



## Part I

# Health-related Millennium Development Goals

## Summary of status and trends

With only five years remaining to 2015, there are signs of progress in many countries in achieving the health-related Millennium Development Goals (MDGs). In other countries, progress has been limited because of conflict, poor governance, economic or humanitarian crises, and lack of resources. The effects of the global food, energy, financial and economic crises on health are still unfolding, and action is needed to protect the health spending of governments and donors alike.

**Undernutrition** is an underlying cause in about one third of all child deaths. Over the past year, rising food prices coupled with falling incomes have increased the risk of malnutrition, especially among children. Although the percentage of children under 5 years of age who are underweight (compared to the WHO Child Growth Standards<sup>3</sup>) declined globally from 25% in 1990 to 18% in 2005, subsequent progress has been uneven. In some countries, the prevalence of undernutrition has increased, and worldwide stunted growth still affected about 186 million children under 5 years of age in 2005.

Globally, **child mortality** continues to fall. In 2008, the total annual number of deaths in children under 5 years old fell to 8.8 million – down by 30% from the 12.4 million estimated in 1990. Mortality in children under 5 years old in 2008 was estimated at 65 per 1000 live births, which is a 27% reduction from 90 per 1000 live births in 1990 (Figure 1). Recent encouraging trends also indicate an acceleration of the rate of decline in all regions since 2000 (Table 1).

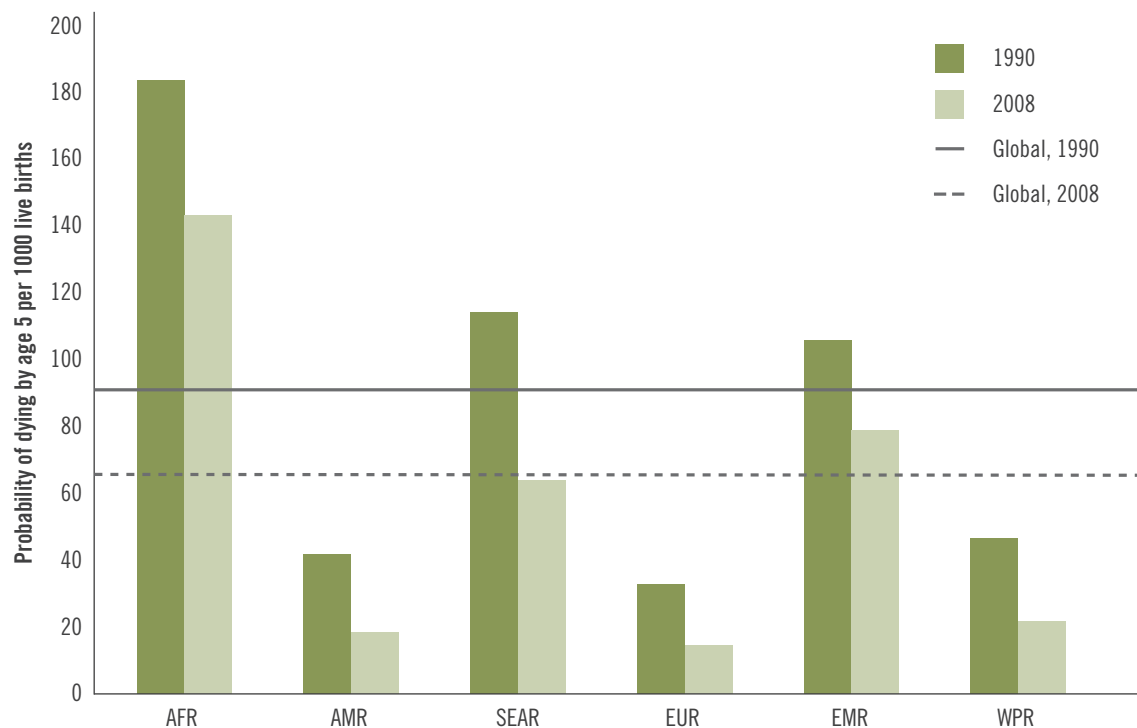
**Table 1: Average annual rate of decline (%) in mortality in children under 5 years old – 1990–1999 and 2000–2008**

WHO region	1990–1999	2000–2008
African Region	0.9	1.8
Region of the Americas	4.2	4.6
South-East Asia Region	2.5	3.8
European Region	3.6	5.6
Eastern Mediterranean Region	1.5	1.7
Western Pacific Region	2.5	5.7
<b>GLOBAL</b>	<b>1.2</b>	<b>2.3</b>

<sup>3</sup> WHO Child Growth Standards. Length/height-for-age, weight-for-age, weight-for-length, weight-for-height and body mass index-for-age: Methods and development. WHO Multicentre Growth Reference Study Group. Geneva, World Health Organization, 2006, page 312.  
[www.who.int/childgrowth/publications/en/](http://www.who.int/childgrowth/publications/en/)

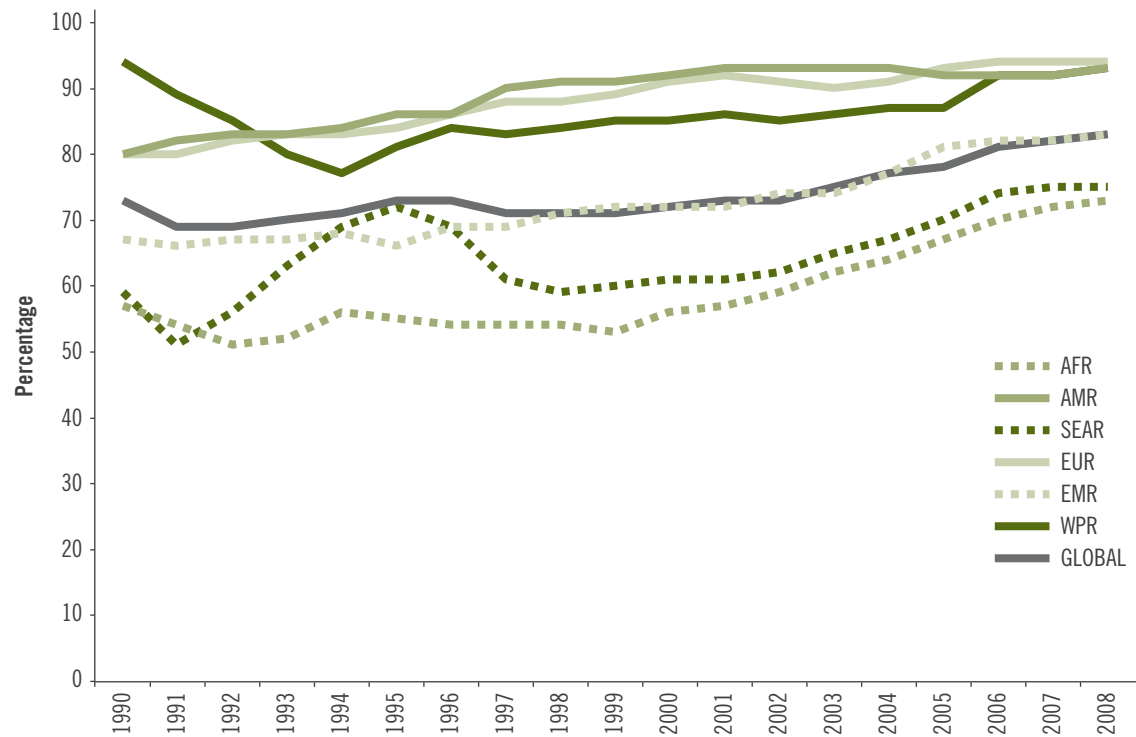
Despite these encouraging trends, regional and national averages mask considerable inequities. The greatest reductions in child mortality have been recorded among the wealthiest households and in urban areas. Concerted efforts will be needed to achieve the MDG target of a 67% reduction from 1990 levels by the year 2015, especially in countries facing economic crises or conflicts. Low-income countries would need to increase their annual average rate of decline from 1.9% to 10.9% in order to achieve the target. Reducing child mortality increasingly depends upon tackling neonatal mortality; globally about 40% of deaths in children under 5 years old are estimated to occur in the first month of life; most in the first week.

Figure 1: Mortality rate in children under 5 years old by WHO region



There have been increases in the coverage of relatively new **child health interventions**, such as the use of insecticide-treated nets to prevent malaria; efforts to prevent the mother-to-child transmission of HIV; and vaccination against hepatitis B and *Haemophilus influenzae* type B pneumonia. Gradual progress can also be recorded for several established interventions such as micronutrient supplementation, while the global coverage of measles immunization increased from 73% to 83% between 1990 and 2008 (Figure 2).

Figure 2: Measles immunization coverage among 1-year-olds by WHO region



Despite these gains, the coverage of critical interventions such as oral rehydration therapy (ORT) for diarrhoea and case management with antibiotics for acute respiratory infections (ARIs) remains inadequate. As a result, diarrhoea and pneumonia still kill almost 3 million children under 5 years old each year, especially in low-income countries.

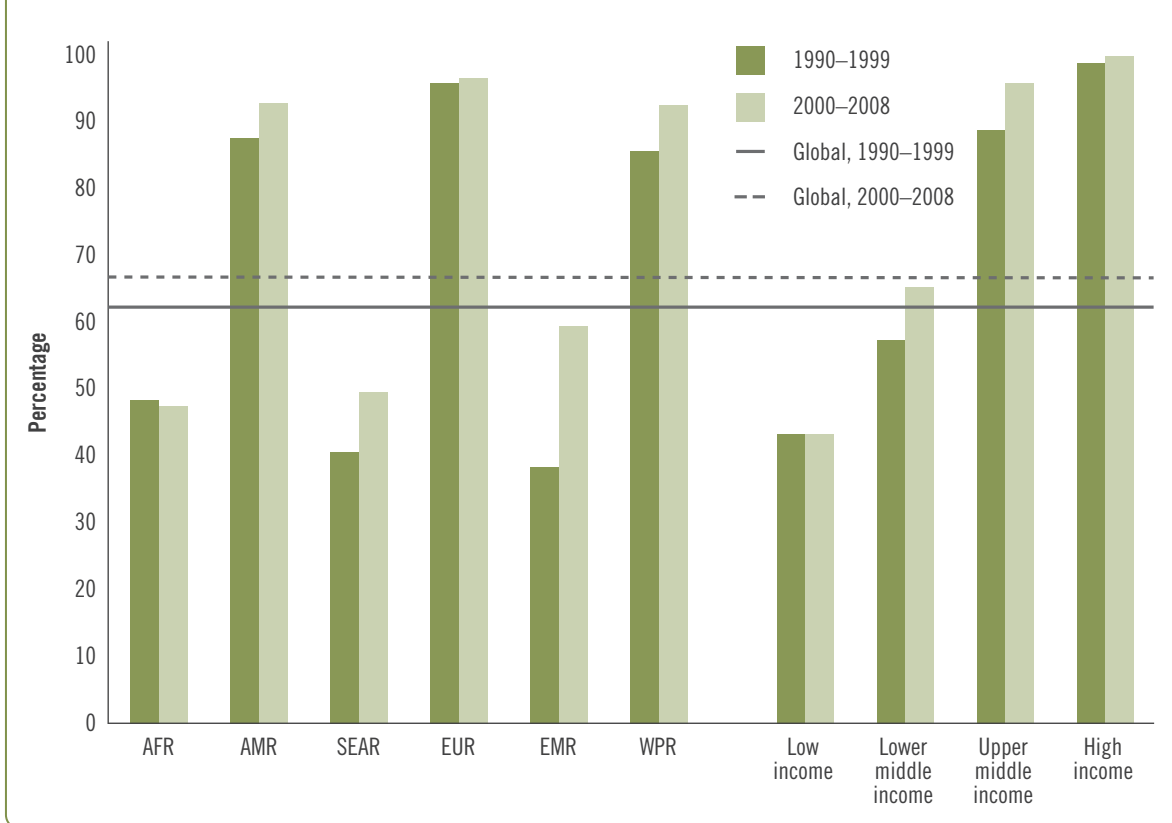
According to estimates made for the year 2005,<sup>4</sup> half a million women – most of them in developing countries – die each year of complications during pregnancy or childbirth. The risk of death was highest in the WHO African Region, where there were 900 maternal deaths per 100 000 live births; compared with only 27 per 100 000 in the WHO European Region. In fact, half of all maternal deaths occurred in the WHO African Region and another third in the WHO South-East Asia Region. Further analysis of the estimates indicated that between 1990 and 2005, no WHO region achieved the 5.5% annual decline in **maternal mortality** necessary to attain the relevant MDG target.<sup>5</sup> The WHO South-East Asia Region, the WHO European Region and the WHO Western Pacific Region showed annual declines of only around 2.4%. There appeared to be stagnation or even a possible worsening of the situation in both the WHO African Region and the WHO Eastern Mediterranean Region. Maternal mortality is the health indicator that shows the widest gaps between richer and poorer, both between and within countries.

<sup>4</sup> *Maternal mortality in 2005: Estimates developed by WHO, UNICEF, UNFPA and The World Bank.* Geneva, World Health Organization, 2007. [www.who.int/whosis/mme\\_2005.pdf](http://www.who.int/whosis/mme_2005.pdf)

<sup>5</sup> MDG 5; Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio.

Interventions to reduce the levels of maternal mortality include ensuring that all pregnant women have access to family-planning services as well as skilled care during pregnancy, childbirth and the postpartum period. This includes emergency obstetric care for the management of complications. The proportion of births attended by a skilled health worker has increased globally, with particularly pronounced improvements in the WHO Eastern Mediterranean Region (Figure 3). However, there was no improvement at all in the WHO African Region. In both the WHO African Region and the WHO South-East Asia Region, less than 50% of women received skilled care during childbirth.

**Figure 3: Births attended by skilled health personnel by WHO region and country-income group**



Antenatal care offers multiple opportunities to improve the health of women. Potential improvements include the prevention and management of HIV infection and malaria, the detection and management of eclampsia, and iron and folate supplementation – the latter being particularly important in low-income and middle-income countries where micronutrient deficiencies are common. Despite this, less than half of all pregnant women in the world receive the WHO-recommended minimum of four antenatal visits.

**Contraceptive prevalence**<sup>6</sup> in developing countries increased from 50% in 1990 to 62% in 2005.<sup>7</sup> Despite this, there remains a continuing unmet need for family planning. For example, data available during 2000–2008 indicates that in the WHO African Region 24% of women wanting to delay or stop childbearing were not using a family-planning method. Levels of adolescent fertility over the period of 2000–2007 were at 47 births per 1000 women aged 15–19 years globally, and were

<sup>6</sup> Defined here as: the proportion of women, married or in union, aged 15–49 years, using any method of contraception.

