

# 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.

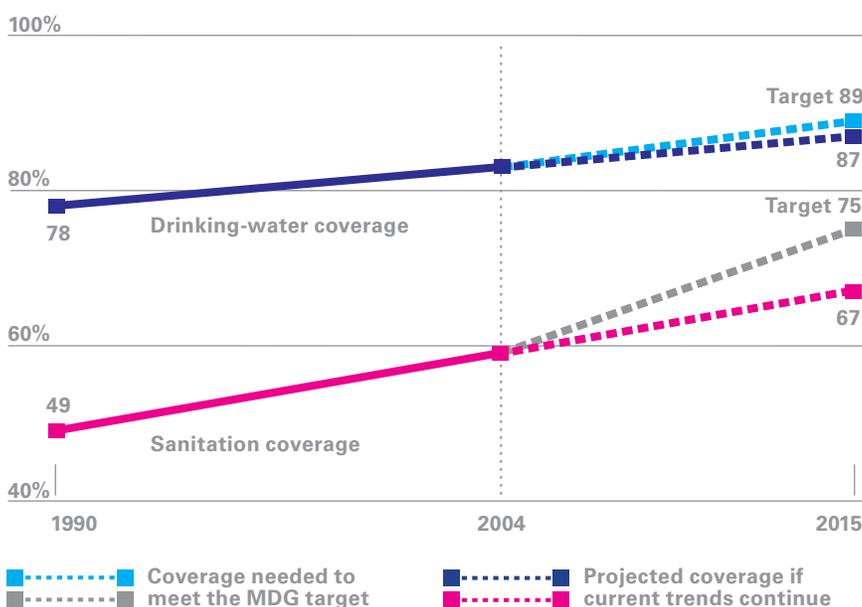
## Drinking water

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.

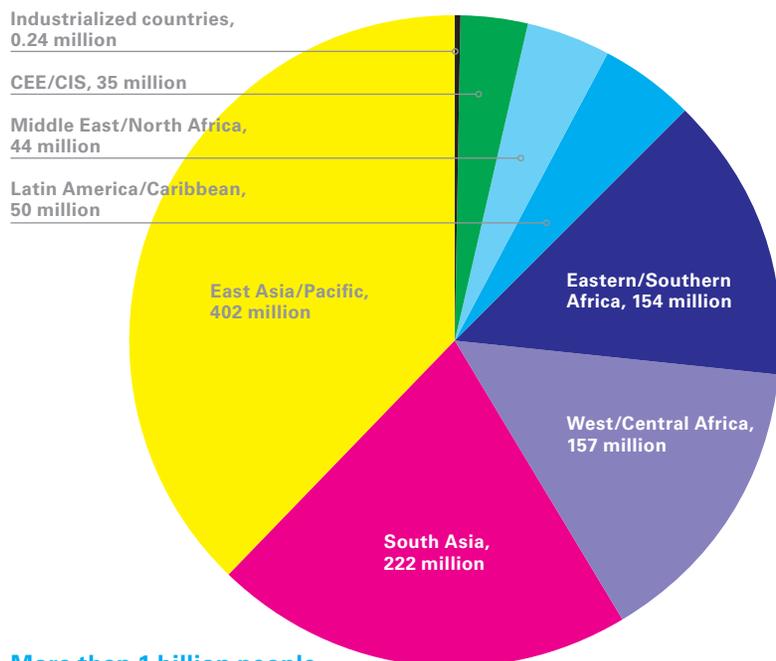
Between the two extremes are sources of drinking water that are more likely to be safe and are referred to as ‘improved’.<sup>2</sup> Among these are public standpipes, tube wells or boreholes, protected dug wells, protected springs and rainwater (see ‘About the Data’ on page 27).

