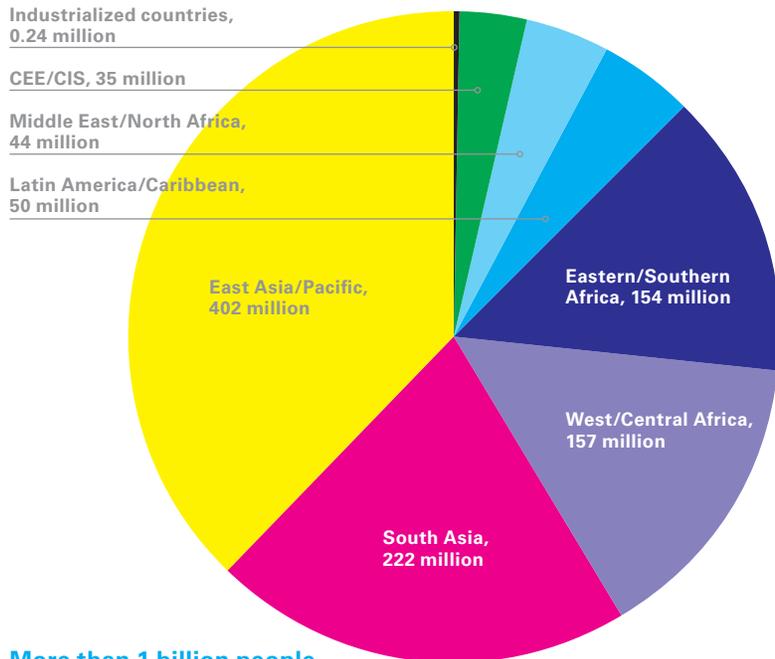
Between the two extremes are sources of drinking water that are more likely to be safe and are referred to as ‘improved’.<sup>2</sup> Among these are public standpipes, tube wells or boreholes, protected dug wells, protected springs and rainwater (see ‘About the Data’ on page 27).

## Global trends towards the MDG water and sanitation targets

With 83 per cent coverage of improved drinking-water sources in 2004, the world is on track to meet the MDG target of halving the proportion of people without access to safe drinking water by 2015. But to meet the sanitation target, it will have to double the rate of improvement since 1990.



The solid lines show coverage levels in 1990 and 2004.



**More than 1 billion people are without access to improved drinking-water sources.**

The chart shows the regional breakdown.

The most recent estimates by the Joint Monitoring Programme for Water Supply and Sanitation (JMP), a programme of the World Health Organization (WHO) and UNICEF, indicate that global coverage increased from 78 per cent in 1990 to 83 per cent in 2004, which means that more than 1.2 billion people gained access to improved drinking-water sources over that period. If the current trend continues, the world is on track to meet its MDG target (89 per cent) by 2015,<sup>3</sup> though more than a billion people were without access to improved drinking-water sources in 2004 – and keeping pace with population growth remains a major challenge.

**Sanitation**

Some 2.6 billion people worldwide – two in five – do not have access to improved sanitation, and about 2 billion of these people live in rural areas. Barely more than one third of the population uses adequate sanitation facilities in West/Central Africa (36 per cent), South Asia (37 per cent) and Eastern/Southern Africa (38 per cent).

‘Improved’ sanitation facilities are those that reduce the chances of people coming into contact with human excreta and are likely to be more sanitary than unimproved facilities.<sup>4</sup> These include toilets that flush waste into a piped sewer, septic tank or pit, as well as dry pit latrines constructed with a cover. Such facilities are only considered to be improved if they are private rather than shared with other households (see ‘About the Data’ on page 27).

Global sanitation coverage increased from 49 per cent in 1990 to 59 per cent in 2004, and about 1.2 billion people gained access to improved sanitation facilities over that period. Yet the world is not making sufficient progress to meet the MDG sanitation target. To do so, the rate of improvement over the past 15 years would have to double between now and 2015. If current trends continue, there will be 2.4 billion people, partly as a result of population growth, without basic sanitation in 2015.

**What the numbers mean for children**

Of the approximately 120 million children born in the developing world each year, half will live in households without access to improved sanitation facilities and one fifth in households without access to improved drinking-water sources, at grave risk to their survival and development.

Unsafe drinking water, inadequate availability of water for hygiene and lack of access to sanitation together contribute to about 88 per cent of deaths from diarrhoeal diseases,<sup>5</sup> or more than 1.5 million of the 1.9 million children under five who perish from diarrhoea each year. This amounts to 18 per cent of all under-five deaths and means that more than 5,000 children are dying every day as a result of diarrhoeal diseases.<sup>6</sup>

Diarrhoea’s impact is particularly severe in children. Acute diarrhoea, as occurs with cholera, if left untreated can cause death within a day or less.

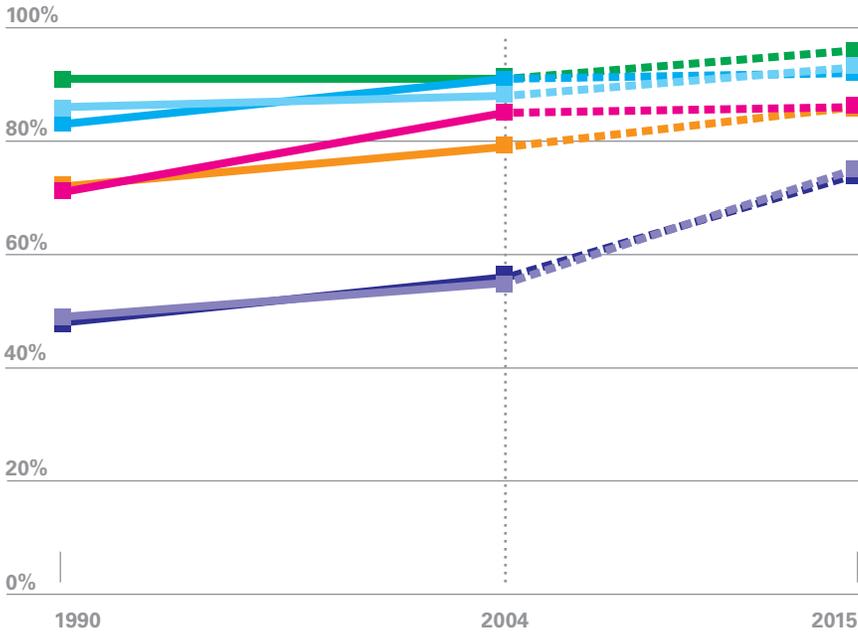
Diarrhoeal diseases are transmitted through human excreta, and it is therefore critically important to have effective barriers in place to prevent this major transmission route. Improved sanitation alone could reduce diarrhoea-related morbidity by more than a third; improved sanitation combined with hygiene awareness and behaviours could reduce it by two thirds.<sup>7</sup> Such behaviours include consistent use of a toilet or latrine by each person in the household, safe disposal of young children’s faeces, and hand washing with soap or ash after defecation and before eating.<sup>8</sup>

Undernutrition, which is associated with more than half of all under-five deaths,<sup>9</sup> is closely linked to diarrhoea. Infectious diseases, and diarrhoea in particular, are the main determinants of wasting and stunting of growth in children in developing countries.<sup>10</sup>

Low child mortality and high levels of water and sanitation provision are connected. Historical analysis of how diarrhoea mortality

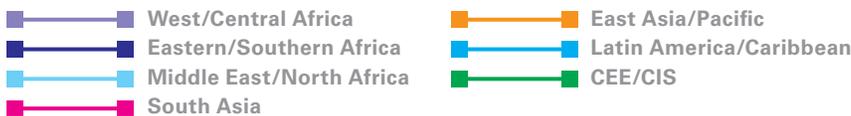
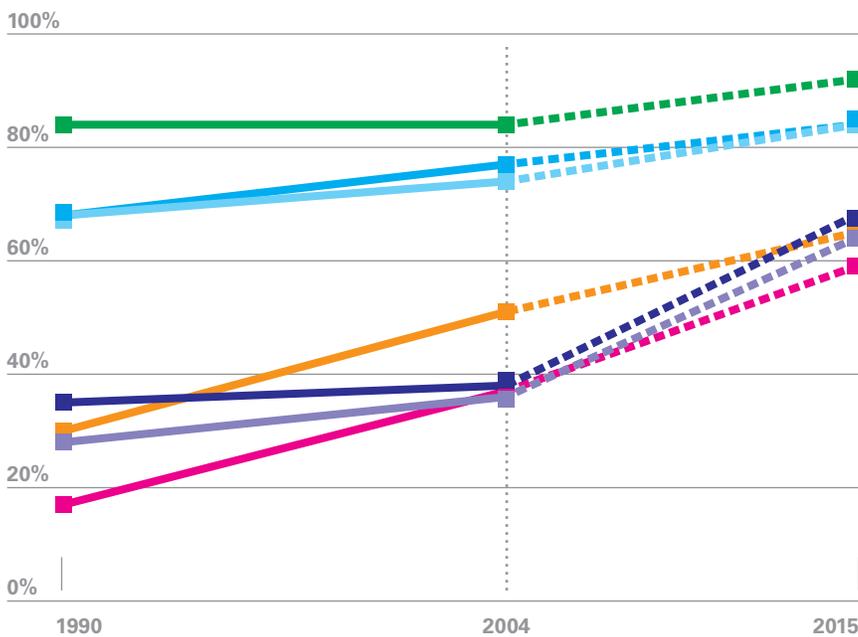
### Regional trends towards the MDG water target

Four developing regions – Middle East/North Africa, South Asia, East Asia/Pacific and Latin America/Caribbean – are on track to halve the proportion of people without access to safe drinking water by 2015. West/Central Africa, Eastern/Southern Africa and CEE/CIS will need to step up progress to meet the target.



### Regional trends towards the MDG sanitation target

Middle East/North Africa, East Asia/Pacific and Latin America/Caribbean are on track to meet the target of halving the proportion of people without access to basic sanitation. West/Central Africa, Eastern/Southern Africa and CEE/CIS are not on track, and South Asia has made progress – but not enough to reach the target.



The solid lines show coverage levels in 1990 and 2004. Dotted lines show progress that will need to be made to reach the targets.

was virtually eradicated in Stockholm (Sweden) in the period up to 1925 suggests that, along with public education and the enforcement of sanitary laws and regulations, large-scale interventions expanding access to clean water had the greatest impact when implemented as part of a broader package that included improved sanitation.<sup>11</sup>

Diarrhoea is, however, far from being the only problem. Pneumonia takes more than 2 million young children's lives every year,<sup>12</sup> and recent studies suggest that hand washing with soap may help reduce the incidence of childhood pneumonia, as well as diarrhoea, in the developing world.<sup>13</sup> Careful and frequent hand washing is recommended, too, as a means of preventing the transmission of avian influenza, among other infectious diseases.

Water, sanitation and hygiene are associated with other diseases, such as trachoma, and worm-related illnesses, including Guinea worm disease (dracunculiasis), bilharzia (schistosomiasis) and those caused by intestinal worms (ascariasis and hookworm). In children, worm infestation can occur at vital stages in their intellectual and physical development.

Worm infestations predominately affect children of school age – from 5 to 15 years old – resulting in reduced physical growth, weakened physical fitness and impaired cognitive functions.<sup>14</sup> Poor nutritional status contributes to these effects. As the intensity of infection increases, academic performance and school attendance decline substantially.<sup>15</sup>

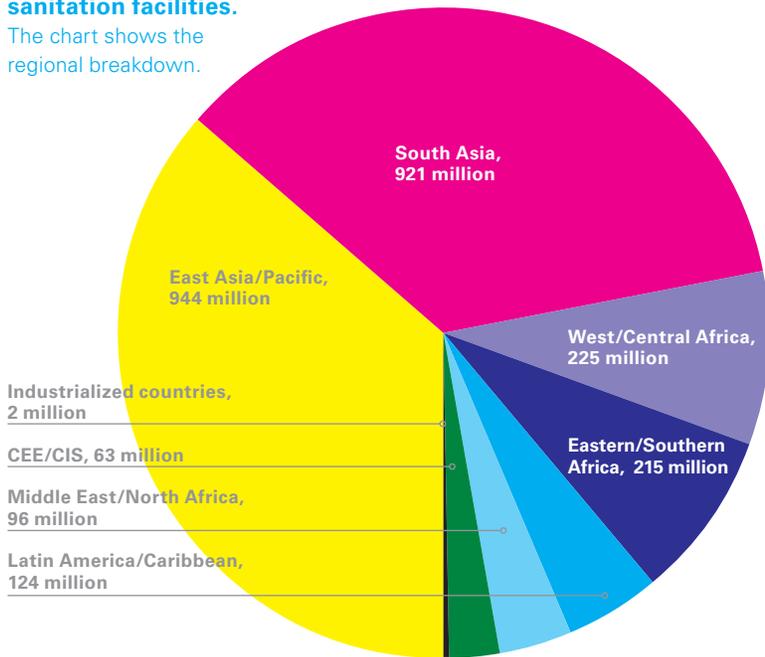
Clean water and improved sanitation can reduce the morbidity of dracunculiasis and schistosomiasis by more than three quarters.<sup>16</sup> Dracunculiasis is today at the point of eradication – its worldwide prevalence has been reduced from an estimated 3.5 million cases in 1986 to about 10,000 reported cases in 2005. Endemic in 20 countries in the late 1980s, Guinea worm is now endemic in just 9 African countries: Burkina Faso, Côte d'Ivoire, Ethiopia, Ghana, Mali, Niger, Nigeria, Sudan and Togo.<sup>17</sup>

### Safe water: region-by-region progress

In assessing progress, four developing regions – East Asia/Pacific, Middle East/North Africa, South Asia and Latin America/Caribbean – are on track to meet their MDG targets for safe water. But the current progress rates in sub-Saharan Africa and in Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS) will leave those regions short.

**About 2.6 billion people are without access to improved sanitation facilities.**

The chart shows the regional breakdown.



The remarkable progress in South Asia and Latin America/Caribbean has placed them on the verge of achieving their drinking-water goals 10 years early. In both regions, the number of people without access shrank between 1990 and 2004 – in South Asia from 326 million to 222 million and in Latin America/Caribbean from 74 million to 50 million.

Although West/Central Africa’s drinking-water coverage improved from 49 per cent in 1990 to 55 per cent in 2004, it needs to reach a far target of 75 per cent by 2015. The total number of people in the region without access to improved drinking-water sources actually increased over the 1990–2004 period. In Eastern/Southern Africa, the situation for access to drinking water is similar, as the region improved coverage from 48 per cent in 1990 to 56 per cent in 2004 but faces a target of 74 per cent. In CEE/CIS, meanwhile, coverage has stagnated at 91 per cent; its 2015 goal is 96 per cent.

Sub-Saharan Africa represents about 11 per cent of the world population, but almost a third of all people without access to safe drinking water live here. High fertility rates in sub-Saharan Africa translate to 54 million children under five without access to an improved drinking-water source, or about 40 per cent of the world’s more than 125 million young children without access. The comparable numbers are negligible in the

industrialized world and 3 million in CEE/CIS. **Basic sanitation: region-by-region progress** Three regions are on track to meet their MDG targets for basic sanitation: Latin America/Caribbean, East Asia/Pacific and Middle East/North Africa.

The largest gains have been made in South Asia, where access to improved sanitation facilities more than doubled from 17 per cent in 1990 to 37 per cent in 2004, and in East Asia/Pacific, where it rose from 30 per cent to 51 per cent. These improvements were primarily driven by gains made in India and China. In India, sanitation coverage more than doubled – from 14 per cent in 1990 to 33 per cent in 2004, while in China sanitation coverage increased from 23 per cent to 44 per cent over the same period. But the majority of the people in both of these highly populated countries still remain without access.

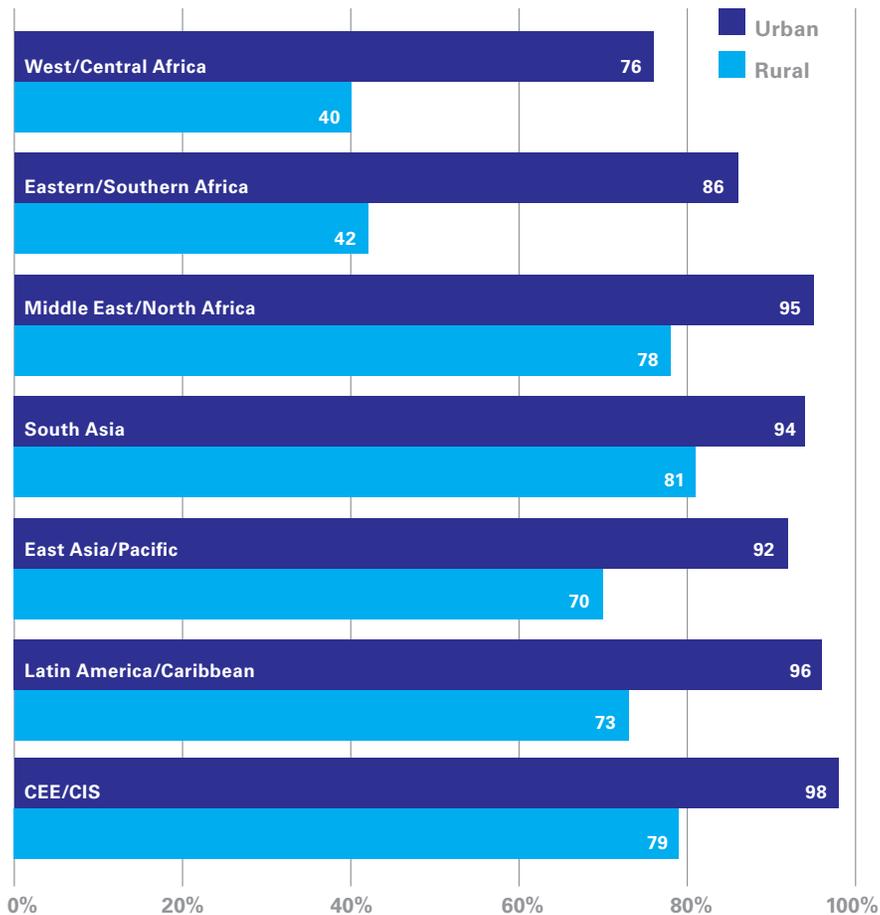
The least progress was made in CEE/CIS, where coverage froze at 84 per cent, and in Eastern/Southern Africa – where access improved only slightly, from 35 per cent in 1990 to 38 per cent in 2004, and where with population growth, the absolute number of people without sanitation increased by a third over the same period.