<sup>7</sup> *The Millennium Development Goals report 2009*. New York, United Nations, 2009.

[www.un.org/millenniumgoals/pdf/MDG%20Report%202009%20ENG.pdf](http://www.un.org/millenniumgoals/pdf/MDG%20Report%202009%20ENG.pdf)

particularly high in the WHO African Region at 118 births for every 1000 adolescent girls – about ten times the average in the WHO Western Pacific Region. Factors that contribute to continuing unmet need for family planning include a lack of decision-making power among women and a shortage of appropriate health services, especially for adolescent girls.

In 2008, there were an estimated 243 million cases of **malaria** causing 863 000 deaths; mostly of children under 5 years old.<sup>8</sup> Despite increases in the supply of insecticide-treated nets, their availability in that year was far below the level of need almost everywhere. The procurement of antimalarial medicines through public health services increased, but access to treatment (especially artemisinin-based combination therapy) was inadequate in all countries surveyed in 2007 and 2008. There are, however, indications<sup>8</sup> that 9 African countries and 29 countries outside Africa are on course to meet the MDG target<sup>9</sup> for reducing the malaria burden.

Latest estimates indicate that the incidence rate of **tuberculosis** (TB) continued to slowly decline, reaching an estimated 140 per 100 000 population in 2008. The prevalence of all TB cases is falling along with mortality rates among HIV-negative TB cases. Globally, the estimated case-detection rate<sup>10</sup> for new smear-positive TB cases increased from 40% in 2000 to 62% in 2008. While there were some improvements in the WHO African Region, less than 50% of TB cases were reported in this region in 2008.

Data on treatment-success rates for new smear-positive TB cases indicate consistent improvements with the global rate rising from 69% in 2000 to 86% in 2007 (Figure 4). In the WHO South-East Asia Region, the rate increased from 50% in 2000 to 88% in 2007. In the WHO European Region, while case-detection rate for new smear-positive cases increased, treatment success remains low at 67% in 2007, partly attributable to a high burden of multidrug-resistant TB. Multidrug-resistant TB and HIV-associated TB pose considerable challenges. Globally, there were an estimated 0.5 million new cases of multidrug-resistant TB in 2007, with 27 countries accounting for 85% of the total.<sup>11</sup>

New **HIV** infections have been reduced by 16% globally between 2000 and 2008, due, at least in part, to successful HIV-prevention efforts. In 2008, it was estimated that 2.7 million people were newly infected with HIV (Figure 5) and there were 2 million **HIV/AIDS**-related deaths.<sup>12</sup>

The availability and coverage of priority health-sector interventions for HIV prevention, treatment and care have continued to expand. In 2008, of the 1.4 million HIV-positive pregnant women, more than 628 000 received antiretroviral therapy (ART) to prevent the transmission of HIV to their children. This represents a coverage of 45% – an increase of 10% compared with 2007.<sup>13</sup> There are, however, striking regional variations. In the WHO African Region (where HIV prevalence among adults was the highest) only 45% of pregnant women in need in low-income and middle-income countries received treatment, while in the WHO European Region (where HIV prevalence among adults was much lower) 94% of pregnant women in need in low-income and middle-income countries had access to treatment.

<sup>8</sup> *World malaria report 2009*. Geneva, World Health Organization, 2009. [www.who.int/malaria/world\\_malaria\\_report\\_2009/en/index.html](http://www.who.int/malaria/world_malaria_report_2009/en/index.html)

<sup>9</sup> MDG 6; Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases.

<sup>10</sup> No distinction is made between DOTS and non-DOTS programmes because by 2007 more than 99% of notified cases were reported to WHO as treated in a DOTS programme. *Global tuberculosis control: a short update to the 2009 report*. Geneva, World Health Organization, 2009. [www.who.int/tb/publications/global\\_report](http://www.who.int/tb/publications/global_report)

<sup>11</sup> *Global tuberculosis control: a short update to the 2009 report*. Geneva, World Health Organization, 2009.

<sup>12</sup> *AIDS epidemic update: December 2009*. Geneva, Joint United Nations Programme on HIV/AIDS (UNAIDS) and World Health Organization (WHO), 2009. [www.unaids.org/en/KnowledgeCentre/HIVData/EpiUpdate/EpiUpdArchive/2009/default.asp](http://www.unaids.org/en/KnowledgeCentre/HIVData/EpiUpdate/EpiUpdArchive/2009/default.asp)

<sup>13</sup> *Towards universal access. Scaling up priority HIV/AIDS interventions in the health sector: Progress report 2009*. Geneva, WHO, UNAIDS, UNICEF, 2009. [www.who.int/hiv/pub/2009progressreport/en/](http://www.who.int/hiv/pub/2009progressreport/en/)

Figure 4: Treatment-success rate among new smear-positive tuberculosis cases by WHO region

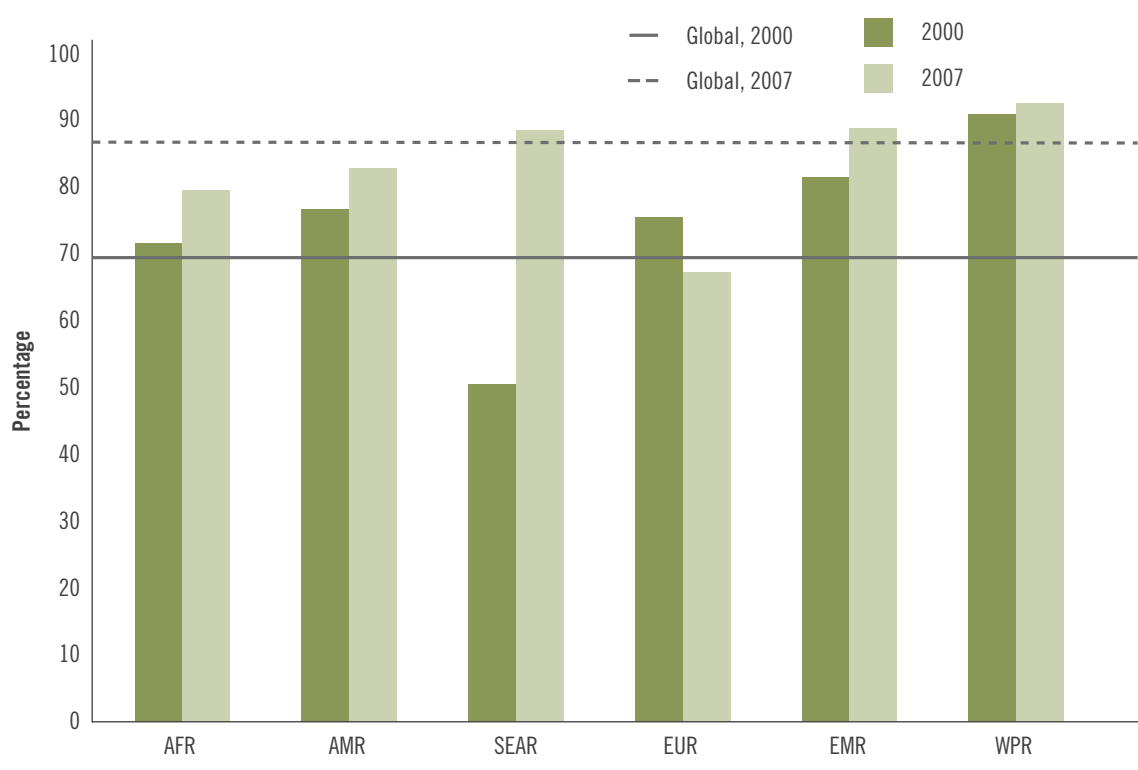
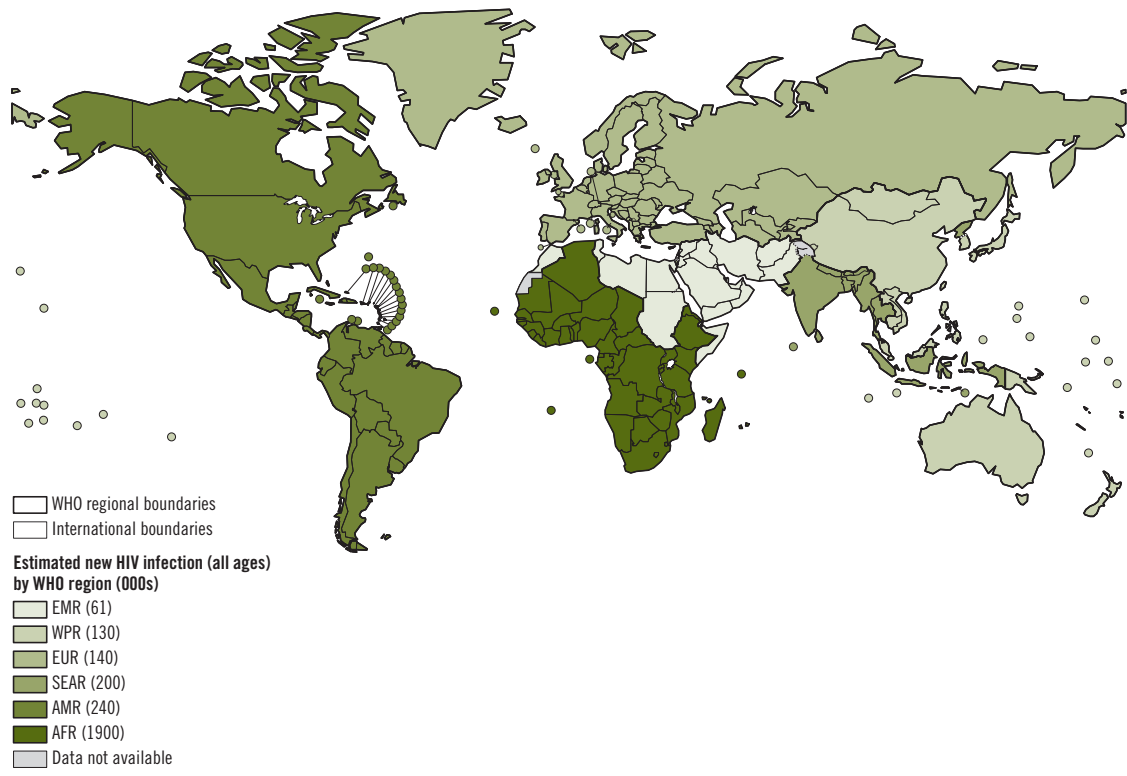


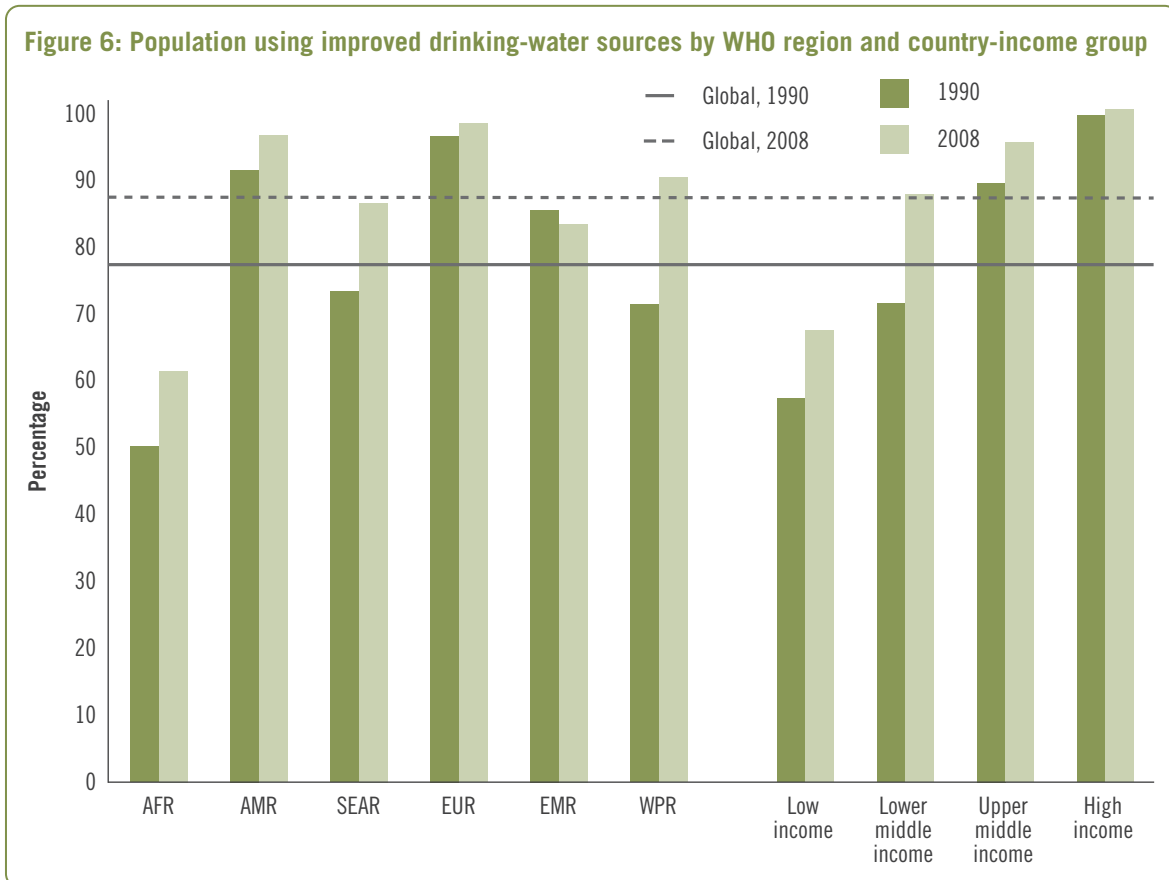
Figure 5: Adults and children newly infected with HIV in 2008 by WHO region



It is estimated that by the end of 2008, more than 4 million people in low-income and middle-income countries were receiving ART – an increase of more than 1 million compared with the end of 2007. This represents a 10-fold expansion in five years, with the greatest growth occurring in sub-Saharan Africa. Nonetheless, more than 5 million of the estimated 9.5 million people in low-income and middle-income countries needing ART were still without access to treatment.<sup>13</sup> Coverage was lowest in the WHO Eastern Mediterranean Region (where only one in every 10 people needing ART received it) and highest in the WHO Region of the Americas (where one out of two who needed therapy received it).