## 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.

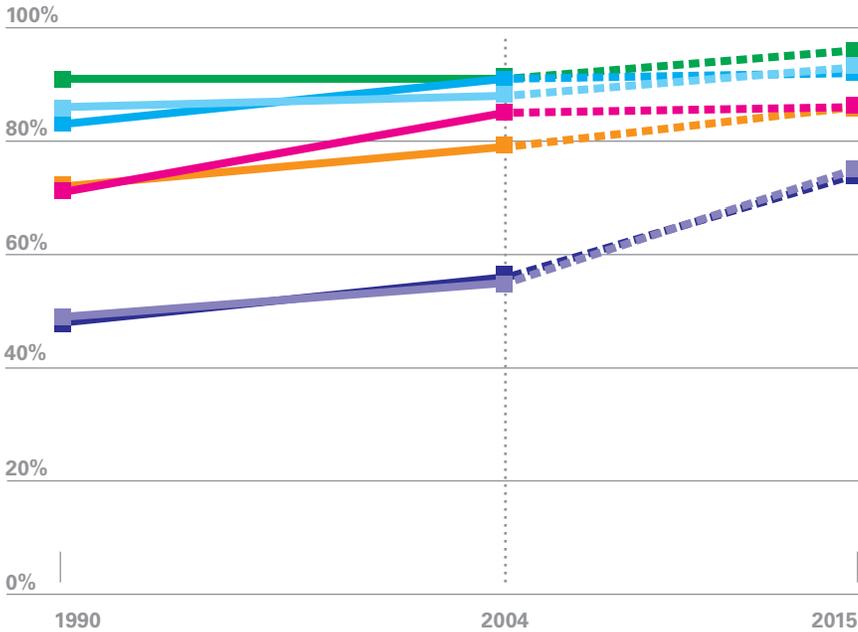
Diarrhoeal diseases are transmitted through human excreta, and it is therefore critically important to have effective barriers in place to prevent this major transmission route. Improved sanitation alone could reduce diarrhoea-related morbidity by more than a third; improved sanitation combined with 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

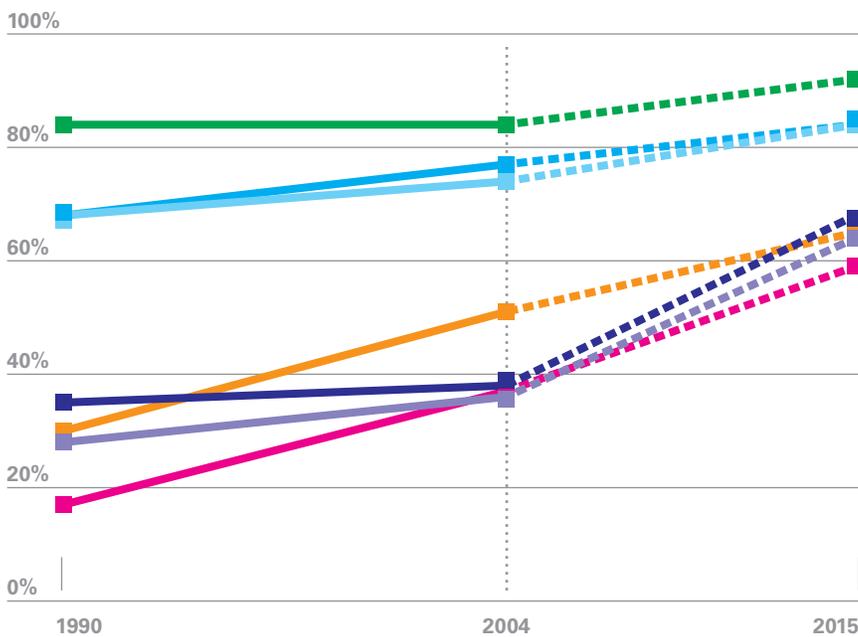
### Regional trends towards the MDG water target