The numbers of children affected by inadequate sanitation vary widely between regions. Of the more than 280 million children under five living in households without access to improved sanitation facilities, almost two thirds live in South Asia (106 million) and sub-Saharan Africa (75 million). Again, these figures compare with negligible numbers of unserved children in the industrialized world and 6 million in CEE/CIS.

**Disparities**

Among the largest disparities in safe water and basic sanitation are those between urban and rural populations. Globally, access to improved drinking-water sources is 95 per cent in urban areas, compared with 73 per cent in rural areas. The urban-rural divide in drinking water is at its widest in sub-Saharan Africa, where 81 per cent of people in urban areas are served, compared with 41 per cent in rural areas.

Moreover, of the more than 1.2 billion people who gained access to improved drinking-water sources over the period 1990–2004, nearly two thirds lived in urban areas. Notwithstanding this, the pace of urbanization is such that the absolute number of people without access to drinking water increased by 63 million in urban areas, doubling in sub-Saharan



### Access to improved drinking-water sources, 2004

Globally, 95 per cent of people living in urban areas and 73 per cent of people living in rural areas have access to improved drinking-water sources. The largest regional disparities are found in sub-Saharan Africa.

Africa and quintupling in East Asia/Pacific. Of the more than 1 billion people who remain without access to improved drinking water, about 900 million live in rural areas, where journeys to collect water tend to be longer than in urban areas. Three quarters of the world's rural population must collect water from a communal source,<sup>18</sup> and they must collect sufficient amounts not only for drinking but for the cooking and washing needs of the whole family. In UNICEF-supported Multiple Indicator Cluster Surveys (MICS) in 23 countries, about half of households surveyed spend more than 30 minutes per trip collecting water, while more than a fifth spend more than an hour on each trip.<sup>19</sup> And there are signs that collection times have increased in some urban areas.<sup>20</sup> In periurban areas and slums, irregular or interrupted supplies may cause residents to wait up to several hours before they can collect water.

Urban sanitation coverage worldwide was more than twice as high as rural coverage in 2004 – 80 per cent in urban areas, compared with 39 per cent in rural areas. Of the 2.6 billion people currently without access to

basic sanitation, 2 billion live in rural areas. The urban-rural disparity is largest in South Asia, where 63 per cent of the urban population versus 27 per cent of the rural population is served. Only in industrialized countries is urban and rural coverage about the same.

The urban-rural divide is not the only disparity evident in access to water and sanitation: An analysis of 20 recent Demographic and Health Surveys showed that the richest quintile is four times more likely to have access to sanitation than the poorest quintile.<sup>21</sup>

There is also an associated gender gap. Women and girls bear more of the consequences of poor water, sanitation and hygiene, as they are usually the ones who fetch the water and care for the children and other household members who fall sick from water-related diseases. In addition, girls' school attendance is affected the most by inadequate water and sanitation facilities in schools and by time spent travelling long distances to drinking-water sources.

Girls and women need greater privacy for personal hygiene than men. In the absence of private sanitation facilities, there have been cases where women limit their food and water intake so they can relieve themselves under cover of darkness; yet night-time trips to fields or roadsides may put them at risk of physical attack.<sup>22</sup>

### Water, sanitation and hygiene in schools

Unsafe water and unhygienic conditions not only have a detrimental effect on the health of under-fives but also have an impact on the health, attendance and learning capacities of school-age children.

UNICEF is promoting an additional target alongside those of the MDGs, which is to ensure that all schools have adequate child-friendly water and sanitation facilities, along with hygiene-education programmes. The Plan of Implementation of the World Summit on Sustainable Development in 2002 emphasized sanitation in schools as a priority action, while the Thirteenth Session of the United Nations Commission on Sustainable Development in 2005 reiterated this position and also emphasized the need for hygiene education in schools.

Providing adequate water and sanitation in schools is essential if the enrolment, learning and retention of girls is to improve and is key to meeting MDGs 2 and 3. Lack of

appropriately private and sanitary facilities has a greater impact on girls than boys, contributing to decisions on whether they ever attend, and then influencing how long they stay in school. Girls sometimes do not attend school during menstruation or drop out at puberty because of a lack of sanitation facilities that are separate for girls and boys in schools. In addition, adolescent girls are particularly at risk of anaemia aggravated by parasitic infections and 'iron stress' when sanitation is inadequate or unavailable at school or in the home.<sup>23</sup>

All children perform better and have enhanced self-esteem in a clean, hygienic environment. Properly used and maintained sanitation facilities and an adequate supply of water for personal hygiene and hand washing prevent infections and infestations, while also contributing to overall public health and environmental protection.

Programmes that combine improved sanitation and hand-washing facilities with hygiene education in schools can improve the health of children for life and can promote positive change in communities. Field

assessments show that teaching children the importance of hand washing and other good hygiene habits promotes increased knowledge and positive behaviour change, especially when the schools are equipped with an adequate number of safe toilets or latrines and sufficient water for washing.<sup>24</sup>

### Water and sanitation in emergencies

Children affected by natural disasters, conflict and instability have the same rights as children everywhere. Water, sanitation and hygiene activities are vital in these circumstances.

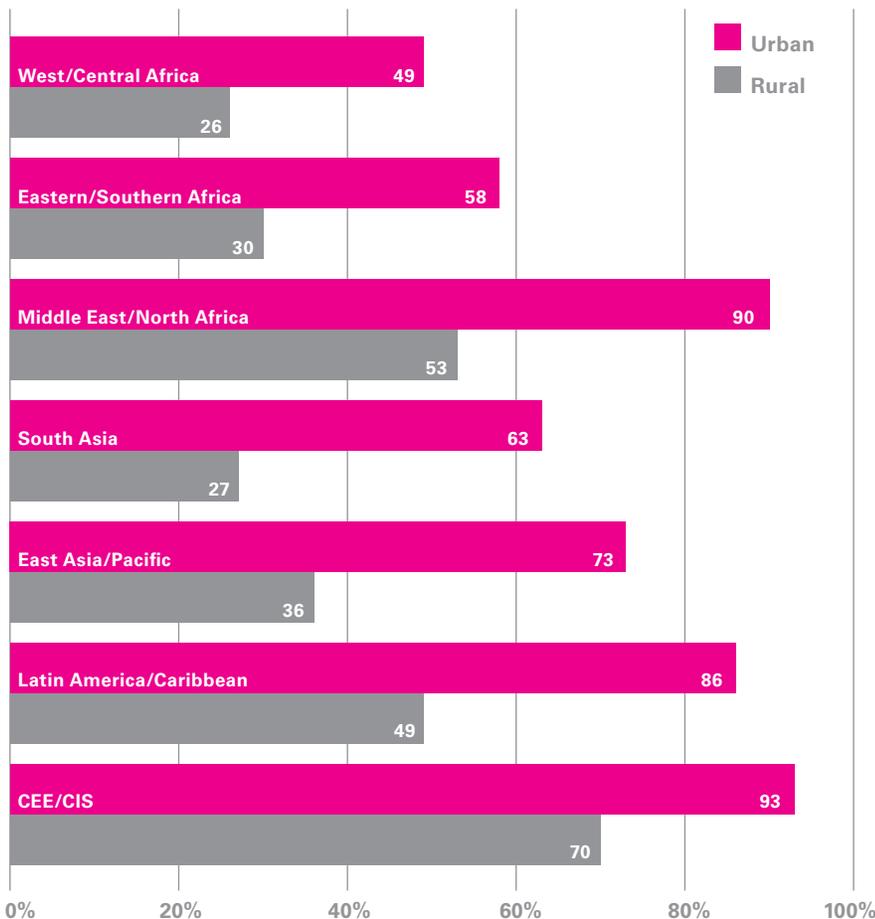
Although the provision of water may take precedence in the early stages of an emergency, sanitation and hygiene inputs are critically important. Beyond the initial response, all three elements – water, sanitation and hygiene – need to be developed both at a general level and in particular at schools and health posts.

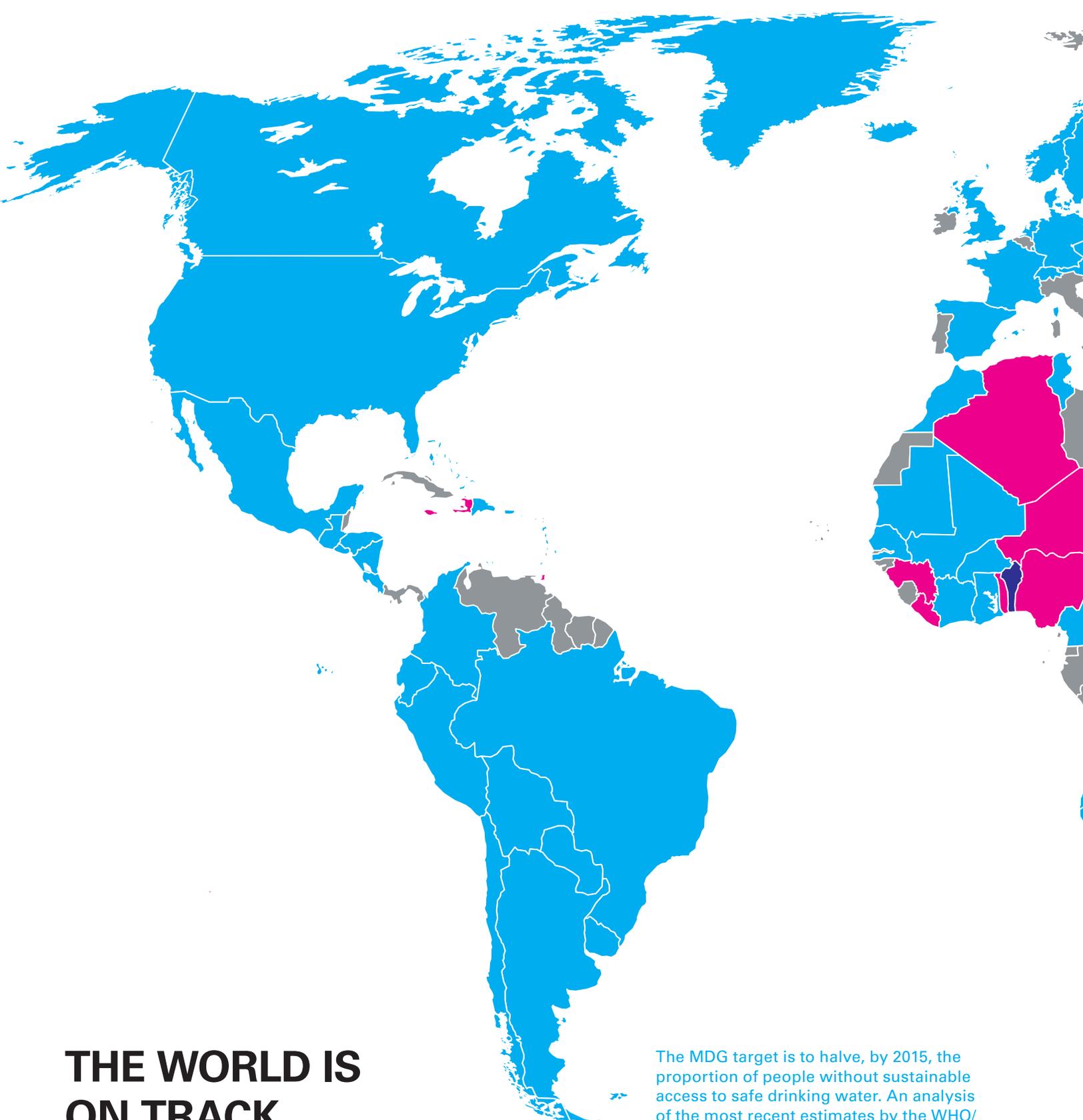
The growing number, frequency and severity of emergencies – particularly in the past two decades – underline the compelling importance of water, sanitation and hygiene to overall humanitarian responses. But too often, support has come up short, or was too late, resulting in an uncoordinated and ineffective response.

A renewed interest in the sector, coupled with a vision of a better response capacity through cluster arrangements, provides a unique opportunity to address past constraints and weaknesses. The stage is now set for sound planning, preparedness and predictability; greater coherence to a system-wide approach; and more effective collaboration and coordination among partners – elements that will lead to more timely and effective responses in future humanitarian crises.

### Access to improved sanitation facilities, 2004

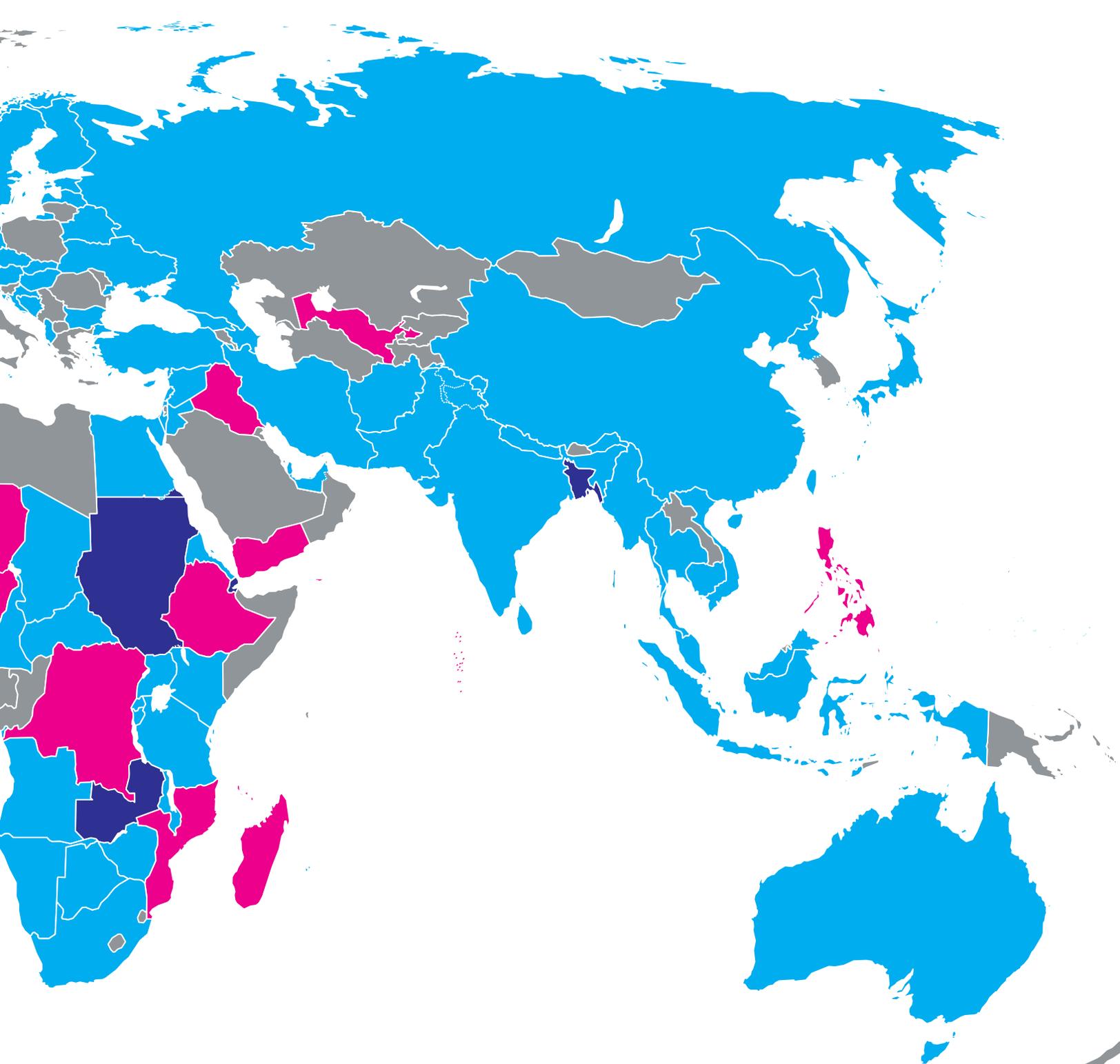
Globally, 80 per cent of people living in urban areas and 39 per cent of people living in rural areas have access to improved sanitation facilities. The largest regional disparities are found in South Asia.





**THE WORLD IS  
ON TRACK  
TO MEET THE MDG  
WATER TARGET**

The MDG target is to halve, by 2015, the proportion of people without sustainable access to safe drinking water. An analysis of the most recent estimates by the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) for the period 1990–2004 shows that 75 developing countries are on track to reach the target, 5 have made progress, though insufficient to reach the target, and 23 are not on track. In 41 developing countries, data were insufficient to estimate trends.