More than 1000 million people are affected by **neglected tropical diseases**. In 2008, 496 million people were treated for lymphatic filariasis out of the 695 million targeted. In 2008, only 4619 cases of dracunculiasis were reported – in the mid-1980s the estimated number of cases was 3.5 million. As many as 190 130 cases of cholera were reported in 2008 – up from 177 963 in 2007. At the beginning of 2009, there were a reported 213 036 cases of leprosy – down from 5.2 million in 1985.

The percentage of the world’s population using “improved” **drinking-water** sources<sup>14</sup> increased from 77% to 87% between 1990 and 2008 (Figure 6). This rate of improvement is sufficient to achieve the relevant MDG target<sup>15</sup> globally. In the WHO African Region, however, while the percentage increased from 50% in 1990 to 61% in 2008, it remained well short of the 68% needed in that year to remain on course for achieving the MDG target. The situation in the WHO Eastern Mediterranean Region appears to have stalled, and an annual rate of increase of 1.6% is needed to



<sup>14</sup> See Part II, Table 5. Risk factors, footnotes 20 and 22 for a full explanation of this term.

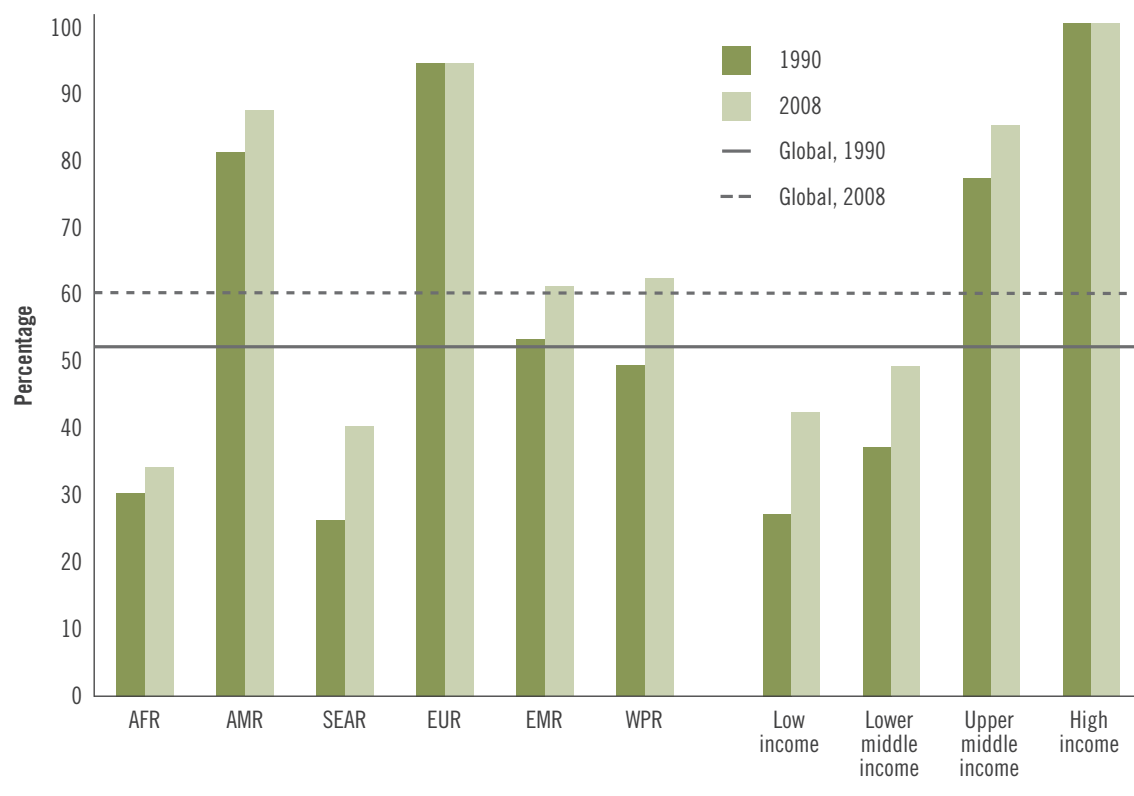
<sup>15</sup> MDG 7; Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking-water and basic sanitation.



achieve the MDG target by 2015. In 2008, the coverage was 90% in the WHO Western Pacific Region, and well in excess of this figure in the WHO Region of the Americas and the WHO European Region. In low-income countries, the annual rate of increase needs to double in order to reach the target, and concerted efforts are also needed to narrow the gap in coverage between urban and rural areas.

In 2008, 2600 million people were not using “improved” **sanitation** facilities,<sup>16</sup> and of these 1100 million were defecating in the open, resulting in high levels of environmental contamination and exposure to the risks of worm infestations (such as schistosomiasis) and microbial infections (such as trachoma, hepatitis and cholera). The situation was most severe in the WHO African Region, where the percentage of the population using improved sanitation facilities increased very slowly: from 30% in 1990 to 34% in 2008. In the WHO South-East Asia Region, the coverage increased from 26% to 40% – still short of the MDG target. In the WHO European Region, 6% of the population were not using improved sanitation facilities in 2008 (Figure 7).

**Figure 7: Population using improved sanitation facilities by WHO region and country-income group**



Although nearly all countries publish an **essential medicines** list, the availability of medicines at public-health facilities is often poor. Surveys conducted in approximately 30 low-income countries indicate that the availability of selected generic medicines at health facilities was only 44% in the public sector and 66% in the private sector. Lack of medicines in the public sector forces patients to purchase medicines privately. In the private sector, generic medicines cost on average 630% more

<sup>16</sup> See Part II, Table 5. Risk factors, footnotes 21 and 22 for a full explanation of this term.



The following charts provide country-by-country and regional summaries of progress for key MDG indicators for which data are available for most countries. For each indicator, countries are sorted within the relevant WHO region by the level of the indicator at the latest available year. Countries with no data, or for which a particular indicator is not relevant, are included at the end of each regional list.

Depending on the availability of data for each indicator, there are three types of chart:

#### Chart type I

For three indicators – under-five mortality rate; population using improved drinking-water sources; and population using improved sanitation – the charts show data for the latest available year; trends since 1990 (or since the first year for which data are available); and the overall trend required for the country to achieve the relevant MDG by 2015.

#### Chart type II

For five indicators – children aged <5 years underweight; measles immunization coverage among 1-year-olds; births attended by skilled health personnel; prevalence of HIV among adults aged 15–49 years; and tuberculosis mortality rate among HIV-negative people – the charts show data for the latest available year, and country trends since the year for which data were first available. For most countries, data have been available since the baseline year of 1990.

#### Chart type III

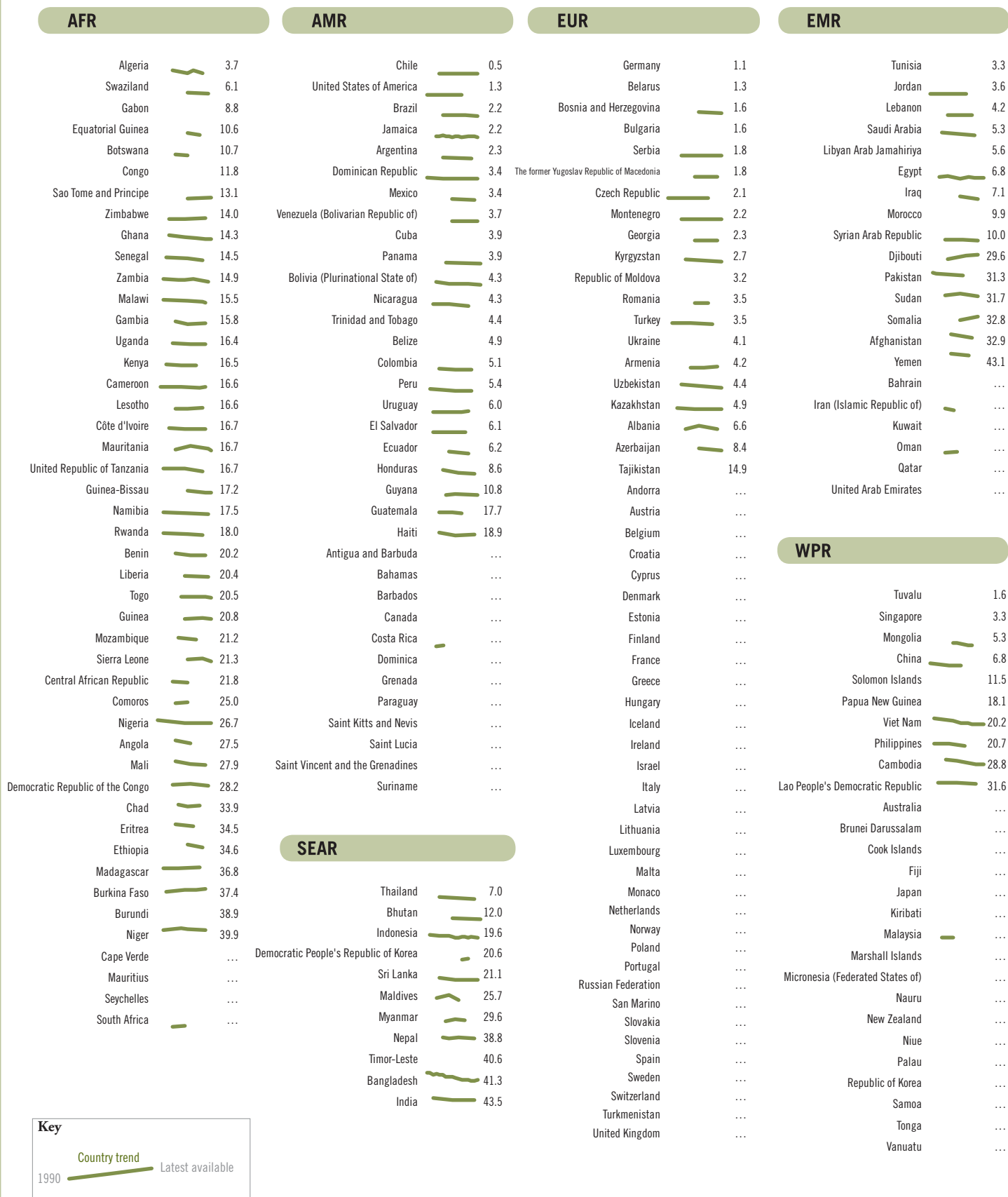
For eleven indicators – maternal mortality ratio; contraceptive prevalence; adolescent fertility rate; antenatal care coverage; unmet need for family planning; males aged 15–24 years with comprehensive correct knowledge of HIV/AIDS; females aged 15–24 years with comprehensive correct knowledge of HIV/AIDS; antiretroviral therapy coverage among people with advanced HIV infection; malaria mortality rate; children aged <5 years sleeping under insecticide-treated nets; and children aged <5 years with fever who received treatment with any antimalarial – the charts show only data for the latest available year.

Further details can be found in the country tables as indicated in each chart.



# 1. Children aged <5 years underweight (%)

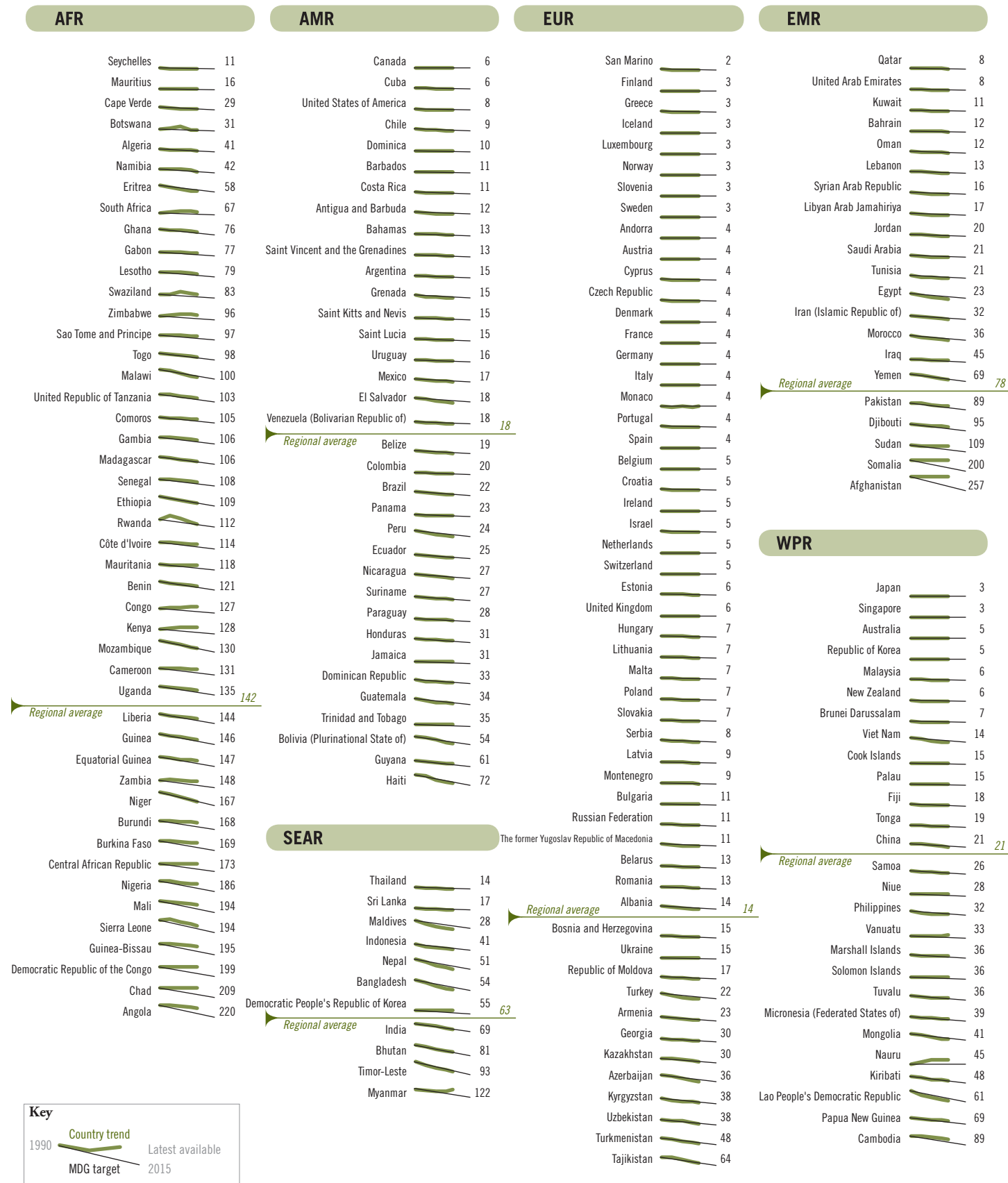
02+2+2+2+2+2  
 18-50+5-7  
 2014  
 31-4-1-3



This chart shows the percentage of children under 5 years old who are underweight in each country. Within each WHO region, countries are sorted by the latest available data since 2000. Regional averages are not available at this time.