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>

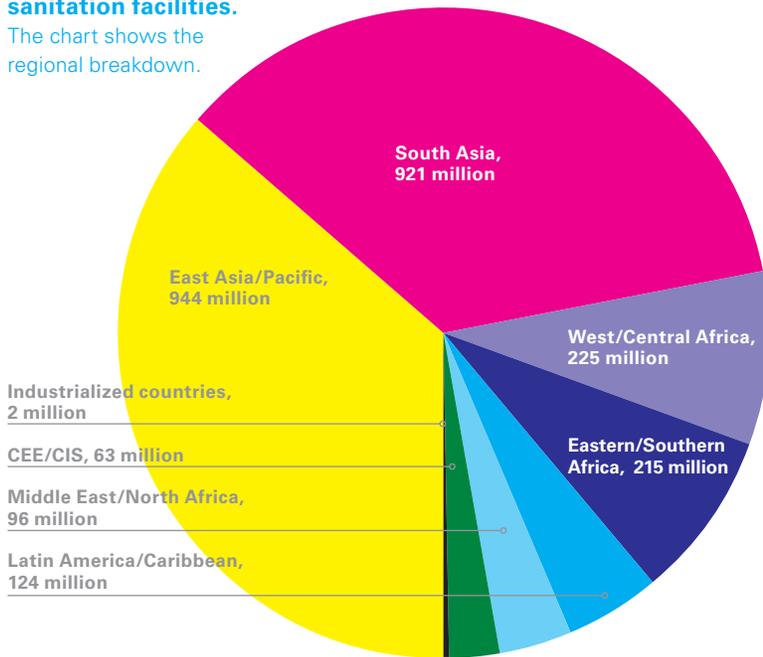
Clean water and improved sanitation can reduce the morbidity of dracunculiasis and schistosomiasis by more than three quarters.<sup>16</sup> Dracunculiasis is today at the point of eradication – its worldwide prevalence has been reduced from an estimated 3.5 million cases in 1986 to about 10,000 reported 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.

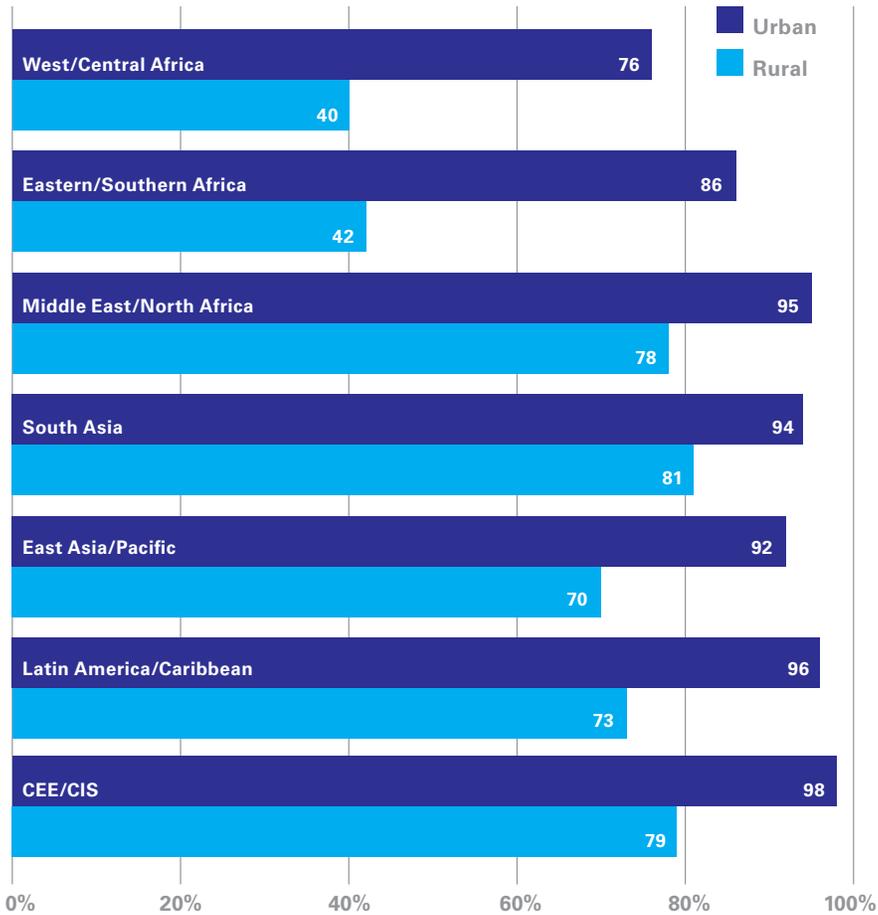
The least progress was made in CEE/CIS, where coverage froze at 84 per cent, and in Eastern/Southern Africa – where access improved only slightly, from 35 per cent in 1990 to 38 per cent in 2004, and where with population growth, the absolute number of people without sanitation increased by a third over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

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-

预览已结束，完整报告链接和二维码如下：

[https://www.yunbaogao.cn/report/index/report?reportId=5\\_6282](https://www.yunbaogao.cn/report/index/report?reportId=5_6282)