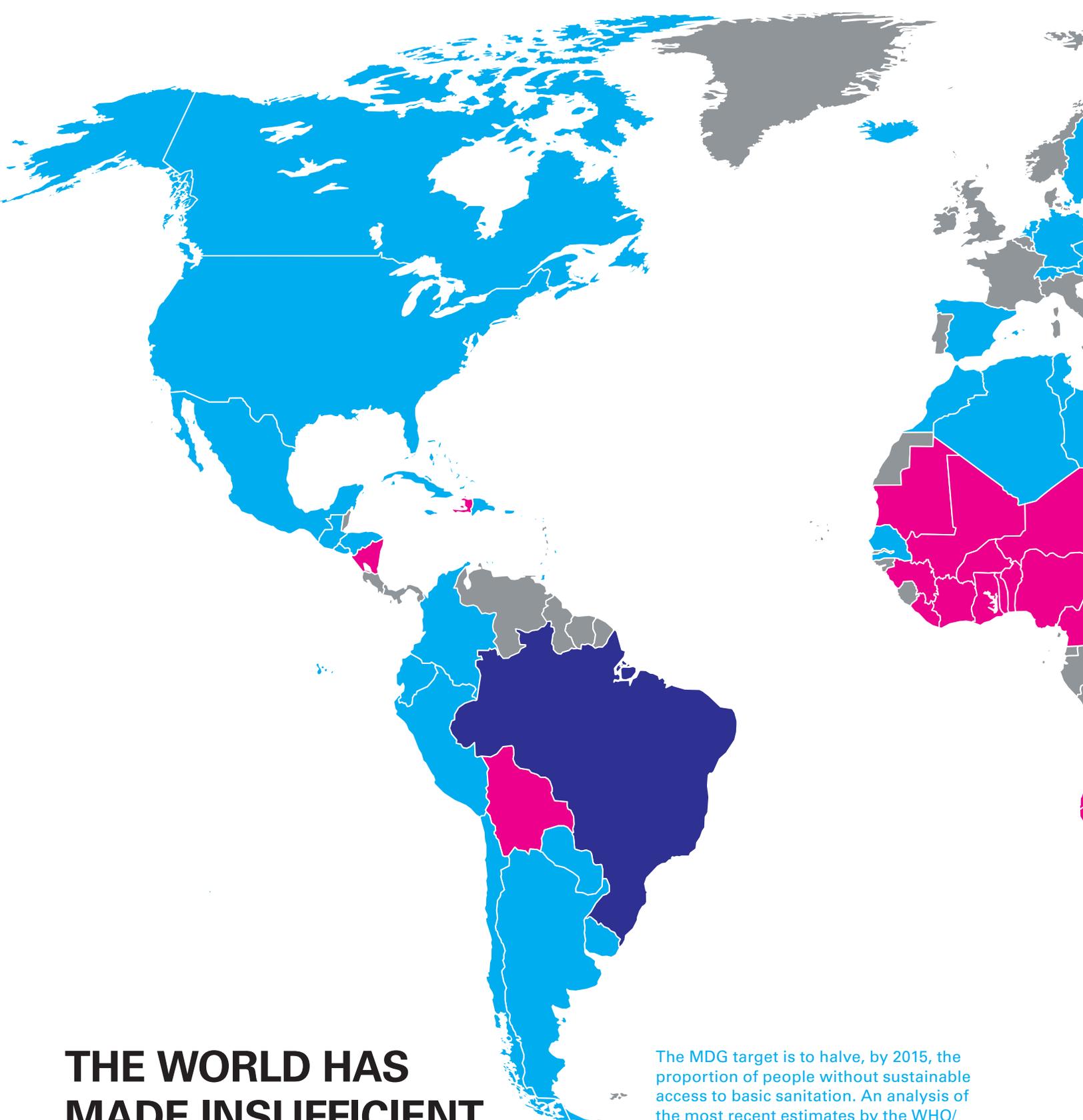


- On track:** Coverage in 2004 was less than 5 per cent below the rate it needed to be for the country to reach the MDG target, or coverage was 95 per cent or higher.
- Progress but insufficient:** Coverage in 2004 was 5 per cent to 10 per cent below the rate it needed to be for the country to reach the MDG target.
- Not on track:** Coverage in 2004 was more than 10 per cent below the rate it needed to be for the country to reach the MDG target, or the 1990–2004 trend shows unchanged or decreasing coverage.
- Insufficient data:** Data were insufficient to estimate trends.

Note: The MDG drinking-water targets in this map and in the table on pages 30–32 are expressed as the proportion of the population using improved drinking-water sources. These targets are calculated by adding half of the proportion of the population *not using* improved drinking-water sources in 1990 to the proportion of the population *using* improved sources in 1990. For countries without a 1990 baseline, MDG targets were calculated based on coverage in 1995 (where such estimates were available), on the assumption that from 1990–1995 the countries were ‘on track’ to reach the MDG target. ‘On track’, ‘progress but insufficient’ and ‘not on track’ classifications were calculated by comparing actual coverage rates in 2004 with the coverage rate the country should have had in 2004 if it was on track to reach the MDG target.

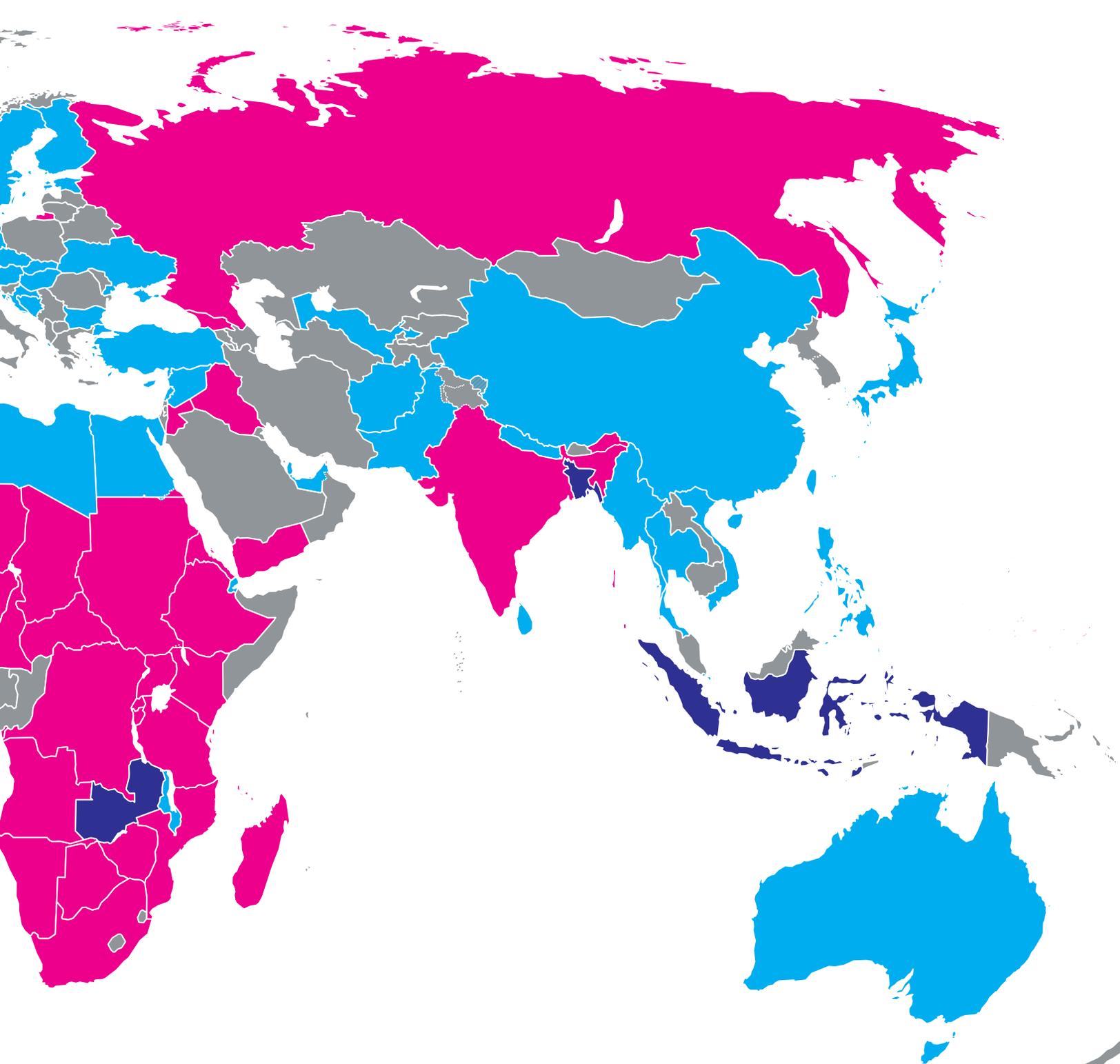
This map is stylized and not to scale. It does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers.

The dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.



**THE WORLD HAS  
MADE INSUFFICIENT  
PROGRESS  
TOWARDS THE MDG  
SANITATION TARGET**

The MDG target is to halve, by 2015, the proportion of people without sustainable access to basic sanitation. An analysis of the most recent estimates by the WHO/ UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) for the period 1990–2004 shows that 50 developing countries are on track to reach the target, 4 have made progress, though insufficient to reach the target, and 41 are not on track. In 49 developing countries, data were insufficient to estimate trends.



- On track:** Coverage in 2004 was less than 5 per cent below the rate it needed to be for the country to reach the MDG target, or coverage was 95 per cent or higher.
- Progress but insufficient:** Coverage in 2004 was 5 per cent to 10 per cent below the rate it needed to be for the country to reach the MDG target.
- Not on track:** Coverage in 2004 was more than 10 per cent below the rate it needed to be for the country to reach the MDG target, or the 1990–2004 trend shows unchanged or decreasing coverage.
- Insufficient data:** Data were insufficient to estimate trends.

Note: The MDG sanitation targets in this map and in the table on pages 30–32 are expressed as the proportion of the population using improved sanitation facilities. These targets are calculated by adding half of the proportion of the population *not using* improved sanitation facilities in 1990 to the proportion of the population *using* improved facilities in 1990. For countries without a 1990 baseline, MDG targets were calculated based on coverage in 1995 (where such estimates were available), on the assumption that from 1990–1995 the countries were 'on track' to reach the MDG target. 'On track', 'progress but insufficient' and 'not on track' classifications were calculated by comparing actual coverage rates in 2004 with the coverage rate the country should have had in 2004 if it was on track to reach the MDG target.

This map is stylized and not to scale. It does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers.

The dotted line represents approximately the Line of Control in Jammu and Kashmir agreed upon by India and Pakistan. The final status of Jammu and Kashmir has not yet been agreed upon by the parties.

# WEST/CENTRAL AFRICA: INCREASING NUMBERS WITH NO ACCESS

The region has the lowest coverage of improved drinking water and sanitation in the world, and the numbers of unserved were higher in 2004 than in 1990.

Coverage improved very slowly between 1990 and 2004, from 49 per cent to 55 per cent in access to improved drinking-water sources and from 28 per cent to 36 per cent in access to improved sanitation facilities. These small rates of increase failed to keep pace with the expanding population in the region. The absolute number of people without access to drinking water increased from 124 million to 157 million, and the number without sanitation from 173 million to 225 million.

Although 75 million people gained access to improved drinking-water sources between 1990 and 2004, a further 147 million, or around 15 million a year, will need to gain access between now and 2015 if the MDG target is to be met.

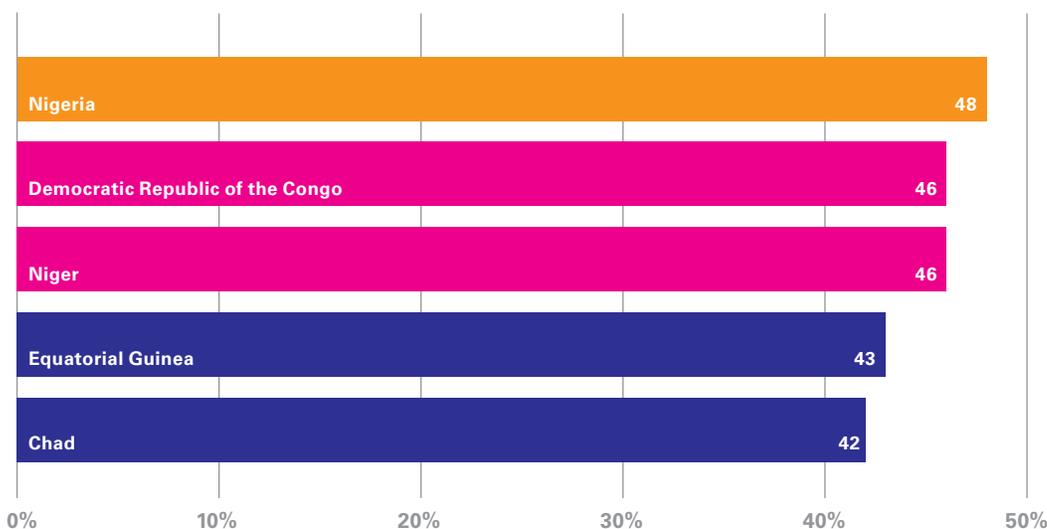
Similarly, although 56 million people benefited for the first time from improved sanitation between 1990 and 2004, another 165 million, or about 17 million a year, must be reached between now and 2015 to

achieve the MDG target. If current trends continue and the rate of progress does not improve, about 260 million people in the region will be without access.

The water and sanitation position in West/Central Africa is of particular urgency, as the region has the highest under-five mortality rate of all developing regions: 191 child deaths per 1,000 live births. Recurrent outbreaks of cholera in both urban and rural areas underline the poor state of this region's basic living conditions.

The majority of the region's population remains based in rural areas, but urbanization is increasing fast. About 49 million people living in urban areas gained access to improved drinking-water sources from 1990 to 2004 (compared with only 26 million people living in rural areas). Yet this increase was unable to match the expanding urban population, and the number of people without access in urban areas doubled, from 17 million to 34 million.

Coverage of improved drinking-water sources is less than 50 per cent in five countries of West/Central Africa.

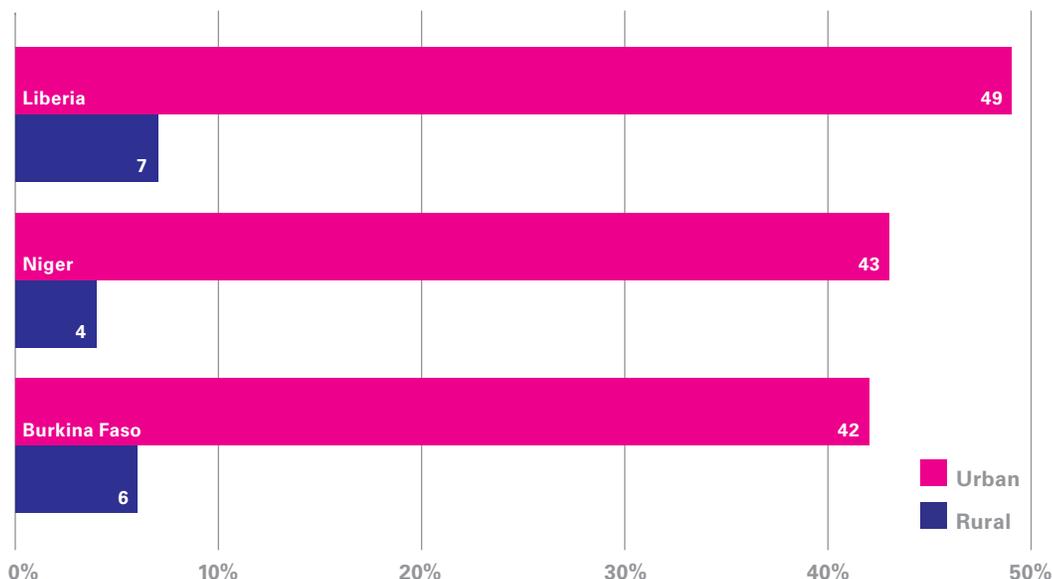


**Burkina Faso, Liberia and Niger have the largest urban-rural disparities in access to improved sanitation facilities in West/Central Africa.**

There are still five countries in West/Central Africa where less than half of the population has access to improved drinking-water sources: Chad (42 per cent), Equatorial Guinea (43 per cent), the Democratic Republic of the Congo (46 per cent), Niger (46 per cent) and Nigeria (48 per cent). The Democratic Republic of the Congo and Nigeria have particularly low coverage in rural areas (29 per cent in the Democratic Republic of the Congo and 31 per cent in Nigeria).

areas), Burkina Faso (42 per cent, compared with 6 per cent) and Liberia (49 per cent, compared with 7 per cent).

The eradication of dracunculiasis or Guinea worm, a disease spread through the use of contaminated water, is a priority. The West/Central Africa region contains seven of the nine remaining countries in which Guinea worm disease is endemic. Ghana reported nearly 4,000 cases in 2005, or 79 per cent of



Nonetheless, some countries merit notice for their progress in increasing access to improved drinking-water sources between 1990 and 2004. Burkina Faso, for example, boosted its coverage from 38 per cent to 61 per cent, while Chad improved from 19 per cent to 42 per cent – and they are among nine countries in the region on track to meet the MDG water target.<sup>25</sup>

Only 4 of the region’s 24 countries have reached more than half their population with improved sanitation facilities: Senegal (57 per cent), Equatorial Guinea (53 per cent), Gambia (53 per cent) and Cameroon (51 per cent). Senegal is, moreover, the only country in the region currently on track to attain the MDG sanitation target, although both Benin and the Democratic Republic of the Congo made considerable progress from a very low base. Between 1990 and 2004, Benin improved its coverage from 12 per cent to 33 per cent and the Democratic Republic of the Congo from 16 per cent to 30 per cent.

Urban-rural disparities in sanitation are particularly large in Niger (43 per cent in urban areas, compared with 4 per cent in rural

cases in the region. Nigeria, however, reported only 120 cases in 2005.<sup>26</sup>

Civil strife and the resulting refugee and internally displaced populations have strained resources in the region and slowed progress in water and sanitation coverage. Restoring safe water, sanitation and hygiene to children and their families is a priority following natural disasters such as the floods in Mali in recent years, as well as during conflicts such as that in Côte d’Ivoire from 2002 onward and major humanitarian crises such as those in the Democratic Republic of the Congo and Liberia.