Further details can be found in **Part II, Table 5**.

## 2. Under-five mortality rate (probability of dying by age 5 per 1000 live births)

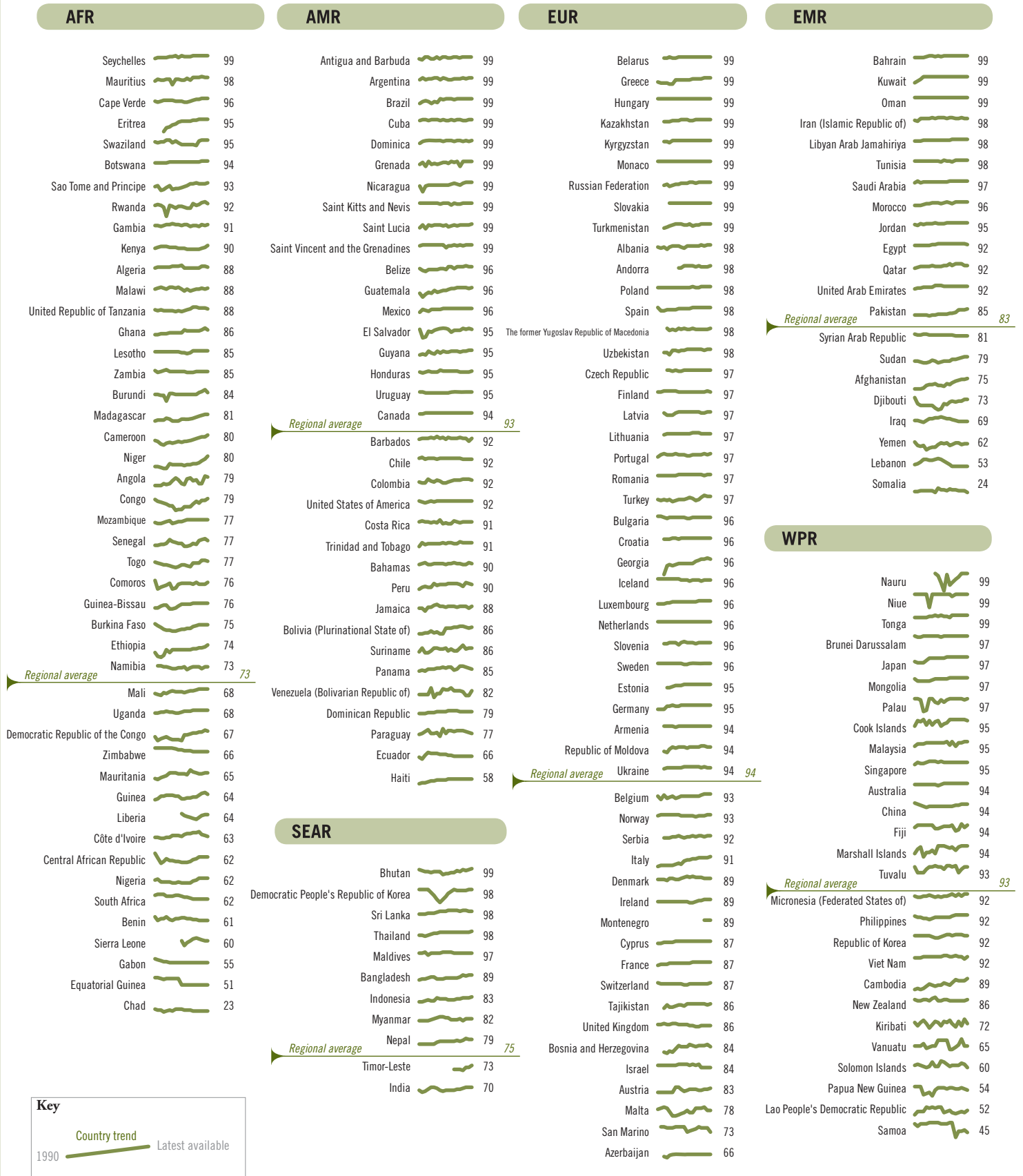


This chart shows estimated under-five mortality for 2008, with countries within each WHO region sorted by level. The bold lines indicate trends since 1990 or since the first year for which data are available.

The thin lines indicate the projected trend needed to reduce by two thirds the under-five mortality rate by 2015.

Further details can be found in **Part II, Table 1**.

### 3. Measles immunization coverage among 1-year-olds (%)

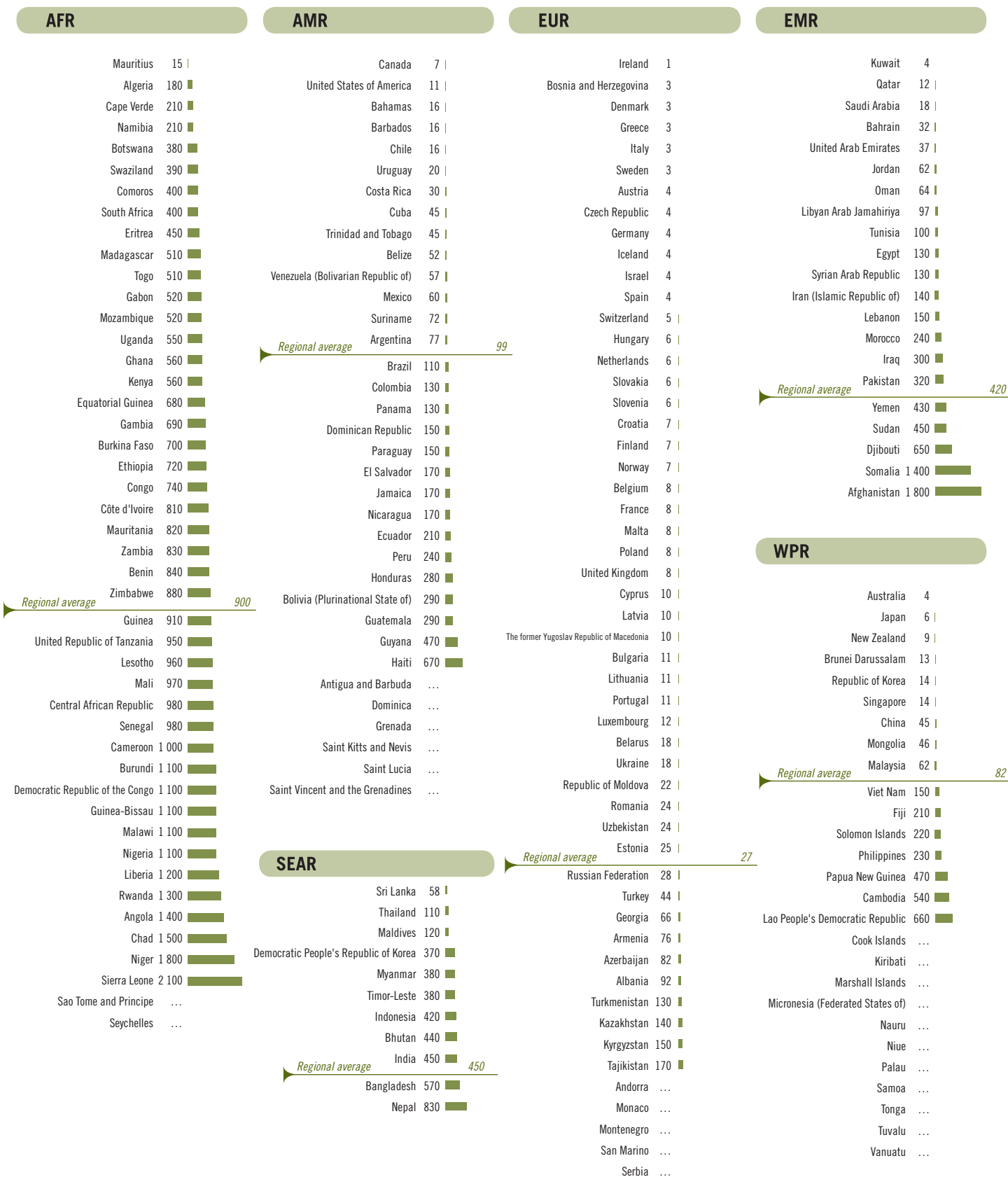


This chart shows the percentage of 1-year-olds fully immunized against measles, with countries within each WHO region sorted by 2008 level.

Further details can be found in **Part II, Table 4**.

## 4. Maternal mortality ratio (per 100 000 live births)

2005  
18-50-75  
YVA1014  
81-ACL-3

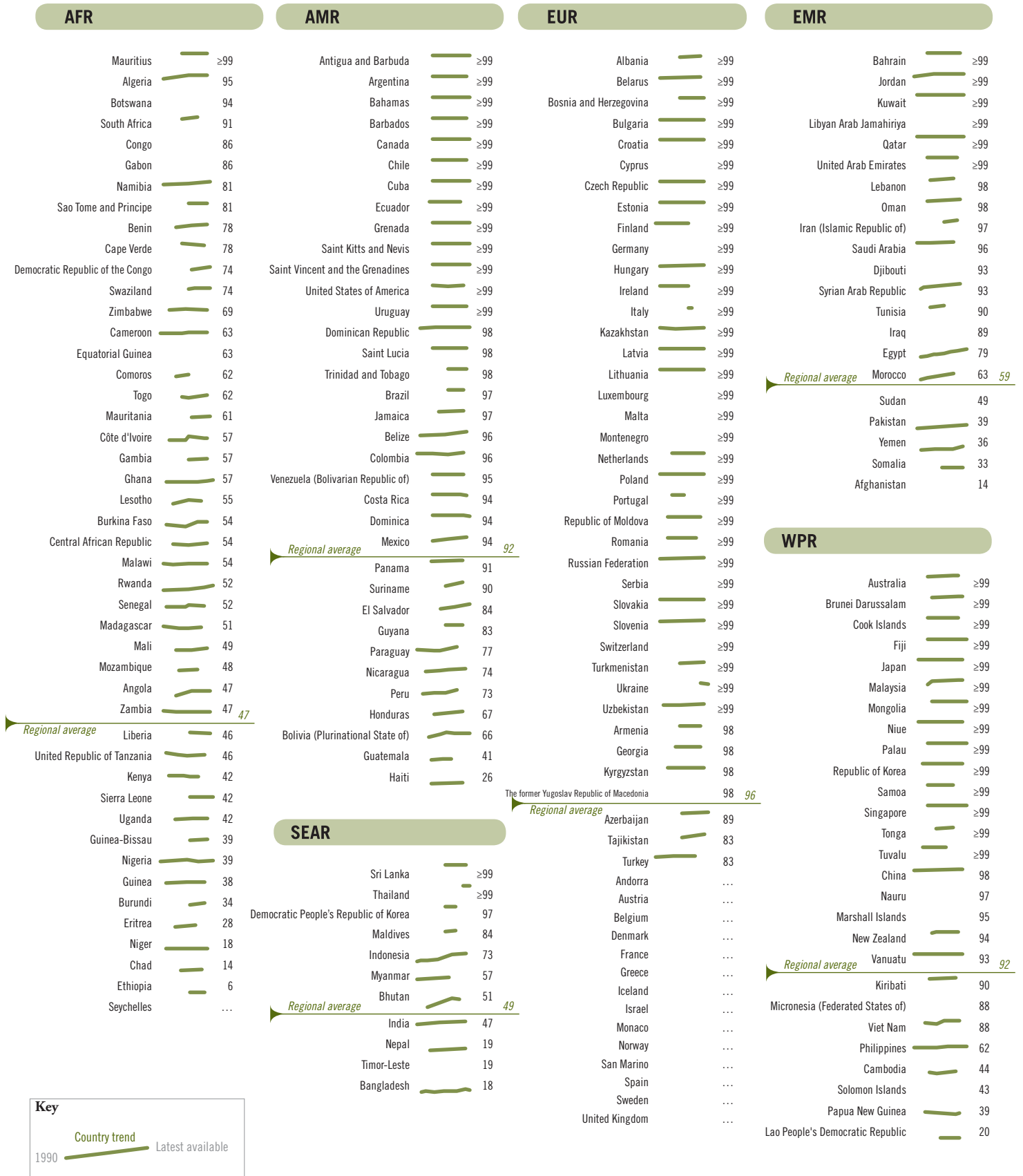


This chart shows the interagency estimated maternal mortality ratio for each country for 2005, with countries within each WHO region sorted by level. Further details can be found in **Part II, Table 2**.