# EASTERN/SOUTHERN AFRICA: SLOW PROGRESS AMID EMERGENCIES

The region faces some of the lowest water and sanitation coverage rates in the world.

Progress in both water and sanitation coverage during the 1990s was slow. In 2004, just 56 per cent of the region's people had access to improved drinking-water sources, up from 48 per cent in 1990 but well short of the 2015 target of 74 per cent, and 38 per cent had access to improved sanitation facilities, up slightly from 35 per cent in 1990.

Although 74 million people gained access to improved drinking-water sources between 1990 and 2004, the increase in coverage did not keep pace with population growth. As a result, the number of people without improved drinking-water sources increased from 129 million to 154 million. A further 129 million, or around 13 million a year, will need to gain access by 2015 if the MDG target is to be met.

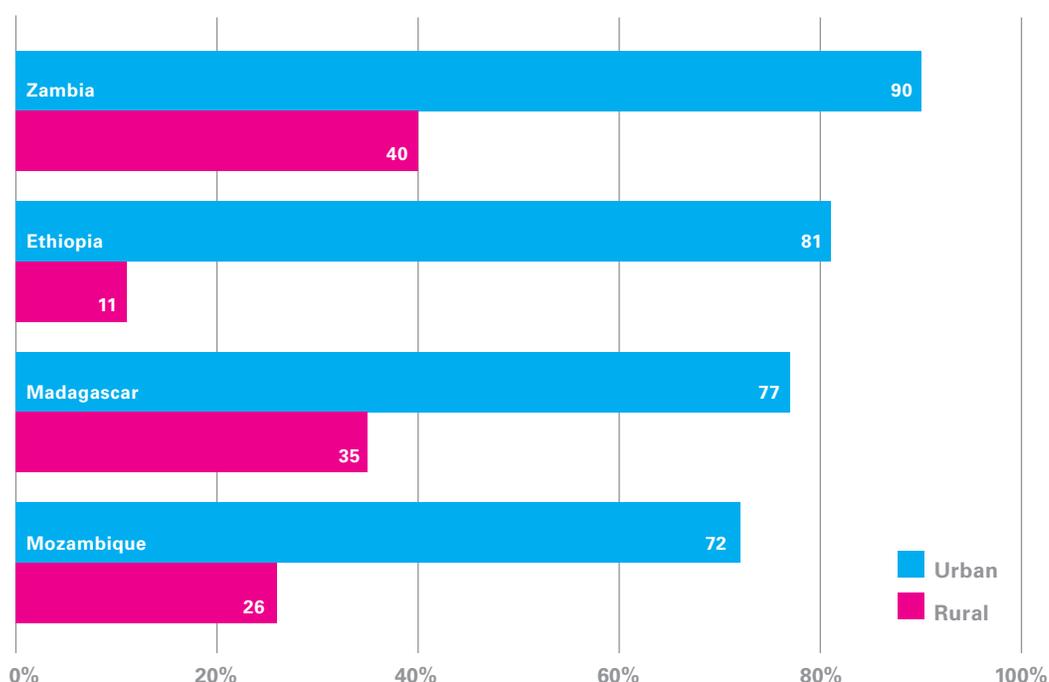
In sanitation, the increase in coverage was not sufficient to match population growth, and the

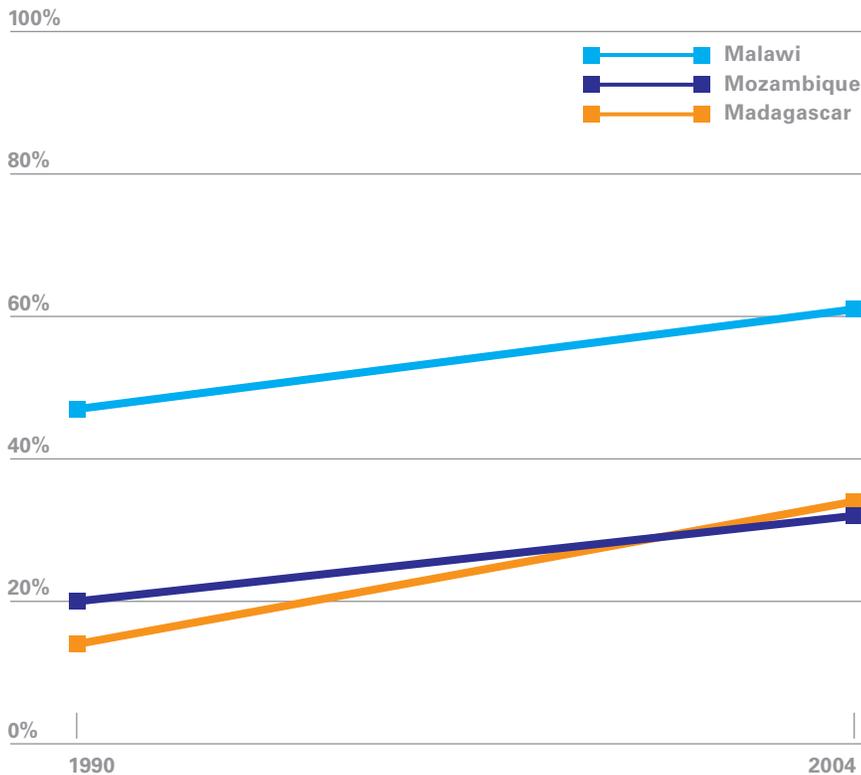
number of people without coverage increased from 162 million to 215 million. To meet the 2015 target of 68 per cent coverage, a further 163 million, or around 16 million a year, will need to gain access.

The under-five mortality rate in Eastern/Southern Africa is 149 child deaths per 1,000 live births, the second largest in the developing world after West/Central Africa, so these issues are of critical importance.

Flood and drought emergencies in the region are cyclical and often catastrophic. During 2006, major international humanitarian assistance was required for 8 million people whose lives were threatened in drought-stricken areas of Djibouti, Eritrea, Ethiopia, Kenya and Somalia – including around 1.6 million children under five. Because of climate shifts, what was once a 10-year

Urban-rural disparities in access to improved drinking-water sources are higher in Eastern/Southern Africa than in any other region.





**Madagascar, Malawi and Mozambique made the largest gains in providing access to improved sanitation facilities in Eastern/Southern Africa, 1990–2004.**

drought cycle in the Horn of Africa has now been abbreviated to between three and five years.

In addition, cholera – a waterborne disease – remains a severe threat. There were recent outbreaks in several countries, including Burundi, Malawi and Mozambique in 2005 and Angola, Kenya and Malawi in 2006. The half-million cholera cases suffered in Eastern/Southern Africa between 1997 and 2000 exceeded the numbers in the rest of the world combined.<sup>27</sup>

Urban-rural disparities in access to improved drinking-water sources are large – with 86 per cent coverage in urban areas, compared to just 42 per cent in the countryside. These disparities are greatest in Ethiopia, with 81 per cent coverage in urban areas and 11 per cent coverage in rural areas.

As always, the overall regional picture masks the diverse experiences of individual countries, some of which have made huge strides over the past 15 years. Malawi, for example, boosted drinking-water coverage from 40 per cent to 73 per cent in the 1990–2004 period, and Namibia’s coverage rose from 57 per cent to 87 per cent. Both countries have already surpassed their 2015 targets. Eleven other countries are also on track to meet their drinking-water targets.<sup>28</sup>

The best performers in sanitation over this period were Madagascar (which improved from 14 per cent to 34 per cent), Malawi (from 47 per cent to 61 per cent) and Mozambique (from 20 per cent to 32 per cent), though Malawi is the only one of the region’s 22 countries actually on track to meet the MDG target.

Two countries of the Horn of Africa – Ethiopia and Somalia – require the most urgent attention, with coverage in improved drinking-water sources of 22 per cent in Ethiopia and 29 per cent in Somalia, and in basic sanitation of just 13 per cent in Ethiopia and 26 per cent in Somalia. Both countries also have especially large populations, high under-five mortality rates and low levels of school attendance. School sanitation is a particular priority in poor rural areas, as it is in Eritrea, where sanitation coverage stands at a mere 9 per cent.

Lack of water and sanitation at school is a problem in many countries of Eastern/Southern Africa, and in schools in some areas, more than 150 children must share one latrine.<sup>29</sup> There are major successes in this field, however. Malawi, for example, has cut costs for school water and sanitation packages by two thirds<sup>30</sup> and introduced facilities for girls, while Uganda improved attendance and lowered drop-out rates for girls after introducing female-only washrooms.<sup>31</sup> In Kenya murals or ‘talking walls’ in schools have proved to be effective in delivering hygiene messages to students, while in South Africa schools have introduced ‘playpumps’ – specially designed roundabout pumps delivering water while children use them for play.

# MIDDLE EAST/NORTH AFRICA: ON TRACK, BUT WATER IS SCARCE

Progress started at relatively high levels, but it has been slow. The region should, however, meet both the water and sanitation targets.

More good news is that the Middle East/North Africa region reduced its under-five mortality rate by nearly a third, from 81 child deaths per 1,000 live births in 1990 to 56 in 2004. But water is an increasingly precious commodity in this arid region, and as the population grows, the link between environmental degradation, water scarcity and conflict is becoming a mounting threat.

Algeria, Djibouti, Qatar, Saudi Arabia, Tunisia, the United Arab Emirates and Yemen had already experienced water scarcity by 1990; Egypt, Iran, the Libyan Arab Jamahiriya, Morocco, Oman and the Syrian Arab Republic are projected to be water-scarce by 2025.<sup>32</sup> The prospect jeopardizes the region's position in relation to the MDG water target, and it underlines the urgent need for countries to manage their water resources sustainably.

Although more than half the countries in the Middle East/North Africa with data sufficient to estimate trends are on track to meet the drinking-water target, in the region as a whole, access to improved drinking-water sources increased only marginally, from 86 per cent in 1990 to 88 per cent in 2004. And the number of people without access increased from 39 million to 44 million over

this period. Among them, some 34 million live in rural areas, about the same number as in 1990. But there are almost twice as many urban dwellers without safe water in 2004 as there were in 1990.

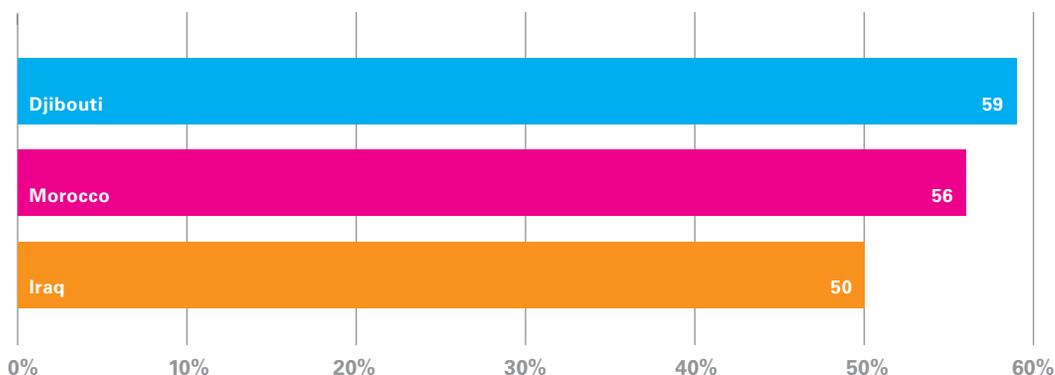
Urban-rural disparities in water are particularly pronounced in Morocco (99 per cent urban to 56 per cent rural). More than 40 per cent of rural dwellers in Djibouti, Iraq and Morocco have no access to improved drinking-water sources.

Data for Sudan refer to the situation in the northern part of the country, where two out of three rural dwellers have access to improved drinking-water sources. Access is much lower when taking into account the entire country, including desert areas with a regular movement of nomadic populations.

There was slightly more progress in the Middle East/North Africa on sanitation coverage, from 68 per cent in 1990 to 74 per cent in 2004, with 87 million people gaining access – and the MDG sanitation target of 84 per cent is likely to be achieved. Over this period, however, the number of people without access actually increased, from 88 million in 1990 to 96 million in 2004. To reach the target, a further 107 million people

**In rural areas of Djibouti, Iraq and Morocco, coverage of improved drinking-water sources is less than 60 per cent.**

The chart shows rural-area coverage in 2004.



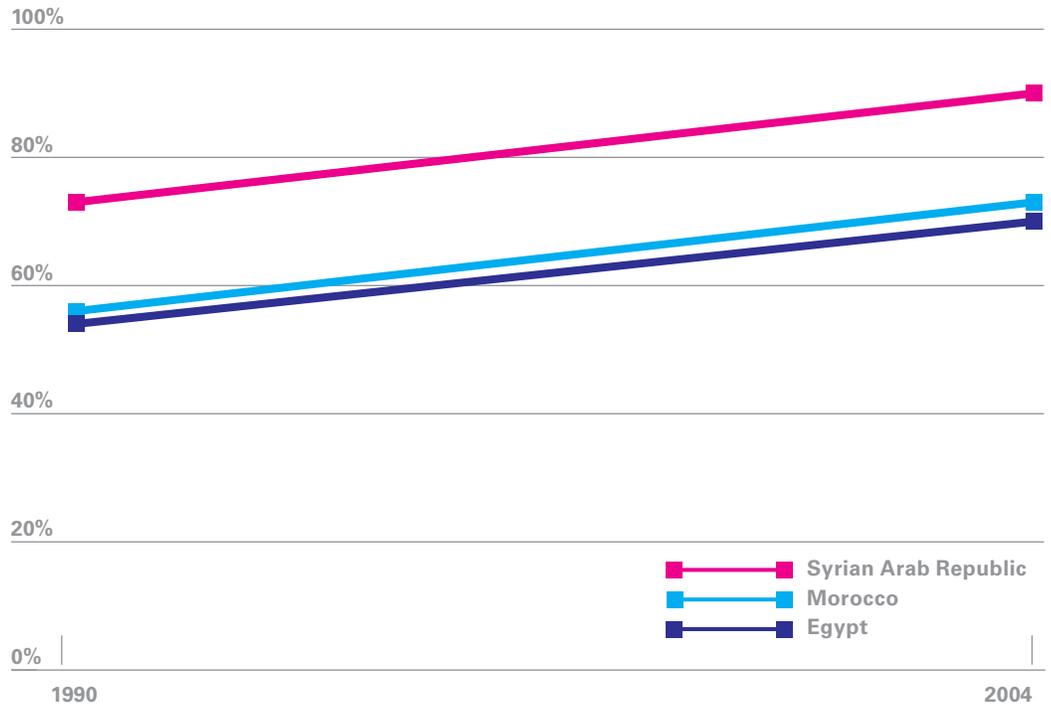
must be reached by 2015, at an average of around 11 million a year.

Urban-rural disparity in sanitation coverage is sizeable, at 90 per cent and 53 per cent, respectively; in Yemen, access for urban populations is three times higher than for rural populations. Disparities exist in middle-income countries as well, including Djibouti, Egypt, Morocco and Tunisia.

logistical problems and security concerns make repairs of local water and sanitation systems difficult. An estimated 25 per cent of child deaths in Iraq are due to water-related diseases.<sup>34</sup>

In Sudan's Darfur region, helping conflict-affected children and their families and communities remains a UNICEF priority, as it was for many years in the conflict areas in

**Egypt, Morocco and the Syrian Arab Republic had the largest increases in access to improved sanitation facilities in the Middle East/North Africa, 1990–2004.**



The largest increases in drinking-water coverage during 1990–2004 were recorded in the Syrian Arab Republic (up from 80 per cent to 93 per cent) and Tunisia (81 per cent to 93 per cent). The region's lowest coverage levels are found in Yemen (67 per cent), Sudan (70 per cent) and Djibouti (73 per cent).

the south of the country, where well drilling, sanitation and hygiene education have all been of the utmost importance. Because the country contains more than 5,000 cases of Guinea worm – about half of all remaining cases in the world – Sudan is the front line in the battle to eliminate the disease.

The biggest improvements in sanitation coverage between 1990 and 2004 were made in Egypt (from 54 per cent to 70 per cent), Morocco (from 56 per cent to 73 per cent) and the Syrian Arab Republic (from 73 per cent to 90 per cent), which are among the 10 countries in the region on track to meet the MDG sanitation target.<sup>33</sup>

Conflict-related emergencies remain a major concern. The priority is to send drinking water directly to families in need and to rehabilitate damaged water and sanitation systems. In Iraq, where coverage since 1990 has declined for both drinking water and sanitation, children continue to suffer as

# SOUTH ASIA: TWO IN THREE WITHOUT SANITATION

The region has made progress in both water and sanitation, but low levels of sanitation remain one of its biggest public-health threats.

South Asia's sanitation coverage is among the lowest in the world, at 37 per cent, about the same as that in sub-Saharan Africa. In four of the region's eight countries – including the most populous country, India – barely more than one third of people have access to improved sanitation facilities.

The situation is of particular concern for the region's children. Under-five mortality in South Asia, at 92 child deaths per 1,000 live births, is the highest in the developing world outside sub-Saharan Africa, where the rate is 171 per 1,000 live births.

The region has boosted access to improved drinking-water sources from 71 per cent in 1990 to 85 per cent in 2004 and has virtually met its MDG target of 86 per cent. The absolute number of people in the region without improved drinking-water sources has declined by about a third, from 326 million in 1990 to 222 million in 2004. Some 445 million

people gained access over the period, 88 per cent of them in India and Pakistan. But a further 243 million, around 24 million a year, need to be reached by 2015 if the target is to be met.

The proportional increase in access to improved sanitation facilities in South Asia has been even greater than that in drinking water. The rate has more than doubled, from 17 per cent in 1990 to 37 per cent in 2004, but it started from such low levels that the pace will have to be considerably accelerated if the region is to meet its MDG target of 59 per cent. A further 478 million people, around 48 million a year, will need to gain access by 2015.

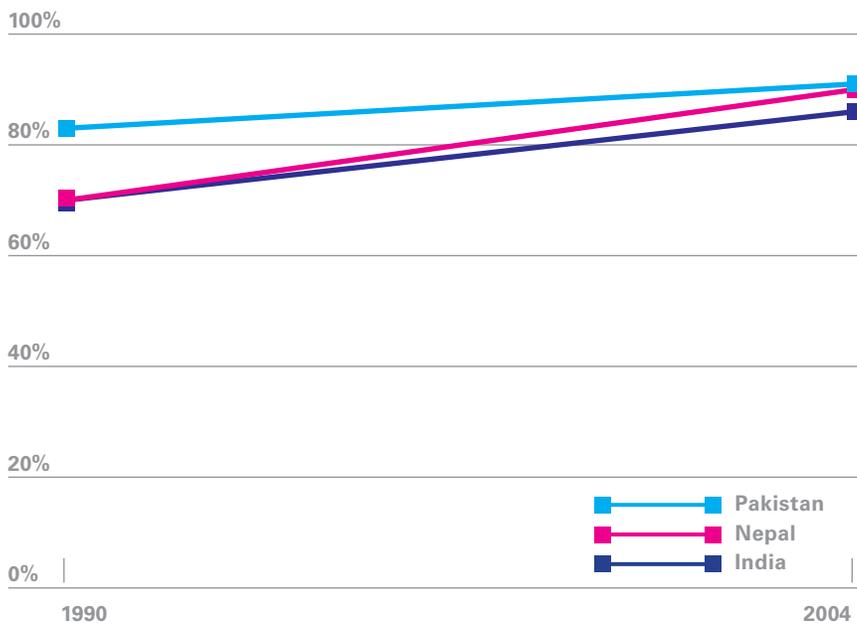
The region's sanitation coverage is on a par with sub-Saharan Africa's, and its 921 million people who live without any toilet facilities represent more than a third of the world's total. Nevertheless, it should be noted that four of the eight countries in the region are on track to meet the MDG sanitation target – including Sri Lanka, which has already exceeded its target, achieving outstanding expansion from 69 per cent coverage in 1990 to 91 per cent by 2004.

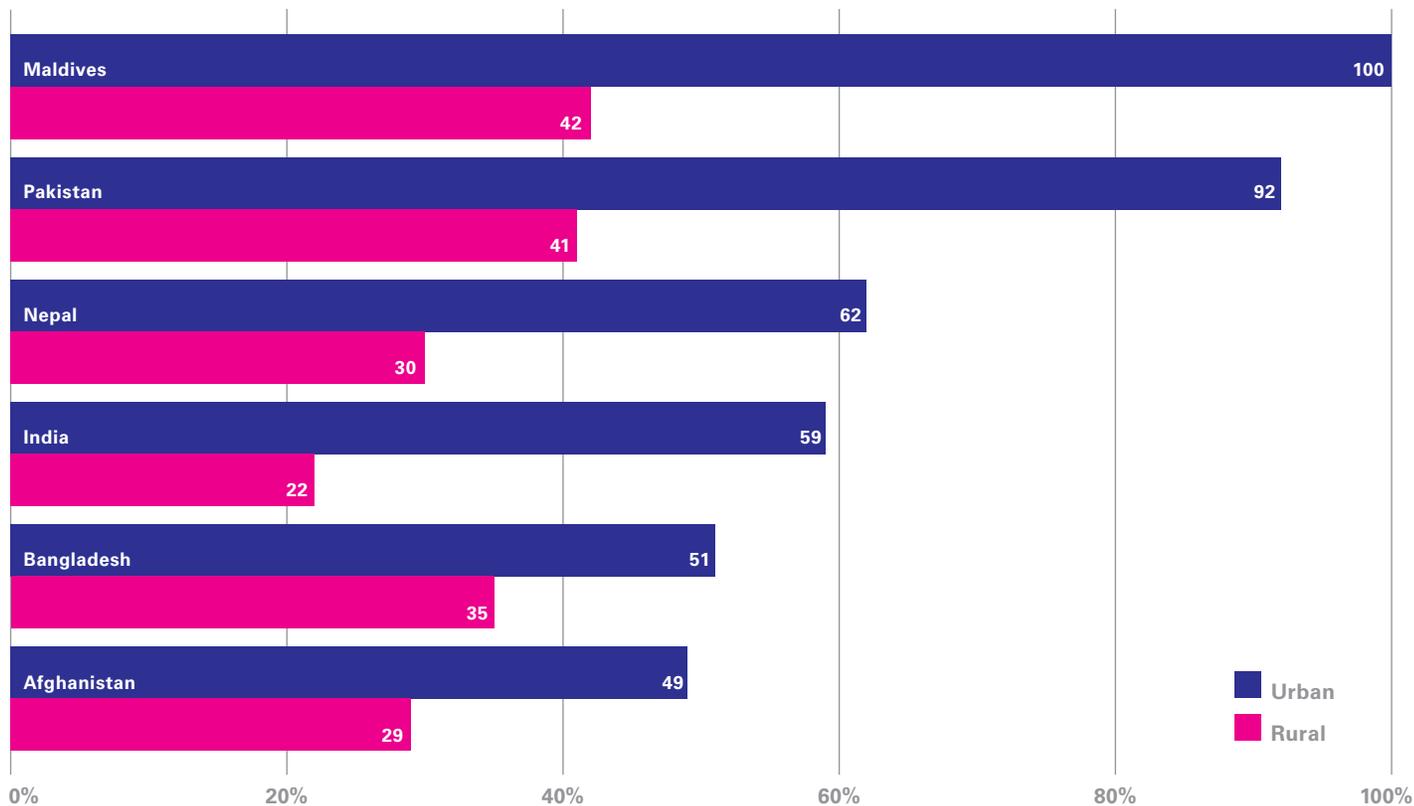
In sanitation coverage, South Asia has the most severe urban-rural disparities in the world. And while the number of people in urban areas without access to sanitation increased from 139 million in 1990 to 153 million in 2004, urban populations are more than twice as likely as rural populations to have access to sanitation. In India, the difference is even greater, at 59 per cent for urban dwellers compared to 22 per cent for their rural counterparts. This leaves 600 million people living in rural India without basic sanitation.

In contrast, for access to improved drinking-water sources, South Asia almost halved the urban-rural gap from 1990–2004. In rural

**India and Nepal have already met the MDG target on water, and Pakistan has virtually achieved it.**

The chart shows progress, 1990–2004.





**Urban-rural disparities in access to improved sanitation facilities in South Asia are the largest in the world.**

areas, coverage increased from 65 per cent to 81 per cent, a surge due primarily to progress in India.

Of the eight countries in the region, India and Nepal have already met the MDG water target, and Pakistan has virtually achieved it. Pakistan has also made notable improvements in sanitation, increasing its coverage from 37 per cent to 59 per cent; advances in rural areas were particularly marked, as coverage rose from 17 per cent in 1990 to 41 per cent in 2004.

Access to improved drinking-water sources in Afghanistan has increased from 4 per cent in 1990 to 39 per cent in 2004. Although this upgrade is remarkable, it still leaves Afghans with the world’s third-lowest access to improved drinking-water sources. The rural population is, moreover, half as likely to have access as that in urban areas (31 per cent compared with 63 per cent). Given that 76 per cent of Afghanistan’s population lives in the countryside, maintaining the recent pace of progress will be a challenge.

Sanitation coverage has also improved dramatically in Afghanistan, from 3 per cent in 1990 to 34 per cent in 2004, so it is broadly on a par with that in India and is approaching the regional average.

In many areas of South Asia, however, naturally occurring arsenic and fluoride contamination are threatening to reverse the gains made in providing improved drinking water. Unsafe levels of arsenic have been detected in Bangladesh, India, Nepal, Pakistan and other countries. The problem is greatest in Bangladesh, where it was discovered that more than 30 per cent of the tube wells sunk in recent decades are contaminated with arsenic above the nationally recommended level. (The drinking-water access figures for Bangladesh in this report have been discounted for the percentage of tube wells contaminated with arsenic.)

UNICEF’s response in Bangladesh has been to partner with the government and non-governmental organizations to raise awareness about arsenic poisoning, to test water sources (safe wells are painted green and unsafe ones red), to improve patient health care and to help provide alternative safe-water options. Around 84,000 new water points have been installed to date in highly arsenic-affected areas, serving millions of people.

# EAST ASIA/PACIFIC: THE CHALLENGE OF URBANIZATION

The region is on track to meet both MDG targets and has reduced its under-five mortality rate by more than one third.

Under-five mortality in East Asia/Pacific dropped from 58 child deaths per 1,000 live births in 1990 to 36 per 1,000 live births in 2004. Yet the region has the world's largest numbers of people without access to improved drinking-water sources and sanitation facilities. It is marked by disparities – especially in sanitation coverage, including within some countries that are on course to meet the MDG targets. Indeed, inequity in the region is a growing concern in view of its overall progress.

Access to improved drinking-water sources increased from 72 per cent in 1990 to 79 per cent in 2004, and 333 million people gained access to water over that period. What is more, the progress kept up with population growth, so the actual number of people without access decreased by 61 million. Nevertheless, East Asia/Pacific has 402 million people without access to improved drinking-water sources, and 272 million more people – 27 million every year – will need to gain access by 2015 if the target is to be met.

The region's progress in sanitation coverage was even more marked, leaping from 30 per cent in 1990 to 51 per cent in 2004, and almost a half-billion people gained access over

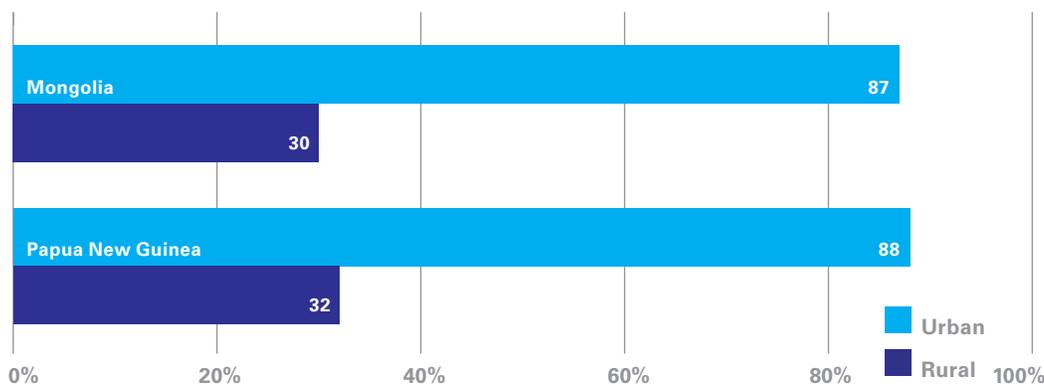
that period. The total number of people still unreached remains vast, however, at 944 million. More than a third of the world's population without basic sanitation lives in East Asia/Pacific.

As in all the world's regions, people living in urban areas are much more likely to have access to improved drinking-water sources and sanitation facilities than people living in rural areas. In Indonesia, the sanitation gap is particularly wide, with 71 per cent of people without access living in rural areas. Urban-rural disparities in sanitation are also high in Cambodia, China and the Lao People's Democratic Republic.

Some 92 per cent of the region's urban population benefit from improved drinking water, but this is a decline from 97 per cent in 1990 and has led to a fivefold increase in the number of city people without access between 1990 and 2004 because of rapid urbanization. The largest urban-rural disparities in drinking-water coverage are found in Mongolia (87 per cent urban to 30 per cent rural) and Papua New Guinea (88 per cent urban to 32 per cent rural).

China's huge population means that changes there strongly influence regional statistics,

Mongolia and Papua New Guinea have the largest urban-rural disparities in access to improved drinking-water sources in East Asia/Pacific.

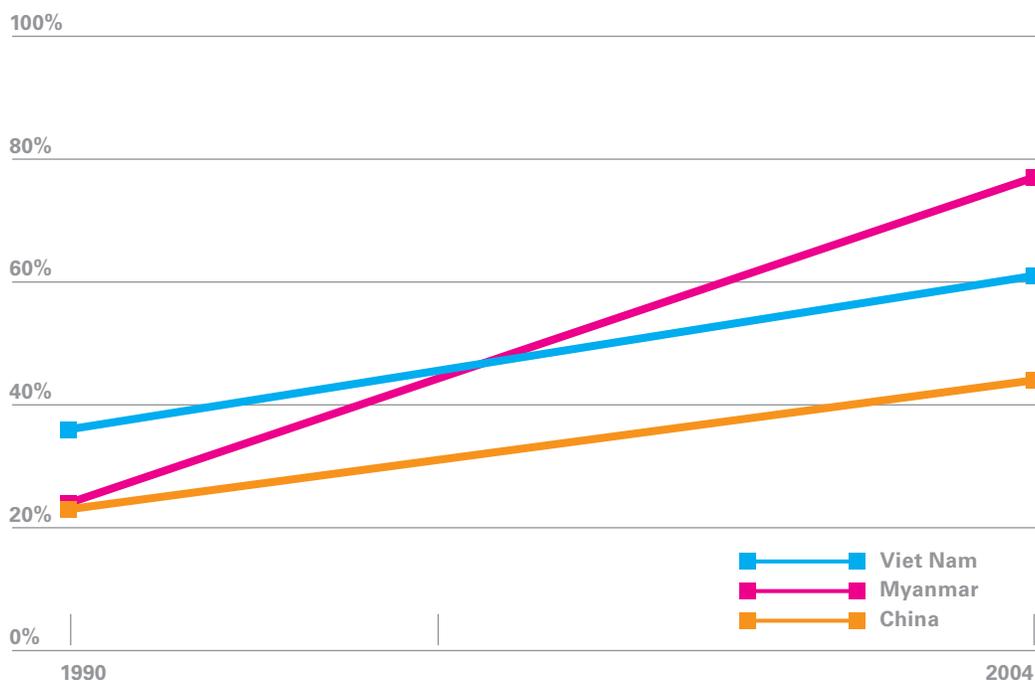


**China, Myanmar and Viet Nam had the largest increases in the region in access to improved sanitation facilities, 1990–2004.**

though East Asia/Pacific would still be on track to meet its MDG targets in both water and sanitation if the country were excluded from the regional average. China made gains in rural drinking-water coverage, from 59 per cent in 1990 to 67 per cent in 2004. Urban drinking-water coverage, however, dropped from 99 per cent to 93 per cent in 2004. Substantial investment in urban basic services will be needed to meet the MDG target, especially

country, Indonesia, also made progress between 1990 and 2004, with drinking-water coverage increasing from 72 per cent to 77 per cent – reaching around 40 million more people. Sanitation coverage rose from 46 per cent to 55 per cent, but this progress is insufficient for Indonesia to meet the MDG target.

In four of the region’s countries – the Marshall Islands, Mongolia, the Philippines and Samoa



given that China’s urban population is projected to grow by nearly 30 per cent by 2015.

The improvement in China’s sanitation coverage was largely due to its success in rural areas, where access rose from 7 per cent in 1990 to 28 per cent in 2004. Yet this level is still low, and more than two out of three people in rural areas remain without access.

The region’s fastest-improving country has been Myanmar, which increased access to improved drinking-water sources from 57 per cent in 1990 to 78 per cent in 2004. Sanitation coverage rose from 24 per cent in 1990 to 77 per cent in 2004, resulting from national efforts in sanitation promotion with strong government support.

Viet Nam made huge strides towards the MDG targets over 1990–2004, boosting access to improved drinking-water sources from 65 per cent to 85 per cent and access to improved sanitation facilities from 36 per cent to 61 per cent. The region’s second most populous

– drinking-water coverage has actually declined. In the Philippines, although limited progress was made in rural areas, coverage in urban areas dropped from 95 per cent in 1990 to 87 per cent in 2004. The latter is partially due to a two-thirds increase in the urban population over the period 1990–2004, from 30 million to 50 million people.

The data do not reflect, however, underlying issues in the region of water-supply facility functionality, the quantity of water available to children and their families for drinking and hygiene needs, and water quality issues. Arsenic and fluoride contamination in groundwater is an emerging problem, with six countries affected so far (Cambodia, China, Lao People’s Democratic Republic, Mongolia, Myanmar and Viet Nam).

# LATIN AMERICA/CARIBBEAN: PROGRESS, YET PERSISTENT DISPARITIES

The region posted the world's largest drop in child mortality rates since 1990 and is on course to meet both water and sanitation targets.

Latin America/Caribbean's under-five mortality rate dropped 43 per cent, from 54 child deaths per 1,000 live births in 1990 to 31 per 1,000 live births in 2004. And in terms of both water and sanitation, 16 of the region's 33 countries are on track to meet their MDG targets.<sup>35</sup>

But the distribution of drinking water and sanitation services follows a pattern of inequity characteristic of a region with acute socio-economic disparities. Within the countries of Latin America/Caribbean, urban-rural disparities are particularly wide, as are intra-rural disparities.

Overall drinking-water coverage increased from 83 per cent in 1990 to 91 per cent in 2004. The region is relatively rich in available water resources, though there are large arid and high-elevation pockets where water scarcity is a serious issue. In Latin America/Caribbean as a whole, the absolute number of people without access to improved drinking-water sources was reduced by about one third, from 74 million in 1990 to 50 million in 2004.

Sanitation coverage increased from 68 per cent to 77 per cent between 1990 and 2004, and 127 million people were reached in that period. Yet if the goal is to be met, a further 103 million – 10 million a year – will need to

gain access between now and 2015.

In Latin America/Caribbean as a whole, urban drinking-water coverage is very high, at 96 per cent. But rural coverage lags behind at 73 per cent, and 34 million of the 50 million people without access to improved drinking-water sources live in rural areas.