## 5. Births attended by skilled health personnel (%)

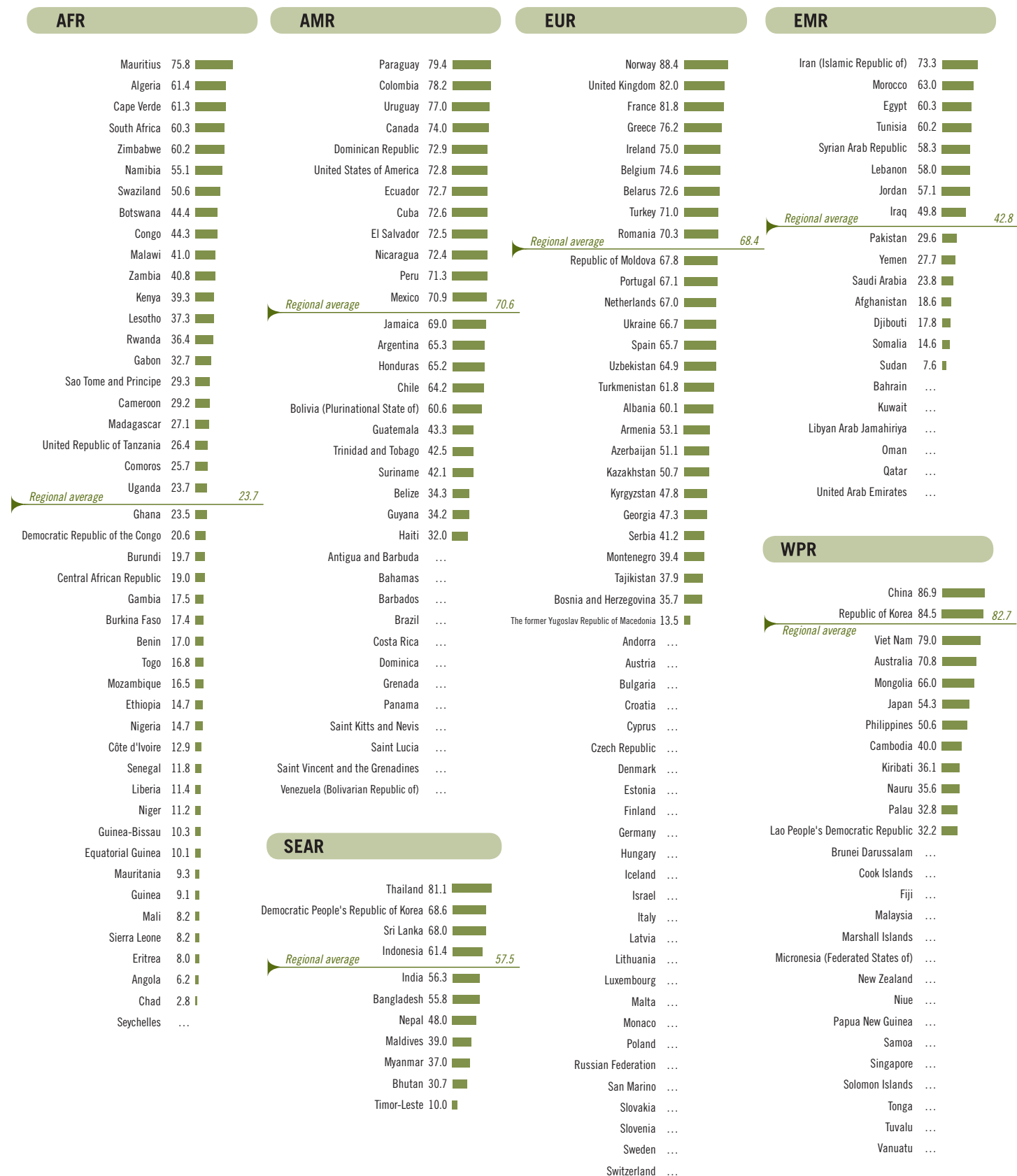
出生时由受过培训的卫生人员接生的比例  
 1990-2000年



This chart shows the percentage of births attended by skilled health personnel. Within each WHO region, countries are sorted by the latest available data since 2000.

Further details can be found in **Part II, Table 4**.

## 6. Contraceptive prevalence (%)

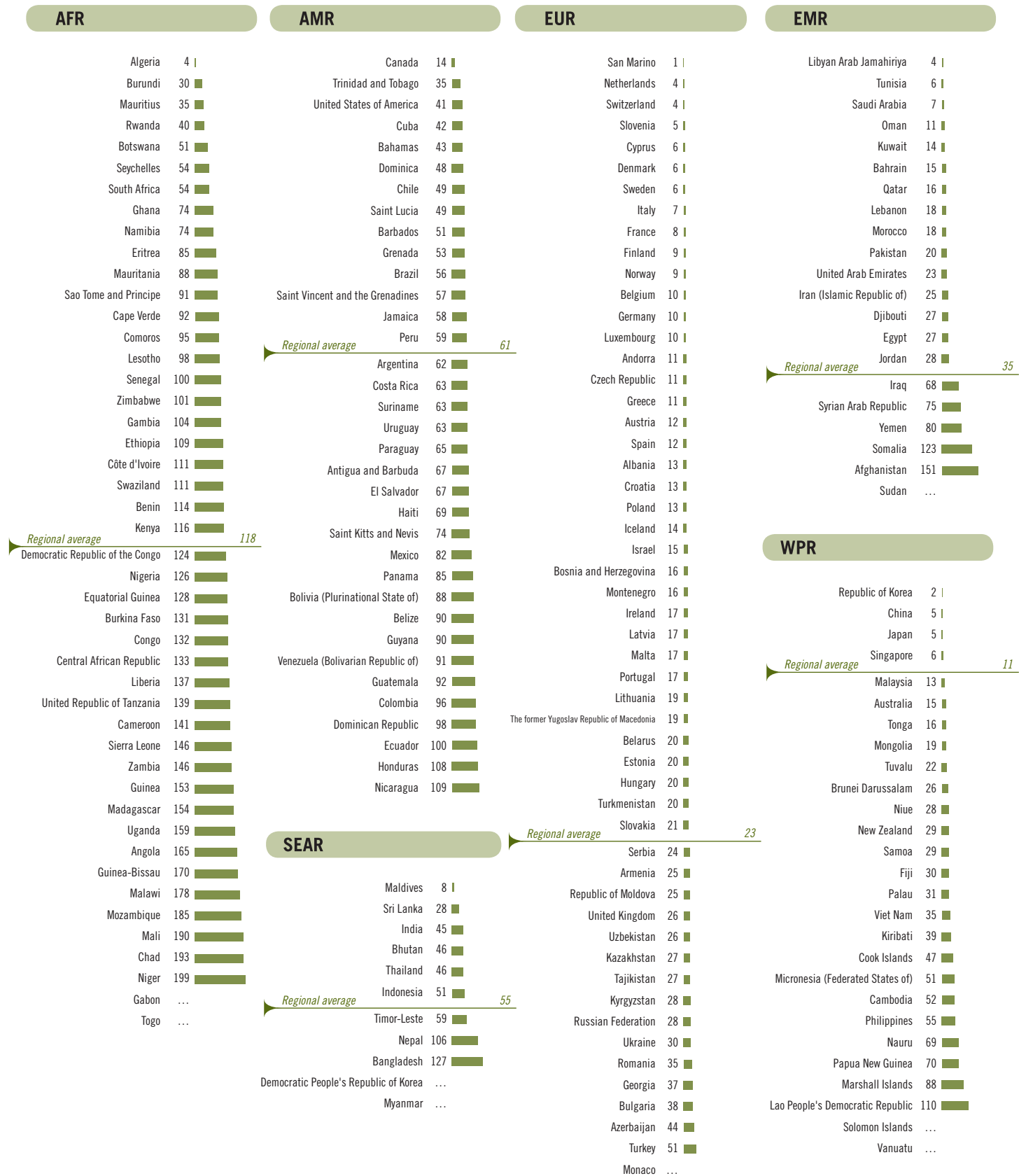


This chart shows the percentage of women married or cohabiting who report current use of at least one method of contraception. Within each WHO region, countries are sorted by the latest available data since 2000.

Further details can be found in **Part II, Table 4**.

## 7. Adolescent fertility rate (per 1000 girls aged 15–19 years)

02+2+2+2+2+2+2  
18-50-75  
2014  
31-ACT-3

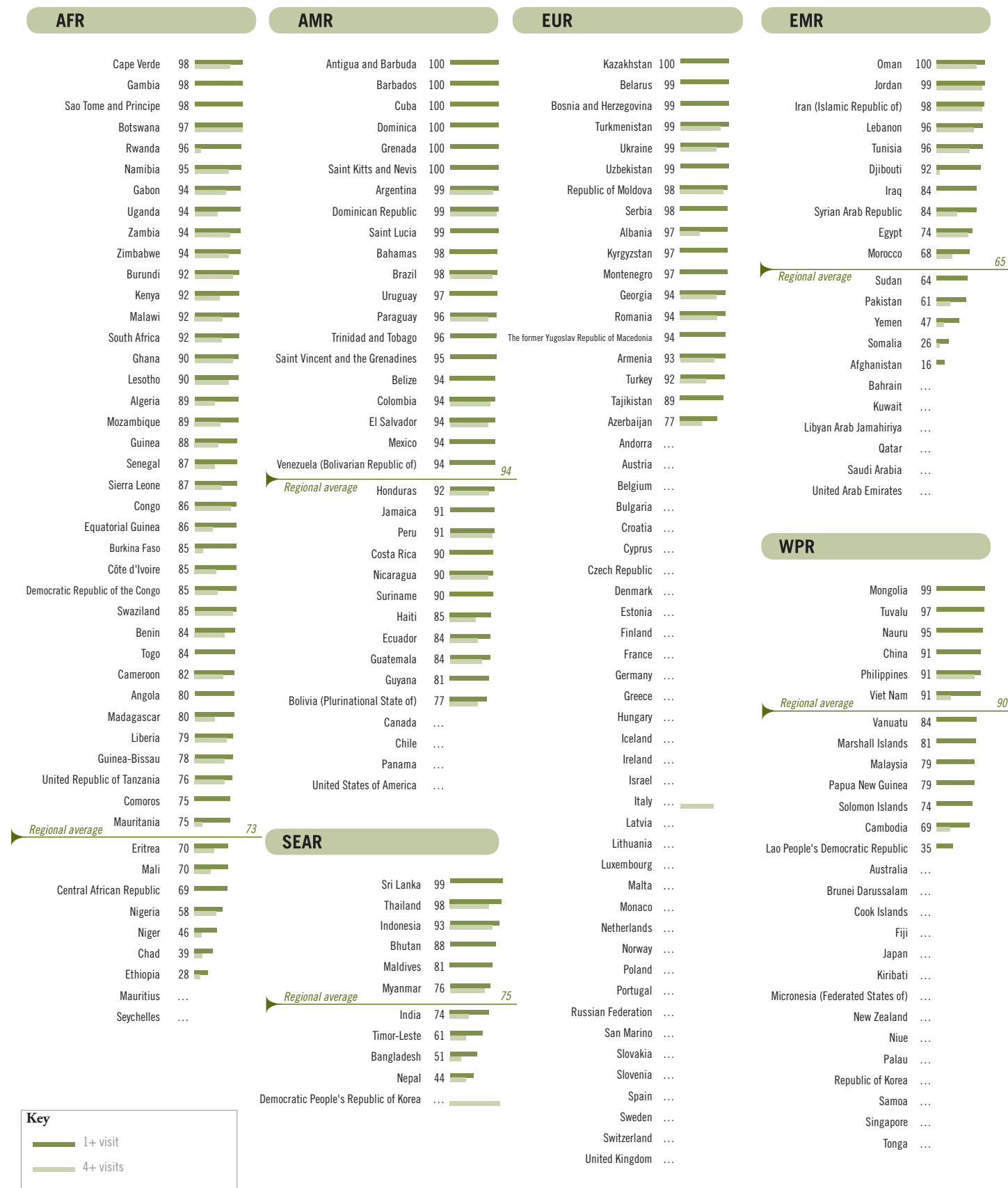


This chart shows estimated adolescent fertility expressed as the number of births among girls aged 15–19 years per 1000 girls in this age group per year. Within each WHO region, countries are sorted by the latest available data since 2000.

Further details can be found in **Part II, Table 9**.

## 8. Antenatal care coverage (%): at least 1 visit and at least 4 visits

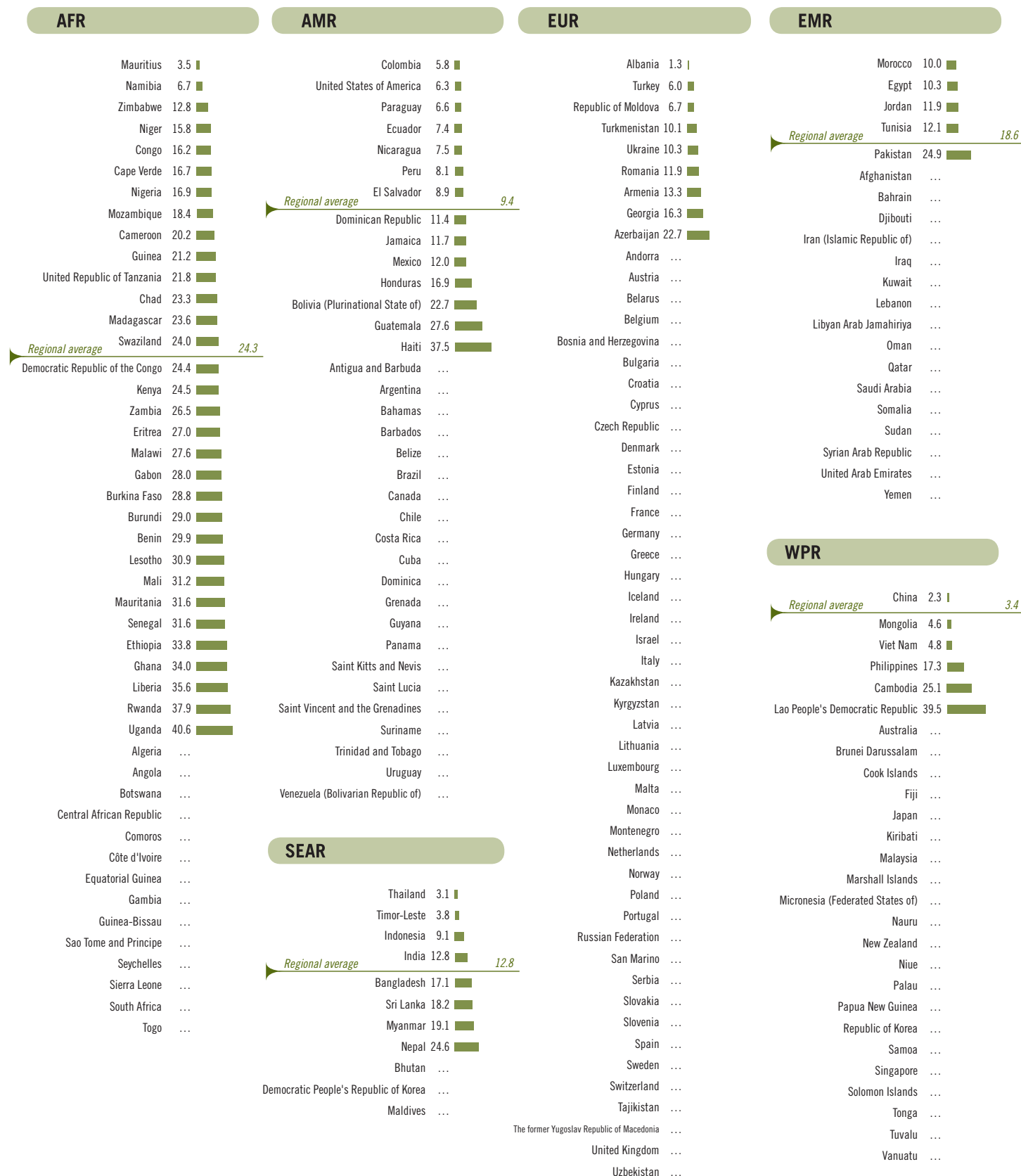
2014-2018  
18-50+岁  
Y2A1Y014-18  
81-A1CL-3



This chart shows the percentage of women who received antenatal care from skilled health personnel at least once and at least four times during pregnancy. Within each WHO region, countries are sorted by the latest available data since 2000 for coverage of at least one visit.

Further details can be found in **Part II, Table 4**.

## 9. Unmet need for family planning (%)



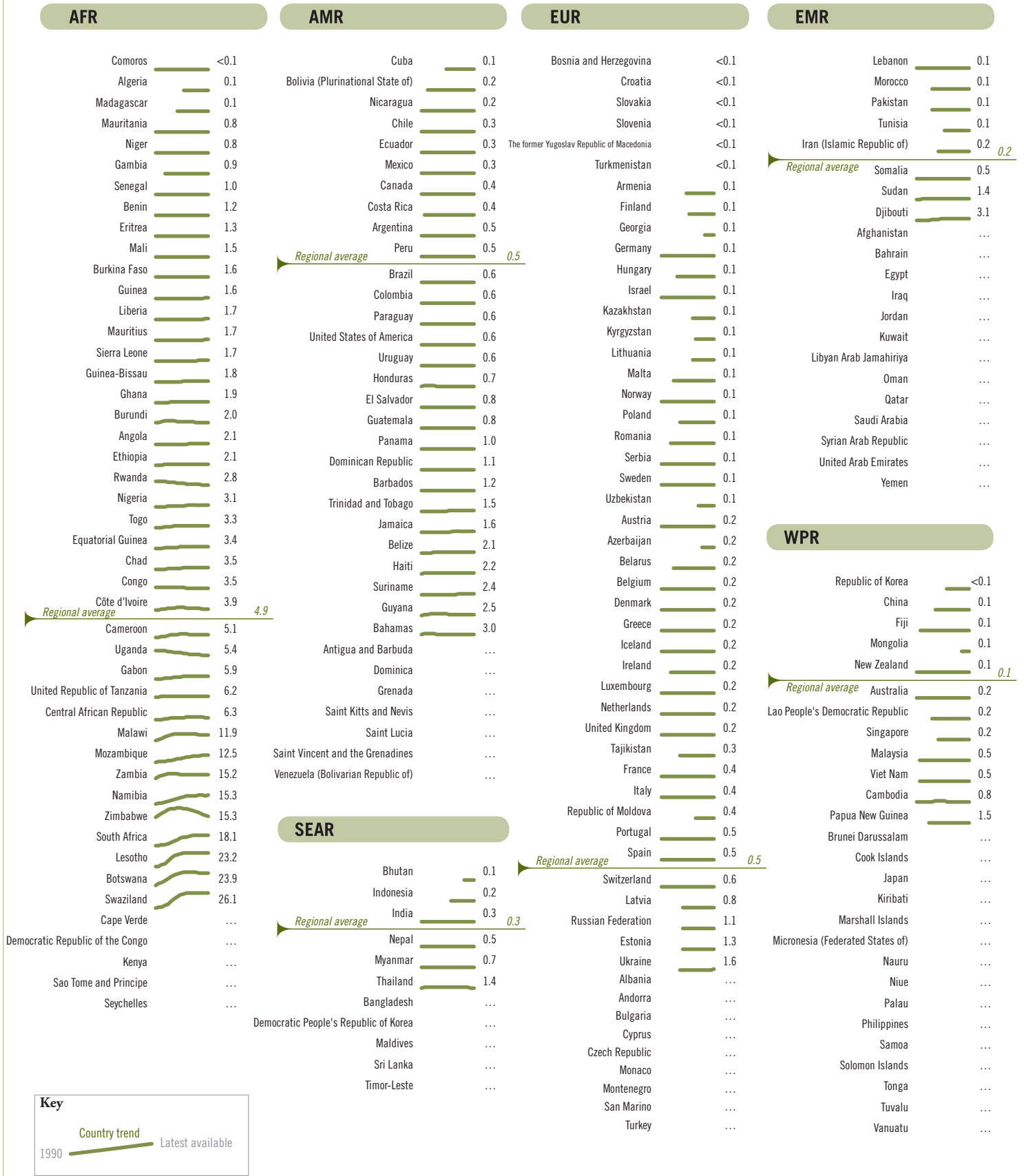
This chart shows the percentage of women who are fecund and sexually active but are not using any method of contraception, and report not wanting any more children or wanting to delay the next child.

Within each WHO region, countries are sorted by the latest available data since 2000.

Further details can be found in **Part II, Table 4**.

# 10. Prevalence of HIV among adults aged 15–49 years (%)

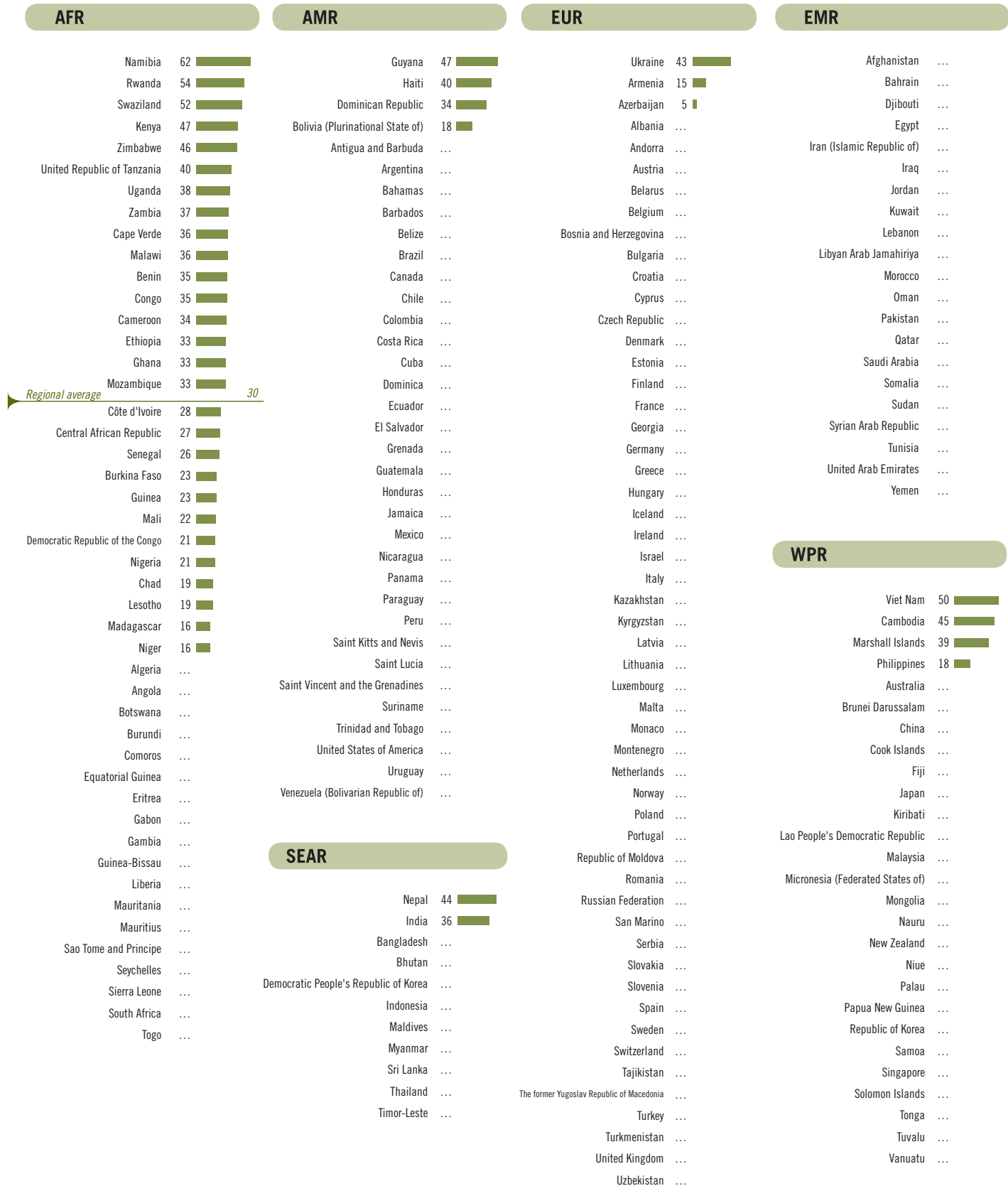
2007  
2006  
2005  
2004  
2003  
2002  
2001  
2000  
1999  
1998  
1997  
1996  
1995  
1994  
1993  
1992  
1991  
1990



This chart shows the estimated prevalence of HIV infection in adults aged 15–49 years, with countries within each WHO region sorted by 2007 level. The regional averages are based on updates and reflect 2008 levels. Because of limited data availability for the MDG target age group (15–24 years) prevalence is reported here for the 15–49 age group. Further details can be found in Part II, Table 2.

# 11. Males aged 15–24 years with comprehensive correct knowledge of HIV/AIDS (%)

02+2+2+2+2+2  
18-50+7-7  
Y2A1Y014  
81-4CL-3



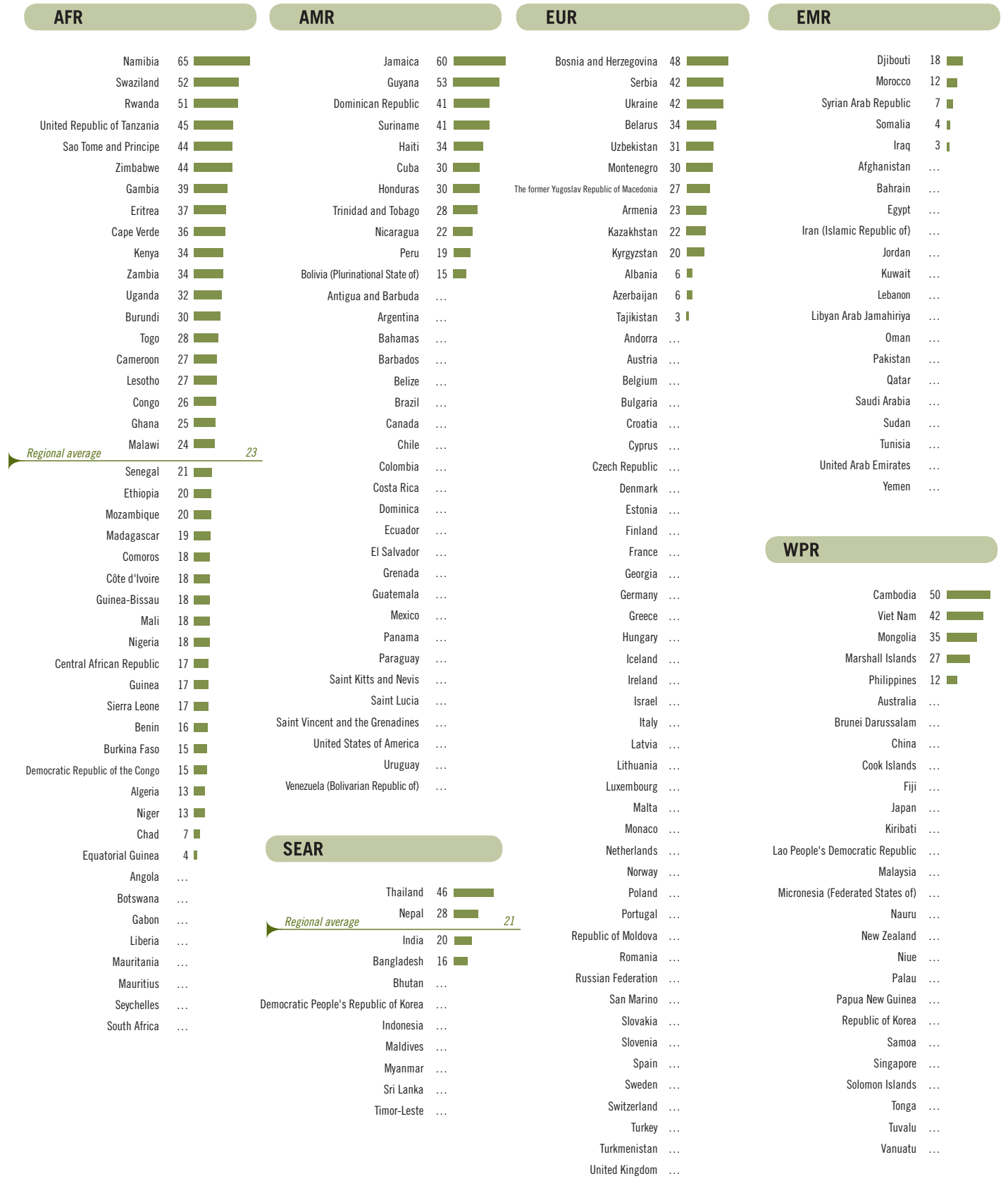
This chart shows the percentage of males who correctly identify the two major ways of preventing the sexual transmission of HIV, who reject the two most-common local misconceptions about HIV transmission and who know that a healthy-looking person can transmit HIV.

Within each WHO region, countries are sorted by the latest available data since 2000.

Further details can be found in **Part II, Table 5**.