In some of the countries with the highest urban coverage, approaching universality, the urban-rural divide is wider still. Chile's improved drinking-water supplies, for example, reach 100 per cent of urban dwellers versus 58 per cent of rural populations; Brazil covers 96 per cent urban and 57 per cent rural; and Paraguay, 99 per cent urban and 68 per cent rural.

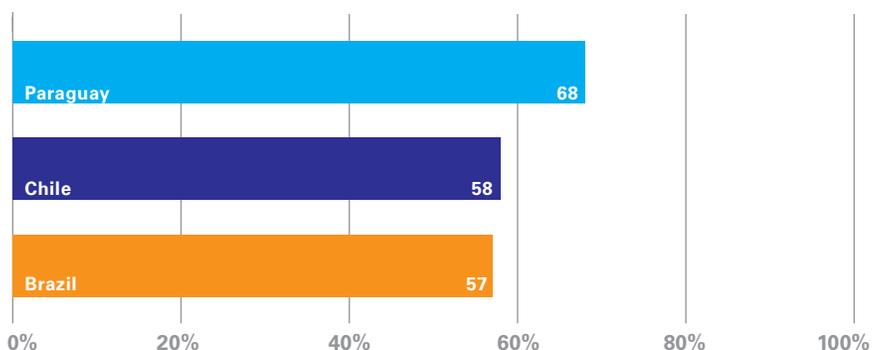
In addition, while Chile, Ecuador, Guatemala and Mexico have already met their MDG water targets, 95 per cent of people without improved drinking-water sources in these countries live in rural areas.

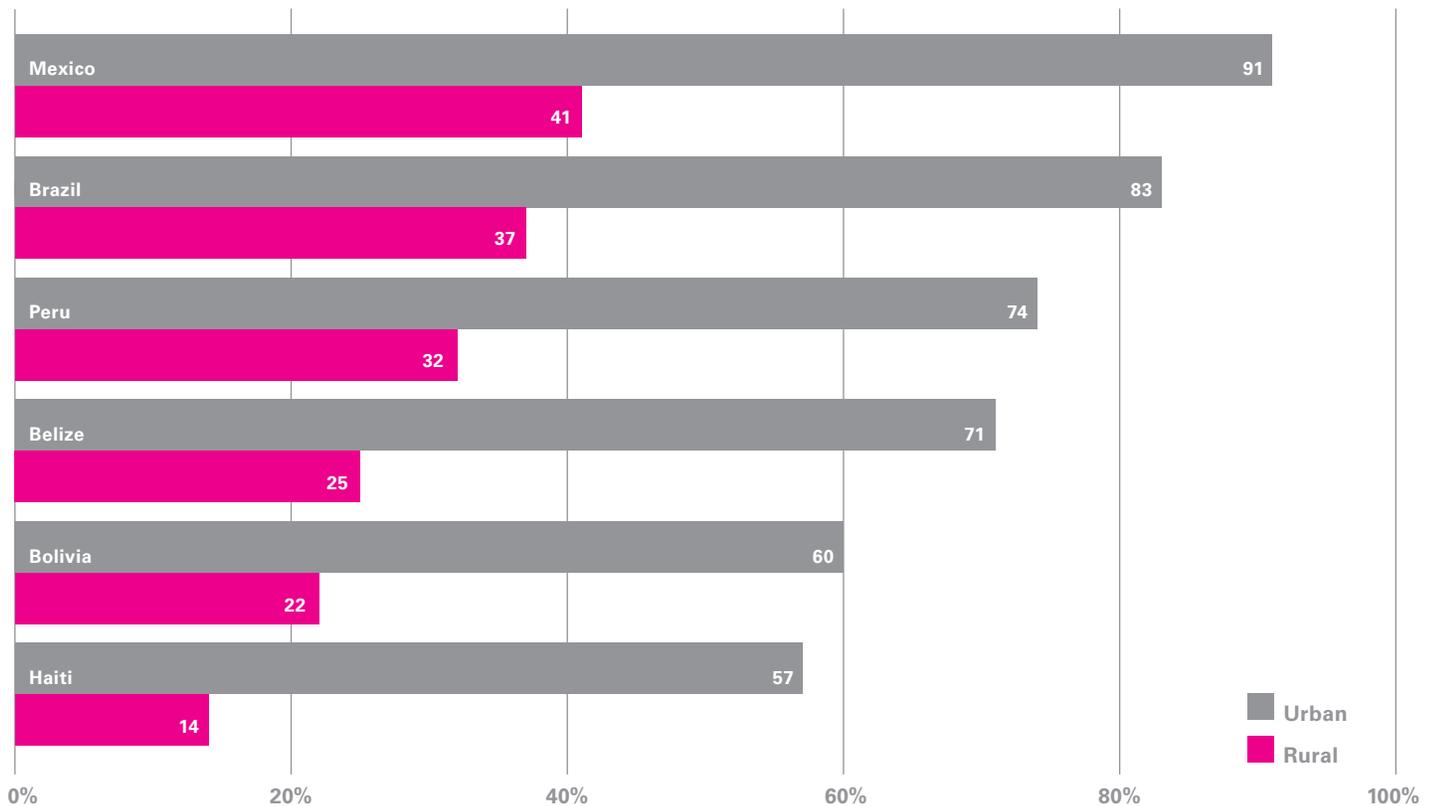
These disparities are even more extreme for sanitation. Although 86 per cent of urban people have access to improved sanitation facilities, they are available to only 49 per cent of the rural population. Urban-rural disparities are especially wide in the two most populous countries: Brazil, where the urban coverage rate is 83 per cent and the rural coverage rate is 37 per cent, and Mexico, where coverage rates are 91 per cent versus 41 per cent, respectively. Haiti, the region's poorest country, provides only 30 per cent coverage overall, and just 14 per cent of rural people have access to improved sanitation facilities.

Large disparities in water and sanitation access persist in the region along social and economic lines, as well. Much poorer levels of service are common among indigenous populations, in poor urban areas, and in populations of African descendants.

**Brazil, Chile and Paraguay have achieved universal or near universal coverage of improved drinking-water sources in urban areas, but coverage in rural areas remains low.**

The chart shows rural-area coverage in 2004.





**Urban-rural disparities in access to improved sanitation facilities remain a challenge in countries of Latin America/Caribbean.**

Guatemala is one of the countries that have made the most progress in recent years. Its sanitation coverage increased from 58 per cent in 1990 to 86 per cent in 2004, while its drinking-water coverage rate also improved substantially, from 79 per cent to 95 per cent.

Other fast-improving countries have been the Dominican Republic, Ecuador and Paraguay. Ecuador raised access to improved drinking-water sources from 73 per cent in 1990 to 94 per cent in 2004, while boosting sanitation coverage from 63 per cent to 89 per cent.

Paraguay showed the region's biggest improvement in water provision, jumping from 62 per cent to 86 per cent, while registering the fourth-largest increase in sanitation access, from 58 per cent in 1990 to 80 per cent in 2004.

Bolivia's improvement in sanitation, from 33 per cent in 1990 to 46 per cent in 2004, is insufficient to put it on track. Because it began from such a low level, to meet the MDG sanitation target Bolivia will have to double its 1990 access rate. However, its 13-percentage-point improvement in drinking-water access, from 72 per cent to 85 per cent, is enough to put the country on track for the water target.

Hurricanes, floods and earthquakes are common in the region, often with devastating effects on water supplies and public health. Between 1994 and 2003 the economic losses in water and sanitation were about \$650 million, as a result of at least 2,100 urban systems damaged, 4,500 rural aqueducts affected, and 28,000 wells and 173,000 latrines destroyed.<sup>36</sup>

When countries are devastated by natural disasters, as were Grenada by Hurricane Ivan and Haiti by Tropical Storm Jeanne in 2004, poor communities are always the worst affected. In these emergencies, restoration of safe water supplies and improved sanitation is an absolute priority.

# CEE/CIS: POOREST CHILDREN LEFT BEHIND

CEE/CIS is not on track to meet either the water or sanitation targets. Coverage, though higher than in other regions, has stagnated.

At 91 per cent, improved drinking-water coverage in the region is high, but it has not advanced since 1990, and CEE/CIS is making no progress towards its MDG target. Some 22 million people will need to gain access by 2015 if the target is to be met.

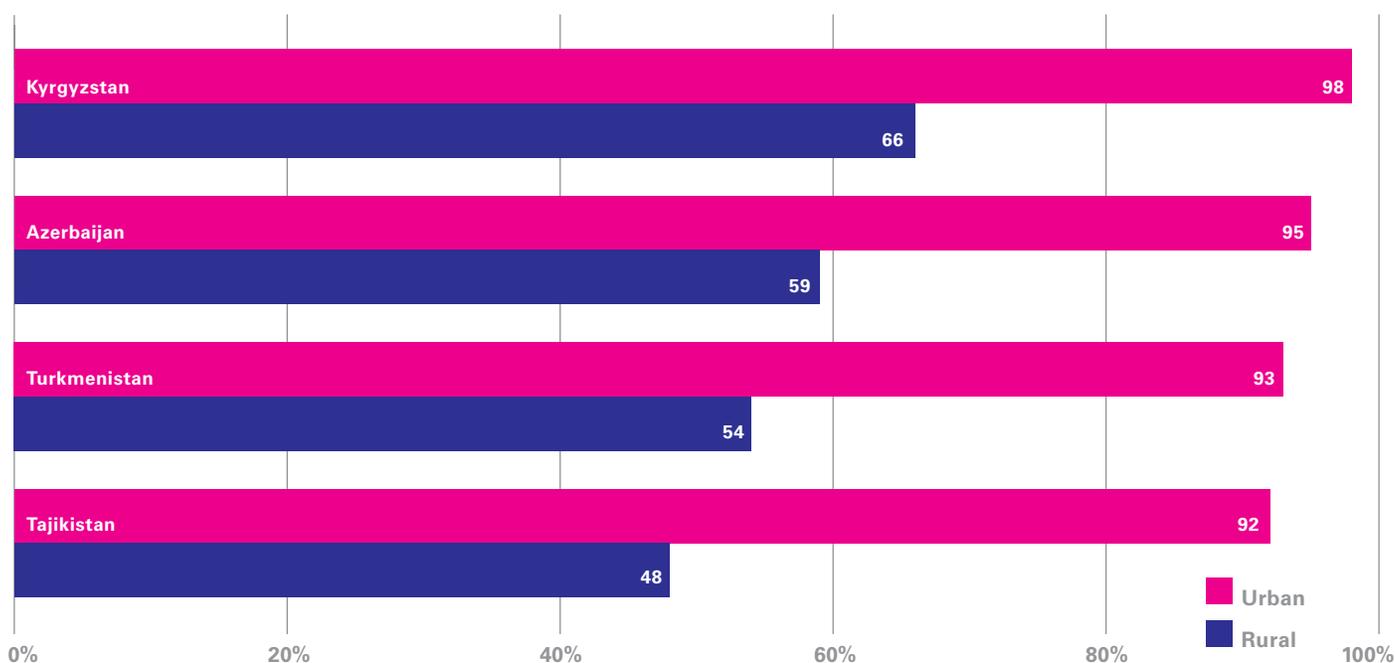
Access to sanitation has also remained static, at 84 per cent, leaving 63 million in the region currently without improved sanitation facilities. Six countries are on track to meet the MDG target, however, and four of these – Bosnia and Herzegovina, Bulgaria, Croatia and Ukraine – have coverage levels above 95 per cent.<sup>37</sup>

Urban-rural disparities are significant: The regional averages show 98 per cent (urban) to 79 per cent (rural) for improved drinking water and 93 per cent to 70 per cent, respectively, for sanitation. Given that urban provision is

generally high, it is clear that the key challenge in pursuit of the MDG targets is to increase coverage in rural areas. This is underlined by the fact that the number of people in rural areas with access to improved drinking-water sources actually declined by 4 million between 1990 and 2004.

Even in the Russian Federation, the country with the region's largest rural population, although 88 per cent of the rural population overall has access to improved drinking-water sources, a little over half of people living in rural areas have water piped directly to their homes.<sup>38</sup> Compared to the north, rural access to improved drinking-water sources is much poorer in some southern countries, including Tajikistan (48 per cent), Turkmenistan (54 per cent), Azerbaijan (59 per cent) and Kyrgyzstan (66 per cent). These are also the countries where less than two thirds of the population

Central Asian countries have some of the largest urban-rural disparities in access to improved drinking-water sources in CEE/CIS.



use improved sanitation facilities. Rural areas of Azerbaijan and Tajikistan are especially poorly served, with sanitation coverage of 36 per cent and 45 per cent, respectively.

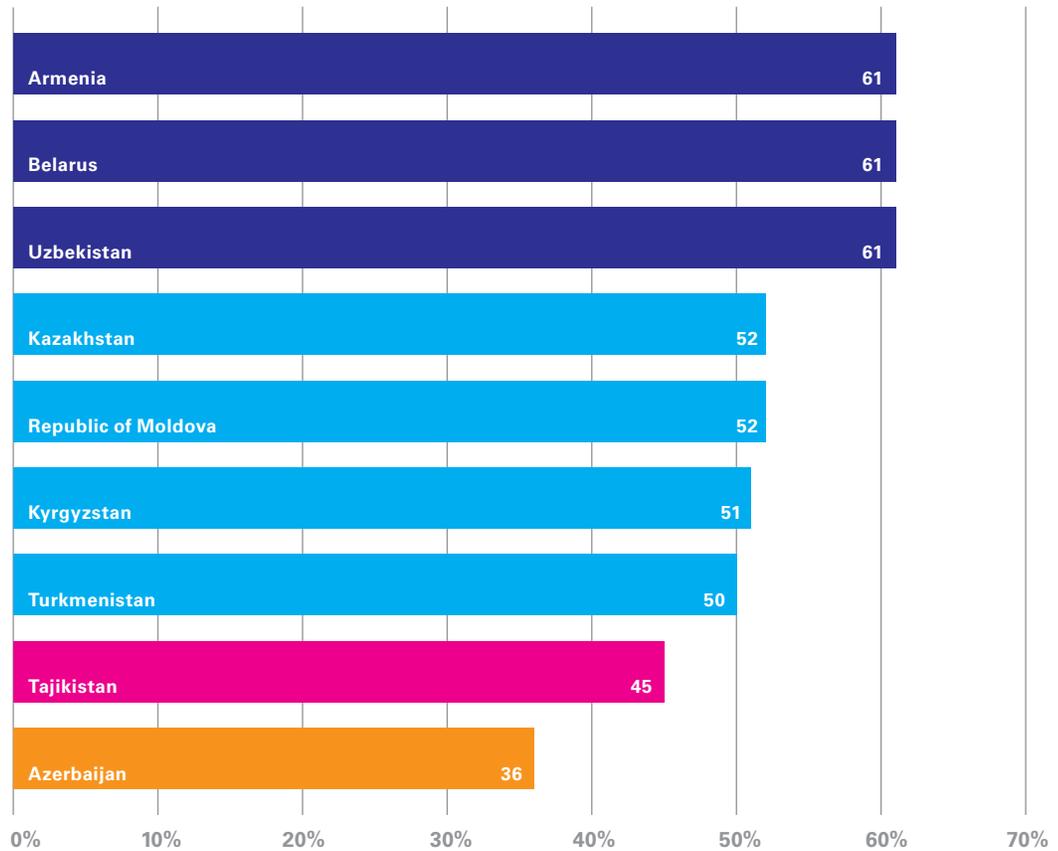
Azerbaijan is, nevertheless, one of the fastest-improving countries in the region in terms of drinking-water provision, having increased coverage from 68 per cent in 1990 to 77 per cent in 2004. Turkey has shown an

lack the appropriate chemicals for purification; and many households once served through piped water and sewage systems have reverted to poorly constructed latrines and untreated water.

In these circumstances, water-related diseases are among the most common causes of child mortality, and under-five mortality levels are far higher in the Central

**Coverage of improved sanitation facilities is less than two thirds in rural areas of nine CEE/CIS countries.**

The chart shows rural-area coverage in 2004.



even bigger improvement, from 85 per cent to 96 per cent, and both these countries are on track to meet their MDG targets.

In the wake of environmental change, Central Asian countries are facing steadily shrinking water reserves, and national water systems are struggling to cope. The low level of the Aral Sea has affected large parts of the subregion. Sinking water tables and increased salinity have reduced drinking-water access to levels far below the regional average, sometimes dropping as low as 10 per cent. In some areas, pesticides have seeped into the water supply.

Water and sanitation networks have rapidly deteriorated in areas of Central Asia; piped water is often untreated because countries

Asian republics than the CEE/CIS regional average of 38 child deaths per 1,000 live births. More information and action within civil society are needed to highlight the needs of the poor and socially vulnerable, and to make water and sanitation a priority.

# INDUSTRIALIZED COUNTRIES: NEED FOR RENEWAL

The region has reached nearly universal levels of coverage for both water and sanitation.

For water and sanitation, the blanket pattern of universal coverage in industrialized countries has a few small holes. In rural areas of Latvia and Hungary, 4 per cent and 2 per cent, respectively, still have no access to improved drinking-water sources.

In many of the European countries with transitional economies, water and sanitation infrastructure still needs to be developed or improved. And all industrialized countries face a substantial challenge in financing the replacement of decaying and leaking infrastructure, which is long overdue for renovation in many cases.

Most countries in the Organisation for Economic Co-operation and Development (OECD) are seeking to finance this renewal of water piping and sewerage by introducing water-pricing schedules that reflect the full marginal costs of providing services for households and industry. In many cases, they have sought to implement measures ensuring access for low-income groups.<sup>39</sup> This kind of targeted service for vulnerable groups is vital, since pockets of deprivation in water and sanitation coverage are otherwise too easily ignored amid the near-universal levels of provision.