## 12. Females aged 15–24 years with comprehensive correct knowledge of HIV/AIDS (%)

02+2009  
1764118-50+74  
Y2A1Y014  
81-A1-3



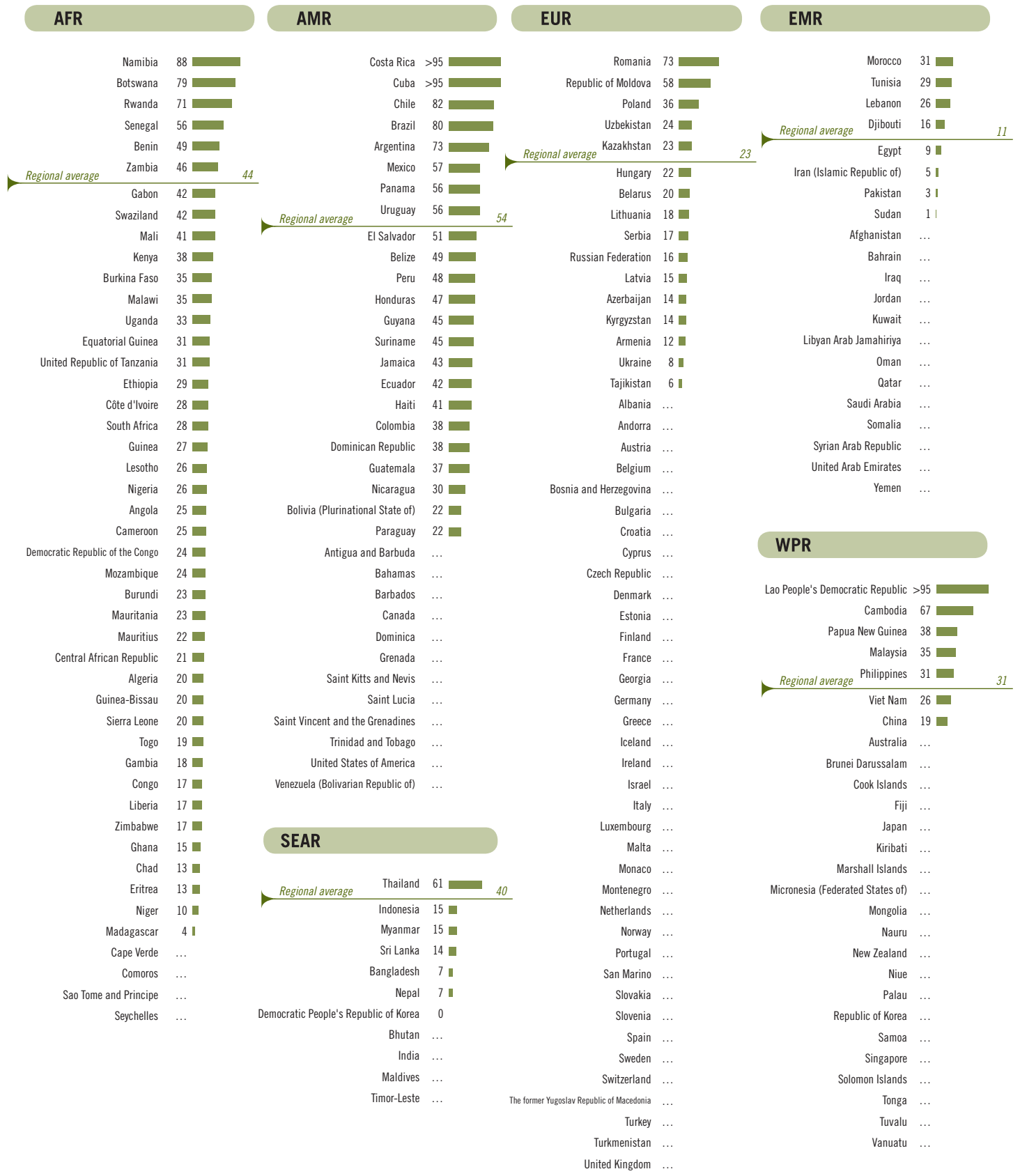
This chart shows the percentage of females who correctly identify the two major ways of preventing the sexual transmission of HIV, who reject the two most-common local misconceptions about HIV transmission and who know that a healthy-looking person can transmit HIV. Within each WHO region, countries are sorted by the latest available data since 2000.

Further details can be found in **Part II, Table 5**.



# 13. Antiretroviral therapy coverage among people with advanced HIV infection (%)

2007  
2008  
2009  
2010  
2011  
2012  
2013  
2014  
2015  
2016  
2017  
2018  
2019  
2020  
2021  
2022  
2023  
2024  
2025

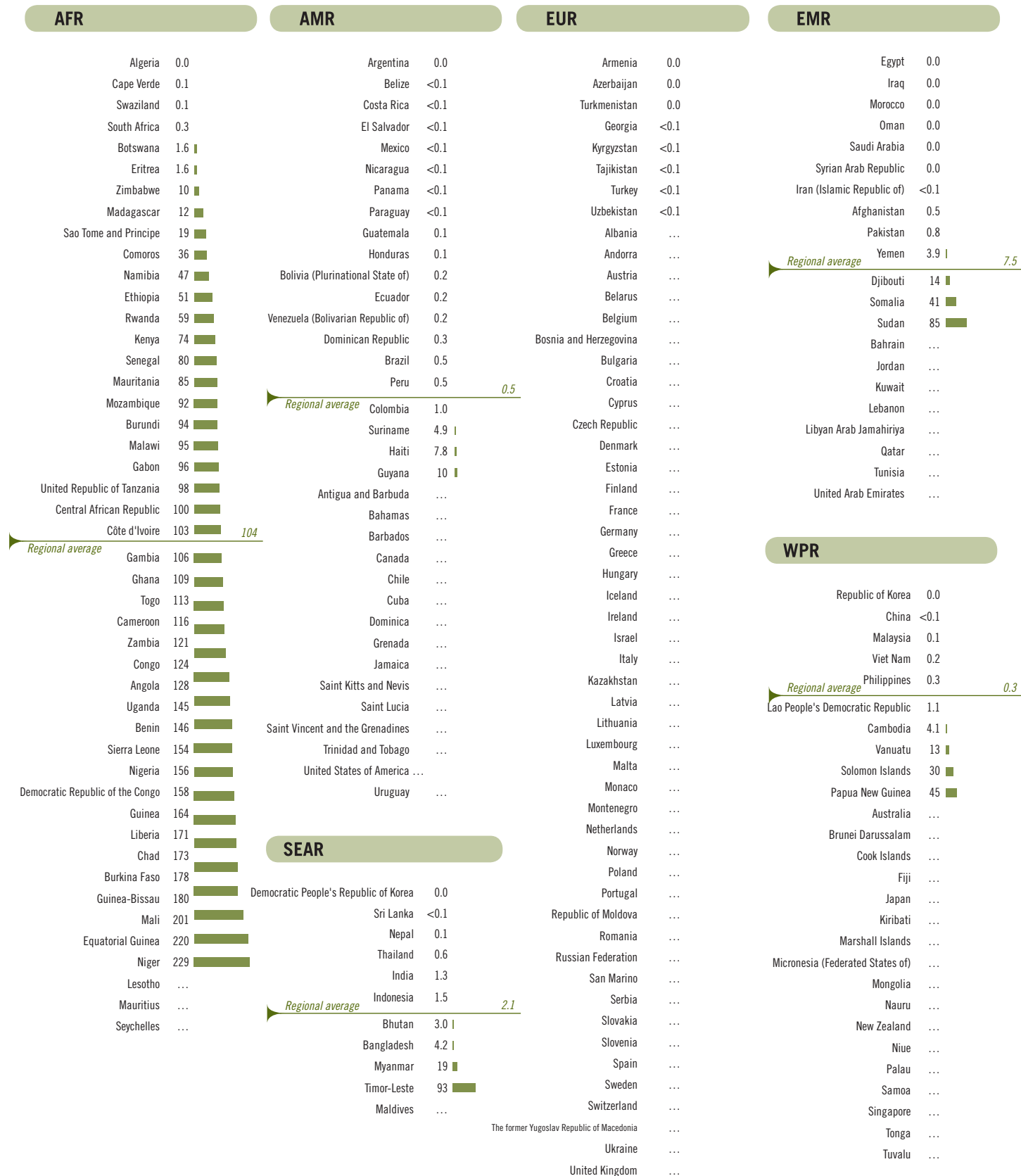


This chart shows the percentage of people with advanced HIV infection currently receiving antiretroviral therapy according to standards of the Joint United Nations Programme on HIV/AIDS for each country for 2007, with countries within each WHO region sorted by level. The regional averages shown are based on 2008 updated data.

Further details can be found in **Part II, Table 4**.

# 14. Malaria mortality rate (per 100 000 population)

02+9+6+9+8  
176+118+50+7+7  
Y4A1Y014  
81-4CL-3

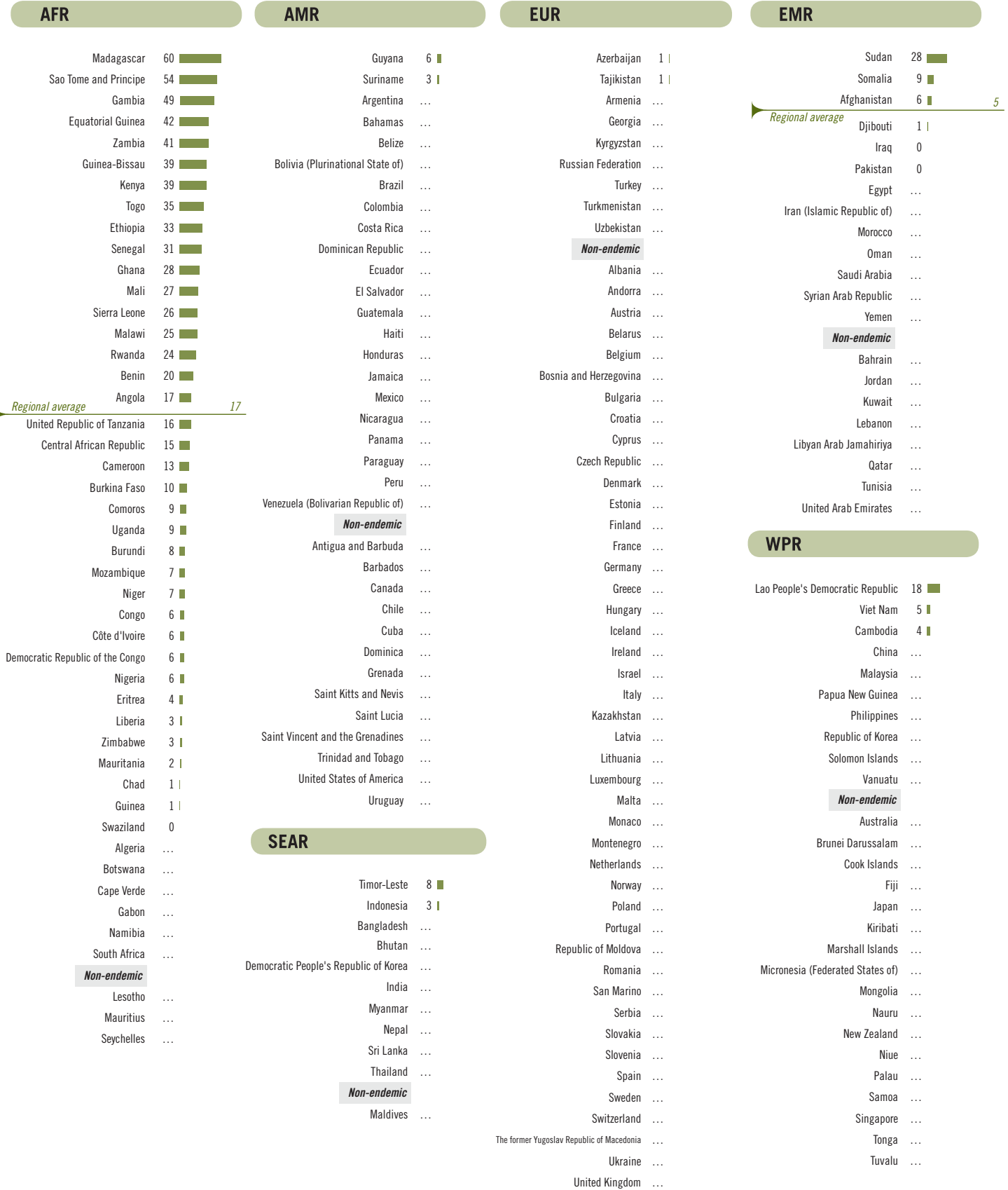


This chart shows the estimated number of deaths from malaria for 2006, with countries within each WHO region sorted by level.

Further details can be found in **Part II, Table 2**.

# 15. Children aged <5 years sleeping under insecticide-treated nets (%)

102+9+691  
18-50+76  
Y2A1Y014  
81-AQL-3

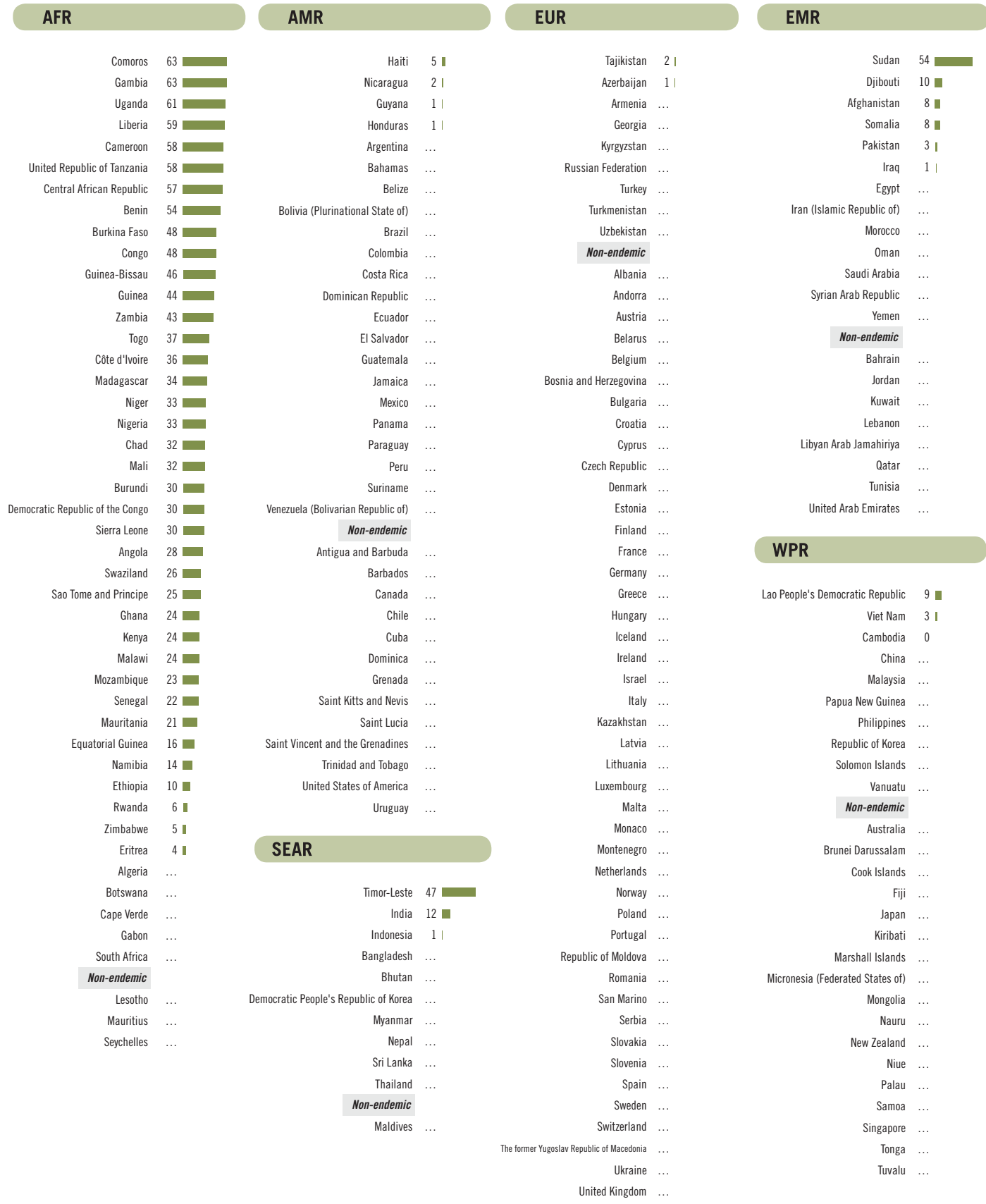


This chart shows the percentage of children under 5 years of age that slept under an insecticide-treated net the night prior to the survey. Within each WHO region, countries are sorted by the latest available data since 2000.

Further details can be found in **Part II, Table 4**.

# 16. Children aged <5 years with fever who received treatment with any antimalarial (%)

2014-2018  
 81-A-C1-3  
 18-50-47-3

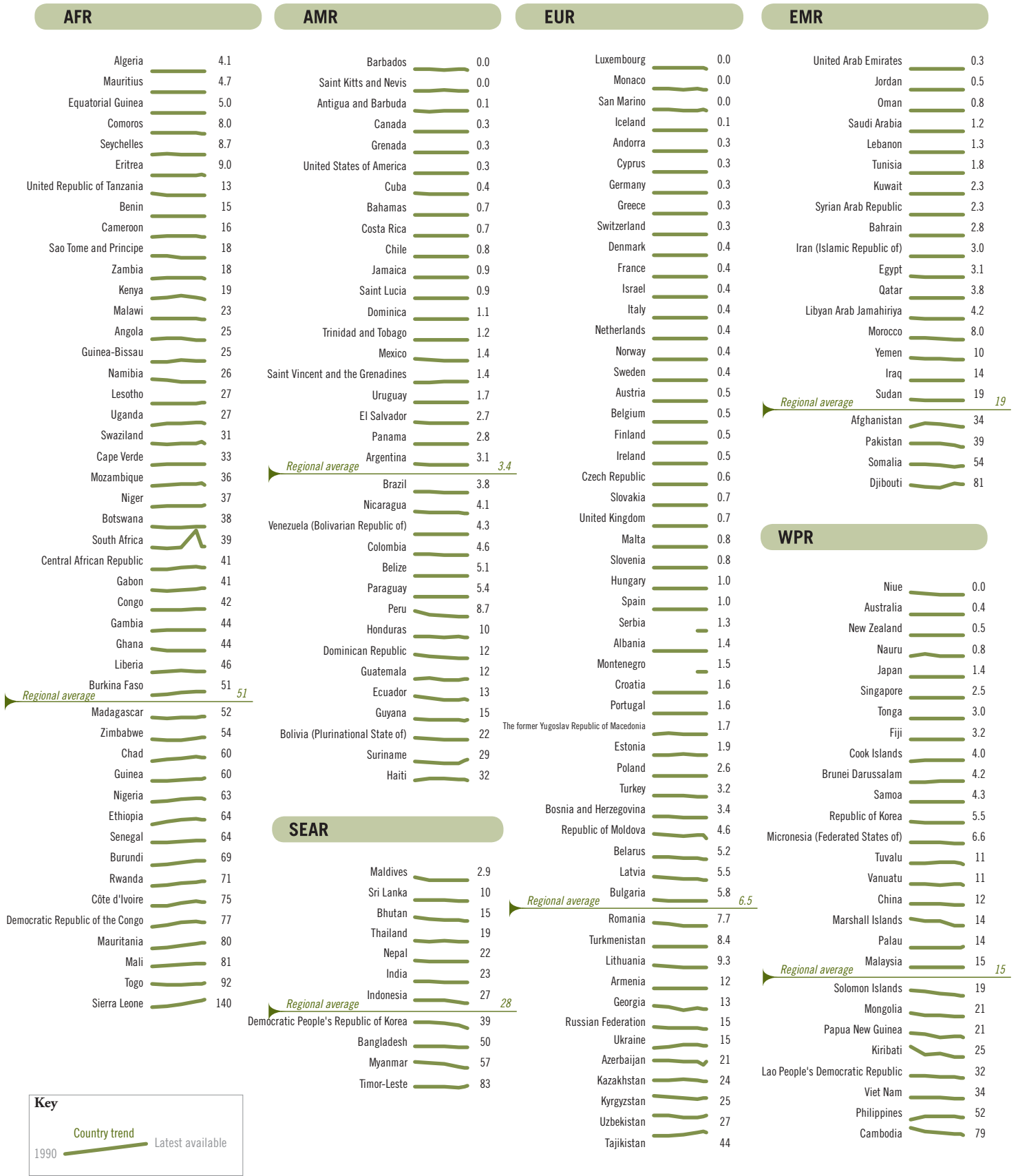


This chart shows the percentage of children under 5 years of age with fever in the two weeks prior to the survey who received any antimalarial medicine. Within each WHO region, countries are sorted by the latest available data since 2000.

Further details can be found in **Part II, Table 4.**

# 17. Tuberculosis mortality rate among HIV-negative people (per 100 000 population)

02+2019  
 17.4-18.50+7.3  
 31-41-3

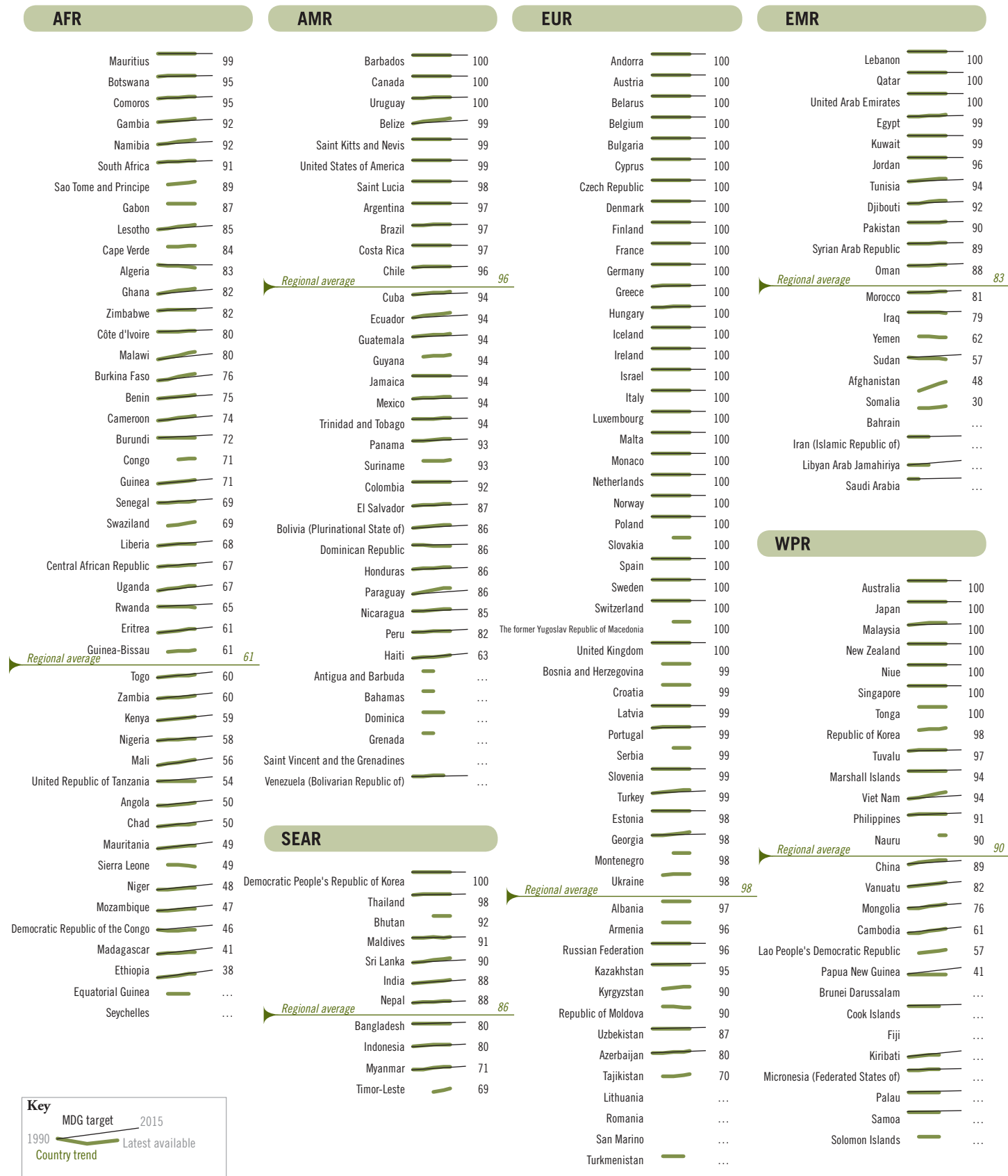


**Key**  
 Country trend  
 1990 — Latest available

This chart shows the estimated number of deaths (per 100 000 population) from tuberculosis among HIV-negative cases for 2008, with countries within each WHO region sorted by level.

Further details can be found in **Part II, Table 4**.

# 18. Population using improved drinking-water sources (%)



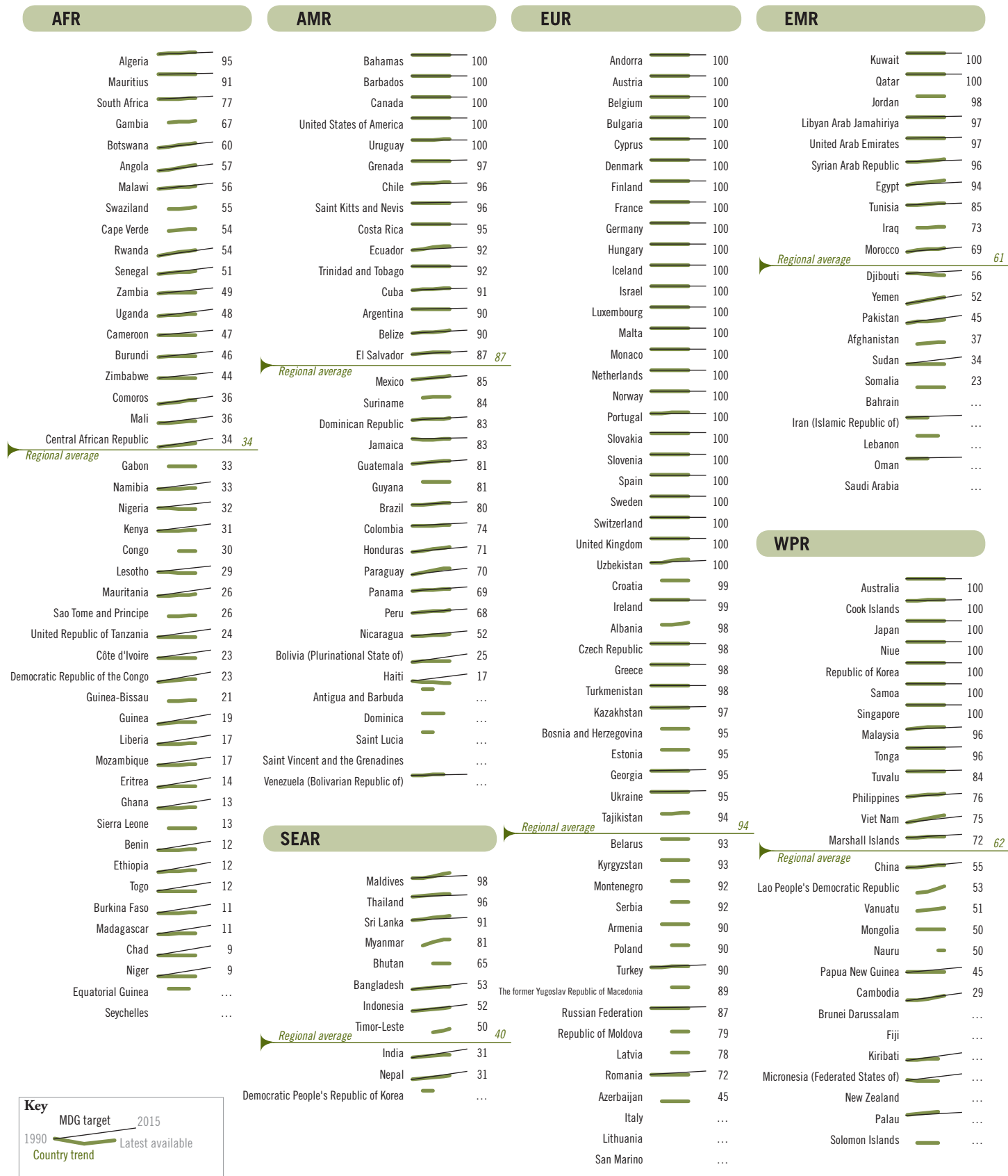
This chart shows the percentage of the population using an improved drinking-water source, with countries within each WHO region sorted by 2008 level. The bold lines indicate trends since 1990 or since the first year for which data are available.

The thin lines indicate the projected trend needed to double the proportion of people with sustainable access to safe drinking-water by 2015.

The MDG target is worded in terms of halving the proportion of people without sustainable access to safe drinking-water by 2015.

Further details can be found in **Part II, Table 5**.

# 19. Population using improved sanitation (%)



This chart shows the percentage of the population using an improved sanitation facility, with countries within each WHO region sorted by 2008 level. The bold lines indicate trends since 1990 or since the first year for which data are available. The thin lines indicate the projected trend needed to double the proportion of people with sustainable access to basic sanitation by 2015. The MDG target is worded in terms of halving the proportion of people without sustainable access to basic sanitation by 2015.

Further details can be found in **Part II, Table 5**.