Official development assistance (ODA) from industrialized countries directed to water and sanitation showed a sharp increase in 2004, though largely explained by the United States programme for reconstruction in Iraq. Donor bilateral commitments from OECD Development Assistance Committee members in 2004 for all countries were about \$3 billion, and multilateral commitments amounted to \$1.8 billion.<sup>40</sup>

However, there is no sign of increased prioritization of the water sector as such. The share of aid to water supply and sanitation in Development Assistance Committee members' total ODA allocable by sector dropped from the 1999–2000 level of 8 per cent to a 2001–2002 level of 6 per cent, where it remained in 2003–2004. France, Germany, Japan, the Netherlands and the United States were the largest country donors for the sector in 2004.<sup>41</sup>

# ABOUT THE DATA: HOW PROGRESS IS MEASURED

Progress towards the MDG targets to improve access to safe drinking water and basic sanitation is measured by the proportions of the population using improved drinking-water sources and improved sanitation facilities as defined below.

## DRINKING-WATER SOURCES

### IMPROVED

Piped water into dwelling, plot or yard  
Public tap/standpipe  
Tube well/borehole  
Protected dug well  
Protected spring  
Rainwater collection

### UNIMPROVED

Unprotected dug well  
Unprotected spring  
Cart with small tank/drum  
Tanker truck  
Surface water (river, dam, lake, pond, stream, canal, irrigation channel)  
Bottled water<sup>a</sup>

<sup>a</sup> Bottled water is considered to be improved only when the household uses water from an improved source for cooking and personal hygiene.

<sup>b</sup> Only private facilities are considered to be improved.

<sup>c</sup> Excreta are flushed to the street, yard or plot, open sewer, ditch, drainage way, channel river or stream.

## SANITATION FACILITIES

### IMPROVED<sup>b</sup>

Flush/pour flush to:  
- piped sewer system  
- septic tank  
- pit latrine  
Ventilation improved (VIP) latrine  
Pit latrine with slab  
Composting toilet

### UNIMPROVED

Flush/pour flush to elsewhere<sup>c</sup>  
Pit latrine without slab/open pit  
Bucket  
Hanging toilet/hanging latrine  
No facilities or bush/field

which requires sanitary inspection of drinking-water sources, as well as physical, chemical and microbial water-quality testing. Thus, the proportion of the population using 'safe' drinking water is likely to be lower than that using improved drinking-water sources. Nor do surveys provide a precise measure of water-consumption quantities. Multiple Indicator Cluster Surveys include a question on travel time to source, which can be taken as an indirect indicator for measuring the quantity of water actually used. People's basic water needs for drinking, cooking and hygiene are usually met if they can reach a public water source, collect water and return to their homes within 30 minutes; if the round trip is longer than 30 minutes, people tend to fetch less water than they need.

'Basic' sanitation facilities are considered the lowest-cost options for safe, hygienic and convenient facilities that prevent the user and his or her immediate environment from coming into contact with human excreta. Public and shared facilities are not considered to be improved and so are not included in rates of coverage.

The estimates presented in this report card are based on more than 500 nationally representative surveys and censuses conducted over the past 25 years. Demographic and Health Surveys, Multiple Indicator Cluster Surveys and data from national censuses make up more than two thirds of the data currently on file with the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP), responsible for monitoring progress towards the MDG drinking-water and sanitation targets. Estimates are derived by fitting a linear regression line to available survey and census data points and extrapolating the line out to common reference years (1990 and 2004).

Detailed information by country is available at <[www.childinfo.org](http://www.childinfo.org)> and <[www.wssinfo.org](http://www.wssinfo.org)> and in the new JMP report (August 2006).

These are proxy indicators. Improved drinking-water sources are more likely to provide safe drinking water than unimproved sources, and improved sanitation facilities are more likely to be sanitary than unimproved facilities. But they are not a direct measure of 'safe' drinking water and 'basic' sanitation as articulated in the MDG 7 target that calls for halving, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation.

Improved drinking-water sources may still contain harmful substances, and clean water can be contaminated during transport and storage. Household surveys from which drinking-water coverage data are collected do not provide information on water quality,

# ENDNOTE: THE WAY FORWARD

This statistical snapshot of the world's progress towards the MDG targets for water and sanitation offers a mixed message overall.

The world is on track to meet the target on reducing the proportion of people without sustainable access to safe drinking water – though it is struggling to keep pace with population growth and ever-accelerating urbanization. The target on sanitation will plainly not be met unless progress is greatly accelerated, and if it is not, 2.4 billion people will be without access to basic sanitation in 2015. On both targets, sub-Saharan Africa is lagging far behind the progress needed; in relation to sanitation, South Asia still has a very long road to travel, despite more than doubling its provision between 1990 and 2004.

The world's children have a right to safe water and basic sanitation, and to the health that these sustain. To a large extent, sustained progress in health, nutrition and education depends upon improvements in water and sanitation. The beneficial effect of fully immunizing a child is entirely lost, for example, if that child dies of diarrhoeal disease.

The relatively slow progress in sanitation when compared with that for water indicates an urgent need to pick up the pace. There is widespread acceptance that sanitation services are critical to improving health and to preserving the gains made in other sectors and a growing recognition that hygiene behaviour change is key to saving children's lives.

Progress towards the MDGs is recognizably failing in three critical areas:

- Mobilizing and maintaining political will at all levels around water- and sanitation-related issues
- Ensuring sufficient national capacity, knowledge and institutional support to allow for an adequate response
- Making services sustainable, and improving the quality of services.

## Key lessons learned

Several lessons have been learned within the sector. We know, for example, that sustainable service delivery depends on decentralized authority, on public- and private-sector resources and expertise, with adequate central support, and on communities empowered to make well-informed choices about technical, management and financial options.

We know that going to scale requires central support through an enabling policy environment, adequate funding and sufficient human-resource capacity. Priority attention and specific techniques are needed to reach the poor and address gender inequities, and high-quality, disaggregated information and strategic partnerships are needed to effectively leverage funds and target activities.

We know, too, that interventions will have more impact if approaches are intersectoral. In emergencies, preparedness and coordination are key to an effective response.

## It is possible to reach the targets

Knowledge and expertise are available about how to advance the agenda for water, sanitation and hygiene, and nine proposed steps to meeting the MDG targets are set out in the box on page 29. These steps draw heavily from the report of the UN Millennium Project Task Force on Water and Sanitation.<sup>42</sup>

There is no doubt that the MDG target on drinking water can be reached. Even the target on sanitation could be met if sufficient resources and commitment were dedicated to the task.

There is, however, no question that meeting the MDG targets – and rising to all the challenges that stand in the way – will require

more resources from national budgets and official development assistance flows. The level of investment, both financial and human, simply has to be stepped up. Not only will this require stronger cost-sharing arrangements between national governments, communities and households, but also the reallocation of existing resources – from government and elsewhere – to target the poorest communities that have struggled without these basic services for too long.

WHO and UNICEF have estimated that reaching the underserved with low-cost, basic levels of service for drinking water and sanitation by the year 2015 will cost \$11.3 billion a year. And more than 80 per cent of the total resources will be needed in Asia and Africa.<sup>43</sup>

It would be money well spent, considering the massive benefits that would spring from the achievement – including fewer child deaths and bouts of illness, more days spent by children in school, and time gained for women and girls when water supplies and sanitation facilities are brought closer to home. It would be a small price to pay for delivering the good health that is their right to many more children.

## NINE STEPS TO REACH THE MDG TARGETS

- 1 Raise the *profile of sanitation and hygiene* in all political and developmental venues. Sanitation is in a state of crisis that needs to be addressed with due urgency.
- 2 Increase national government *funding of water and sanitation improvements*, and adopt ‘fast-track’ countries for rapid scale-up of official development assistance and other forms of financial assistance to the sector, using such selection criteria as good governance and absorptive capacity.
- 3 Support and introduce a series of ‘*quick impact initiatives*’ that include programmes encouraging hand washing, household water treatment, and community-based ‘franchising’ of water and sanitation service delivery in order to demonstrate how a difference can be made in a short time – while stressing the importance of longer-term interventions for providing and upgrading these basic services.
- 4 Accelerate access to water and sanitation, with *particular attention to the unreached*, both urban and rural, by improving the management and allocation of resources and ensuring that national sector programmes focus on access to water and sanitation services to enhance the health and sustainable livelihoods of the poor.
- 5 Focus on *essential and sustainable low-cost services*, especially at the household level, with adequate attention to community-based maintenance and operation systems and to ensuring that plans are in place for the upgrading of services based on people’s ability to pay.
- 6 Encourage *household water security* through the year-round availability of enough water of adequate quality to ensure family survival, health and productivity, without compromising the integrity of the environmental resource base.
- 7 Strengthen *policies and institutional frameworks* needed to improve sanitation, safe water supply and hygiene, and build government capacities for leadership and responsibility.
- 8 Recognize the importance of achieving the water and sanitation MDGs in *national and regional developmental frameworks*.
- 9 Strengthen *partnerships* to help mobilize concern and commitment for action to achieve the MDGs. Such partnerships include the Water, Sanitation and Hygiene (WASH) Initiative, led by the Water Supply and Sanitation Collaborative Council, and the new Global Water Challenge, supported through the United Nations Foundation, a network of local and international non-governmental organizations, private-sector companies, government officials and community representatives – which supports national programmes and has already begun to reap the fruits of effective collaboration.

# WATER AND SANITATION

U5MR 2004	Access to improved drinking-water sources (percentage)									Access to improved sanitation facilities (percentage)							
	1990			2004			MDG target 2015	Progress towards the MDG target	1990			2004			MDG target 2015	Progress towards the MDG target	
	Urban	Rural	Total	Urban	Rural	Total			Urban	Rural	Total	Urban	Rural	Total			
<b>West/Central Africa</b>																	
Benin	152	73	57	63	78	57	67	82	insufficient	32	2	12	59	11	33	56	not on track
Burkina Faso	192	61	34	38	94	54	61	69	on track	32	3	7	42	6	13	54	not on track
Cameroon	149	77	31	50	86	44	66	75	on track	59	40	48	58	43	51	74	not on track
Cape Verde	36	-	-	-	86	73	80	88	-	-	-	-	61	19	43	66	-
Central African Republic	193	74	39	52	93	61	75	76	on track	34	17	23	47	12	27	62	not on track
Chad	200	41	13	19	41	43	42	60	on track	28	2	7	24	4	9	54	not on track
Congo	108	-	-	-	84	27	58	76	-	-	-	-	28	25	27	59	-
Congo, Democratic Republic of the	205	90	25	43	82	29	46	72	not on track	53	1	16	42	25	30	58	not on track
Côte d'Ivoire	194	73	67	69	97	74	84	85	on track	37	10	21	46	29	37	61	not on track
Equatorial Guinea	204	-	-	-	45	42	43	68	-	-	-	-	60	46	53	73	-
Gabon	91	95	-	-	95	47	88	91	-	-	-	-	37	30	36	64	-
Gambia	122	95	-	-	95	77	82	90	-	-	-	-	72	46	53	74	-
Ghana	112	86	37	55	88	64	75	78	on track	23	10	15	27	11	18	58	not on track
Guinea	155	74	34	44	78	35	50	72	not on track	27	10	14	31	11	18	57	not on track
Guinea-Bissau	203	-	-	-	79	49	59	76	-	-	-	-	57	23	35	62	-
Liberia	235	85	34	55	72	52	61	78	not on track	59	24	39	49	7	27	70	not on track
Mali	219	50	29	34	78	36	50	67	on track	50	32	36	59	39	46	68	not on track
Mauritania	125	32	43	38	59	44	53	69	on track	42	22	31	49	8	34	66	not on track
Niger	259	62	35	39	80	36	46	70	not on track	35	2	7	43	4	13	54	not on track
Nigeria	197	80	33	49	67	31	48	75	not on track	51	33	39	53	36	44	70	not on track
Sao Tome and Principe	118	-	-	-	89	73	79	88	-	-	-	-	32	20	25	58	-
Senegal	137	89	49	65	92	60	76	83	on track	53	19	33	79	34	57	67	on track
Sierra Leone	283	-	-	-	75	46	57	76	-	-	-	-	53	30	39	66	-
Togo	140	81	37	50	80	36	52	75	not on track	71	24	37	71	15	35	69	not on track
<b>Eastern/Southern Africa</b>																	
Angola	260	23	40	36	75	40	53	68	on track	61	18	29	56	16	31	65	not on track
Botswana	116	100	88	93	100	90	95	97	on track	61	21	38	57	25	42	69	not on track
Burundi	190	97	67	69	92	77	79	85	on track	42	44	44	47	35	36	72	not on track
Comoros	70	98	91	93	92	82	86	97	not on track	62	20	32	41	29	33	66	not on track
Eritrea	82	62	39	43	74	57	60	72	on track	44	0	7	32	3	9	54	not on track
Ethiopia	166	81	15	23	81	11	22	62	not on track	13	2	3	44	7	13	52	not on track
Kenya	120	91	30	45	83	46	61	73	on track	48	37	40	46	41	43	70	not on track
Lesotho	82	-	-	-	92	76	79	88	-	61	32	37	61	32	37	69	-
Madagascar	123	80	27	40	77	35	50	70	not on track	27	10	14	48	26	34	57	not on track
Malawi	175	90	33	40	98	68	73	70	on track	64	45	47	62	61	61	74	on track
Mauritius	15	100	100	100	100	100	100	100	on track	95	-	-	95	94	94	-	-
Mozambique	152	83	24	36	72	26	43	68	not on track	49	12	20	53	19	32	60	not on track
Namibia	63	99	42	57	98	81	87	79	on track	70	8	24	50	13	25	62	not on track
Rwanda	203	88	57	59	92	69	74	80	on track	49	36	37	56	38	42	69	not on track
Seychelles	14	100	75	88	100	75	88	94	-	-	100	-	-	100	-	-	-
Somalia	225	-	-	-	32	27	29	61	-	-	-	-	48	14	26	58	-
South Africa	67	98	69	83	99	73	88	92	on track	85	53	69	79	46	65	85	not on track
Swaziland	156	-	-	-	87	54	62	79	-	-	-	-	59	44	48	71	-
Tanzania, United Republic of	126	85	35	46	85	49	62	73	on track	52	45	47	53	43	47	74	not on track
Uganda	138	80	40	44	87	56	60	72	on track	54	41	42	54	41	43	71	not on track
Zambia	182	86	27	50	90	40	58	75	insufficient	63	31	44	59	52	55	72	insufficient
Zimbabwe	129	100	69	78	98	72	81	89	on track	69	42	50	63	47	53	75	not on track
<b>Middle East/North Africa</b>																	
Algeria	40	99	89	94	88	80	85	97	not on track	99	77	88	99	82	92	94	on track
Bahrain	11	100	-	-	100	-	-	-	-	100	-	-	100	-	-	-	-
Djibouti	126	76	59	72	76	59	73	86	insufficient	88	50	79	88	50	82	90	on track
Egypt	36	97	92	94	99	97	98	97	on track	70	42	54	86	58	70	77	on track
Iran (Islamic Republic of)	38	99	84	92	99	84	94	96	on track	86	78	83	-	-	-	92	-
Iraq	125	97	50	83	97	50	81	92	not on track	95	48	81	95	48	79	91	not on track
Jordan	27	99	91	97	99	91	97	99	on track	97	82	93	94	87	93	97	not on track
Lebanon	31	100	100	100	100	100	100	100	on track	100	-	-	100	87	98	99	on track
Libyan Arab Jamahiriya	20	72	68	71	-	-	-	86	-	97	96	97	97	96	97	99	on track
Morocco	43	94	58	75	99	56	81	88	on track	87	27	56	88	52	73	78	on track
Occupied Palestinian Territory	24	94	-	-	94	88	92	96	-	-	-	-	78	61	73	85	-
Oman	13	85	73	80	-	-	-	90	-	97	61	83	97	-	-	92	-
Qatar	21	100	100	100	100	100	100	100	on track	100	100	100	100	100	100	100	on track
Saudi Arabia	27	97	63	90	97	-	-	95	-	100	-	-	100	-	-	-	-
Sudan	91	85	57	64	78	64	70	82	insufficient	53	26	33	50	24	34	67	not on track
Syrian Arab Republic	16	94	67	80	98	87	93	90	on track	97	50	73	99	81	90	87	on track
Tunisia	25	95	62	81	99	82	93	91	on track	95	47	75	96	65	85	88	on track
United Arab Emirates	8	100	100	100	100	100	100	100	on track	98	95	97	98	95	98	99	on track
Yemen	111	84	68	71	71	65	67	86	not on track	82	19	32	86	28	43	66	not on track

No water and sanitation data: Kuwait.

Country	U5MR 2004	Access to improved drinking-water sources (percentage)						Access to improved sanitation facilities (percentage)									
		1990			2004			MDG target 2015	Progress towards the MDG target	1990			2004			MDG target 2015	Progress towards the MDG target
		Urban	Rural	Total	Urban	Rural	Total			Urban	Rural	Total	Urban	Rural	Total		
<b>South Asia</b>																	
Afghanistan	257	10	3	4	63	31	39	52	on track	7	2	3	49	29	34	52	on track
Bangladesh	77	83	69	72	82	72	74	86	insufficient	55	12	20	51	35	39	60	insufficient
Bhutan	80	-	-	-	86	60	62	79	-	-	-	-	65	70	70	83	-
India	85	89	64	70	95	83	86	85	on track	45	3	14	59	22	33	57	not on track
Maldives	46	100	95	96	98	76	83	98	not on track	100	-	-	100	42	59	76	-
Nepal	76	95	67	70	96	89	90	85	on track	48	7	11	62	30	35	56	on track
Pakistan	101	95	78	83	96	89	91	92	on track	82	17	37	92	41	59	69	on track
Sri Lanka	14	91	62	68	98	74	79	84	on track	89	64	69	98	89	91	85	on track
<b>East Asia/Pacific</b>																	
Cambodia	141	-	-	-	64	35	41	61	on track	-	-	-	53	8	17	52	-
China	31	99	59	70	93	67	77	85	on track	64	7	23	69	28	44	62	on track
Cook Islands	21	99	87	94	98	88	94	97	not on track	100	91	94	100	100	100	97	on track
Fiji	20	-	-	-	43	51	47	71	-	87	55	68	87	55	72	84	-
Indonesia	38	92	63	72	87	69	77	86	on track	65	37	46	73	40	55	73	insufficient
Kiribati	65	76	33	49	77	53	65	75	on track	33	21	25	59	22	40	63	not on track
Korea, Democratic People's Rep. of	55	100	100	100	100	100	100	100	on track	-	-	-	58	60	59	77	-
Korea, Republic of	6	97	-	-	97	71	92	95	-	-	-	-	-	-	-	-	-
Lao People's Democratic Republic	83	-	-	-	79	43	51	72	-	-	-	-	67	20	30	60	-
Malaysia	12	100	96	98	100	96	99	99	on track	95	-	-	95	93	94	-	-
Marshall Islands	59	95	97	96	82	96	87	98	not on track	88	51	74	93	58	82	87	on track
Micronesia (Federated States of)	23	93	86	88	95	94	94	94	on track	54	20	29	61	14	28	65	not on track
Mongolia	52	87	30	63	87	30	62	82	-	-	-	-	75	37	59	77	-
Myanmar	106	86	47	57	80	77	78	79	on track	48	16	24	88	72	77	62	on track
Niue	-	100	100	100	100	100	100	100	on track	100	100	100	100	100	100	100	on track
Palau	27	73	98	80	79	94	85	90	on track	76	54	67	96	52	80	84	on track
Papua New Guinea	93	88	32	39	88	32	39	70	-	67	41	44	67	41	44	72	-
Philippines	34	95	80	87	87	82	85	94	not on track	66	48	57	80	59	72	79	on track
Samoa	30	99	89	91	90	87	88	96	not on track	100	98	98	100	100	100	99	on track
Singapore	3	100	-	100	100	-	100	100	on track	100	-	100	100	-	100	100	on track
Solomon Islands	56	-	-	-	94	65	70	83	-	98	-	-	98	18	31	61	-
Thailand	21	98	94	95	98	100	99	98	on track	95	74	80	98	99	99	90	on track
Timor-Leste	80	-	-	-	77	56	58	77	-	-	-	-	66	33	36	64	-
Tonga	25	100	100	100	100	100	100	100	on track	98	96	96	98	96	96	98	on track
Tuvalu	51	92	89	89	94	92	100	95	on track	83	74	78	93	84	90	89	on track
Vanuatu	40	93	53	60	86	52	60	80	not on track	-	-	-	78	42	50	72	-
Viet Nam	23	90	59	65	99	80	85	83	on track	58	30	36	92	50	61	68	on track
No water and sanitation data: Brunei Darussalam and Nauru.																	
<b>Latin America/Caribbean</b>																	
Antigua and Barbuda	12	95	-	-	95	89	91	95	-	98	-	-	98	94	95	98	on track
Argentina	18	97	72	94	98	80	96	97	on track	86	45	81	92	83	91	91	on track
Bahamas	13	98	-	-	98	86	97	98	on track	100	100	100	100	100	100	100	on track
Barbados	12	100	100	100	100	100	100	100	on track	99	100	100	99	100	100	100	on track
Belize	39	100	-	-	100	82	91	95	-	-	-	-	71	25	47	71	-
Bolivia	69	91	49	72	95	68	85	86	on track	49	14	33	60	22	46	67	not on track
Brazil	34	93	55	83	96	57	90	92	on track	82	37	71	83	37	75	86	insufficient
Chile	8	98	49	90	100	58	95	95	on track	91	52	84	95	62	91	92	on track
Colombia	21	98	78	92	99	71	93	96	on track	95	52	82	96	54	86	91	on track
Costa Rica	13	100	-	-	100	92	97	98	on track	-	97	-	89	97	92	96	-
Cuba	7	95	-	-	95	78	91	95	-	99	95	98	99	95	98	99	on track
Dominica	14	100	-	-	100	90	97	98	on track	-	-	-	86	75	84	91	-
Dominican Republic	32	98	66	84	97	91	95	92	on track	60	43	52	81	73	78	76	on track
Ecuador	26	82	61	73	97	89	94	87	on track	77	45	63	94	82	89	82	on track
El Salvador	28	87	48	67	94	70	84	84	on track	70	33	51	77	39	62	76	on track
Grenada	21	97	-	-	97	93	95	97	on track	96	97	97	96	97	96	99	on track
Guatemala	45	89	72	79	99	92	95	90	on track	73	47	58	90	82	86	79	on track
Guyana	64	-	-	-	83	83	83	91	-	-	-	-	86	60	70	83	-
Haiti	117	60	42	47	52	56	54	74	not on track	25	23	24	57	14	30	62	not on track
Honduras	41	92	79	84	95	81	87	92	on track	77	31	50	87	54	69	75	on track
Jamaica	20	98	86	92	98	88	93	96	not on track	86	64	75	91	69	80	88	on track
Mexico	28	89	64	82	100	87	97	91	on track	75	13	58	91	41	79	79	on track
Nicaragua	38	91	46	70	90	63	79	85	on track	64	24	45	56	34	47	73	not on track
Panama	24	99	79	90	99	79	90	95	-	89	51	71	89	51	73	86	-
Paraguay	24	81	44	62	99	68	86	81	on track	72	45	58	94	61	80	79	on track
Peru	29	89	41	74	89	65	83	87	on track	69	15	52	74	32	63	76	on track
Saint Kitts and Nevis	21	99	99	100	99	99	100	100	on track	96	96	95	96	96	95	98	on track
Saint Lucia	14	98	98	98	98	98	98	99	on track	-	-	-	89	89	89	94	-
Saint Vincent and the Grenadines	22	-	-	-	-	93	-	-	-	-	96	-	-	96	-	-	-
Suriname	39	98	-	-	98	73	92	95	-	99	-	-	99	76	94	96	-
Trinidad and Tobago	20	93	89	92	92	88	91	96	not on track	100	100	100	100	100	100	100	on track
Uruguay	17	100	100	100	100	100	100	100	on track	100	99	100	100	99	100	100	on track
Venezuela, Bolivarian Rep. of	19	-	-	-	85	70	83	91	-	-	-	-	71	48	68	82	-

U5MR 2004	Access to improved drinking-water sources (percentage)								Access to improved sanitation facilities (percentage)								
	1990			2004			MDG target 2015	Progress towards the MDG target	1990			2004			MDG target 2015	Progress towards the MDG target	
	Urban	Rural	Total	Urban	Rural	Total			Urban	Rural	Total	Urban	Rural	Total			
<b>CEE/CIS</b>																	
Albania	19	99	94	96	99	94	96	98	on track	99	-	-	99	84	91	94	-
Armenia	32	99	-	-	99	80	92	96	-	96	-	-	96	61	83	91	-
Azerbaijan	90	82	51	68	95	59	77	84	on track	-	-	-	73	36	54	75	-
Belarus	11	100	100	100	100	100	100	100	on track	-	-	-	93	61	84	91	-
Bosnia and Herzegovina	15	99	96	97	99	96	97	99	on track	99	-	-	99	92	95	97	on track
Bulgaria	15	100	97	99	100	97	99	100	on track	100	96	99	100	96	99	100	on track
Croatia	7	100	100	100	100	100	100	100	on track	100	100	100	100	100	100	100	on track
Georgia	45	91	67	80	96	67	82	90	on track	99	94	97	96	91	94	99	not on track
Kazakhstan	73	97	73	87	97	73	86	94	-	87	52	72	87	52	72	86	-
Kyrgyzstan	68	98	66	78	98	66	77	89	-	75	51	60	75	51	59	80	-
Moldova, Republic of	28	97	-	-	97	88	92	96	-	-	-	-	86	52	68	82	-
Romania	20	-	-	-	91	16	57	76	-	-	-	-	89	-	-	-	-
Russian Federation	21	97	86	94	100	88	97	97	on track	93	70	87	93	70	87	94	not on track
Serbia and Montenegro*	15	99	86	93	99	86	93	-	-	97	77	87	97	77	87	-	-
Tajikistan	118	-	-	-	92	48	59	78	-	-	-	-	70	45	51	73	-
Turkey	32	92	74	85	98	93	96	93	on track	96	70	85	96	72	88	93	on track
Turkmenistan	103	-	-	-	93	54	72	84	-	-	-	-	77	50	62	79	-
Ukraine	18	99	-	-	99	91	96	98	on track	98	-	-	98	93	96	98	on track
Uzbekistan	69	99	91	94	95	75	82	97	not on track	69	39	51	78	61	67	76	on track

No water and sanitation data: The former Yugoslav Republic of Macedonia.

<b>Industrialized Countries</b>																	
Andorra	7	100	100	100	100	100	100	100	on track	100	100	100	100	100	100	100	on track
Australia	6	100	100	100	100	100	100	100	on track	100	100	100	100	100	100	100	on track
Austria	5	100	100	100	100	100	100	100	on track	100	100	100	100	100	100	100	on track
Belgium	5	100	-	-	100	-	-	-	-	-	-	-	-	-	-	-	-
Canada	6	100	99	100	100	99	100	100	on track	100	99	100	100	99	100	100	on track
Cyprus	5	100	100	100	100	100	100	100	on track	100	100	100	100	100	100	100	on track
Czech Republic	4	100	100	100	100	100	100	100	on track	99	97	99	99	97	98	100	on track
Denmark	5	100	100	100	100	100	100	100	on track	-	-	-	-	-	-	-	-
Estonia	8	100	99	100	100	99	100	100	on track	97	96	97	97	96	97	99	on track
Finland	4	100	100	100	100	100	100	100	on track	100	100	100	100	100	100	100	on track
France	5	100	100	100	100	100	100	100	on track	-	-	-	-	-	-	-	-
Germany	5	100	100	100	100	100	100	100	on track	100	100	100	100	100	100	100	on track
Hungary	8	100	98	99	100	98	99	100	on track	100	-	-	100	85	95	97	on track
Iceland	3	100	100	100	100	100	100	100	on track	100	100	100	100	100	100	100	on track
Ireland	6	100	-	-	100	-	-	-	-	-	-	-	-	-	-	-	-
Israel	6	100	100	100	100	100	100	100	on track	100	-	-	100	-	-	-	-
Italy	5	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Japan	4	100	100	100	100	100	100	100	on track	100	100	100	100	100	100	100	on track
Latvia	12	100	96	99	100	96	99	100	on track	-	-	-	82	71	78	-	-
Luxembourg	6	100	100	100	100	100	100	100	on track	-	-	-	-	-	-	-	-
Malta	6	100	100	100	100	100	100	100	on track	100	-	-	100	-	-	-	-
Monaco	5	100	-	100	100	-	100	100	on track	100	-	100	100	-	100	100	on track
Netherlands	6	100	100	100	100	100	100	100	on track	100	100	100	100	100	100	100	on track
New Zealand	6	100	82	97	100	-	-	99	-	-	88	-	-	-	-	-	-
Norway	4	100	100	100	100	100	100	100	on track	-	-	-	-	-	-	-	-
Poland	8	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Slovakia	9	100	99	100	100	99	100	100	on track	100	98	99	100	98	99	100	on track
Spain	5	100	100	100	100	100	100	100	on track	100	100	100	100	100	100	100	on track
Sweden	4	100	100	100	100	100	100	100	on track	100	100	100	100	100	100	100	on track
Switzerland	5	100	100	100	100	100	100	100	on track	100	100	100	100	100	100	100	on track
United Kingdom	6	100	100	100	100	100	100	100	on track	-	-	-	-	-	-	-	-
United States of America	8	100	100	100	100	100	100	100	on track	100	100	100	100	100	100	100	on track

No water and sanitation data: Greece, Holy See, Liechtenstein, Lithuania, Portugal, San Marino and Slovenia.

<b>Regional Summaries</b>																	
Sub-Saharan Africa	171	82	35	48	81	41	55	74	not on track	52	24	32	53	28	37	66	not on track
West/Central Africa	191	79	34	49	76	40	55	75	not on track	47	19	28	49	26	36	64	not on track
Eastern/Southern Africa	149	87	36	48	86	42	56	74	not on track	59	28	35	58	30	38	68	not on track
Middle East/North Africa	56	96	75	86	95	78	88	93	on track	87	48	68	90	53	74	84	on track
South Asia	92	89	65	71	94	81	85	86	on track	51	6	17	63	27	37	59	insufficient
East Asia/Pacific	36	97	61	72	92	70	79	86	on track	66	15	30	73	36	51	65	on track
Latin America/Caribbean	31	93	60	83	96	73	91	92	on track	81	36	68	86	49	77	84	on track
CEE/CIS	38	97	83	91	98	79	91	96	not on track	94	67	84	93	70	84	92	not on track
Industrialized countries	6	100	100	100	100	100	100	100	on track	100	100	100	100	99	100	100	on track
Developing countries	87	93	60	71	92	70	80	86	on track	68	17	35	73	33	50	68	insufficient
Least developed countries	155	78	43	51	79	51	59	76	insufficient	48	16	22	55	29	36	61	not on track
World	79	95	64	78	95	73	83	89	on track	79	26	49	80	39	59	75	insufficient

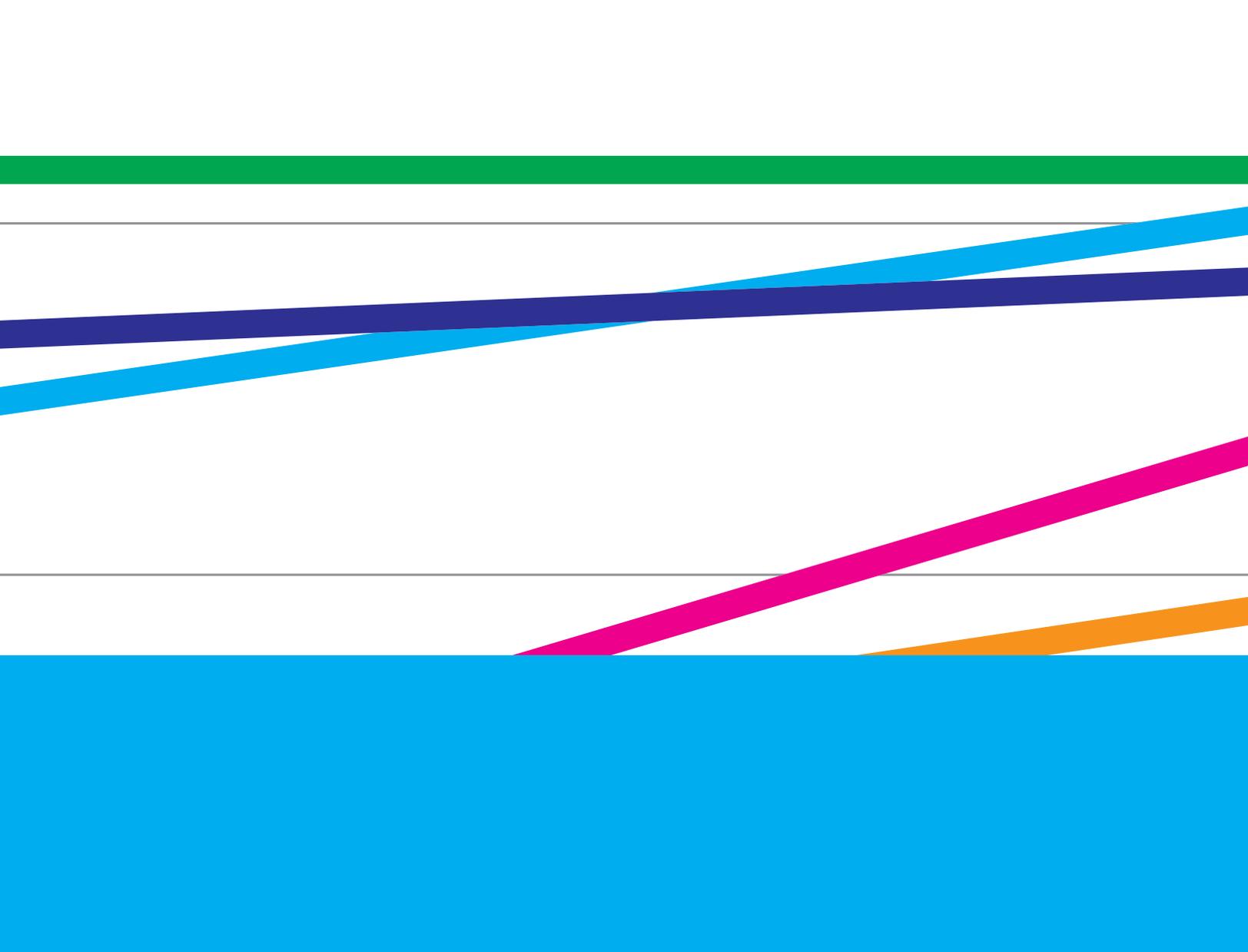
NOTES: U5MR Under-five mortality rate

- Data were not available or were insufficient to estimate trends.

\* Water and sanitation data were calculated for the country of Serbia and Montenegro in 1990 and 2004 before its break-up in 2006. JMP is in the process of revising the joint data to reflect separate coverage levels for Montenegro and Serbia, on which basis the countries' respective MDG targets and estimated progress towards those targets will be calculated.

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Published by UNICEF  
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ISBN-13: 978-92-806-4050-2  
ISBN-10: 92-806-4050-X  
\$10.00 £5.50 €8.30  
Sales no.: E.06.XX.13

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(UNICEF), New York  
September 2006