Part I

Health-related Millennium Development Goals

Summary of status and trends

Health is at the heart of the Millennium Development Goals (MDGs). Goals 4, 5 and 6 specifically focus on health, but all the MDGs have health-related aspects; achieving them will not be possible without progress on food security, gender equality, the empowerment of women, wider access to education and better stewardship of the environment.

At the midpoint between 2000 and 2015, the analysis shows encouraging signs of progress, particularly in child health; it points to areas where current gains need to be sustained, particularly in relation to AIDS, tuberculosis and malaria; and areas where there has been little or no movement, notably maternal and newborn health. More detailed and updated data for 2008, reported in *World Health Statistics 2009*, show major differences in progress between and within countries and regions. Looking forward to 2015 and beyond, the challenges presented by weak health systems, the health transition and emerging health threats will become increasingly prominent.

Overall, the proportion of children under five years of age suffering from under-nutrition (according to the WHO Child Growth Standards) declined from 27% in 1990 to 20% in 2005. However, progress has been uneven and an estimated 112 million children are underweight. Under-nutrition is an underlying cause in more than one third of child deaths.

In 2007, there were an estimated 9 million child deaths, significantly fewer than the 12.5 million estimated in 1990, with a 27% decline in the **under-5 mortality rate** over that period to 67 per 1000 live births in 2007. Reducing child mortality increasingly depends on tackling **neonatal mortality**; globally, an estimated 37% of deaths among children under five occurs in the first month of life, most in the first week. Countries making the least progress are generally those affected by high levels of HIV/AIDS, economic hardship or conflict.

Much of the progress in reducing child mortality can be attributed to increased immunization coverage, use of oral rehydration therapies during episodes of diarrhoea, use of insecticide-treated mosquito nets, access to artemisinin-based combination therapies, efforts to eliminate disease due to *Haemophilus influenzae* type b infection and reduced disease incidence due to improved water and sanitation. However, because the availability and use of proven interventions at community level remain low, pneumonia and diarrhoea still kill 3.8 million children under five each year.

Every year some 536 000 women die of complications during pregnancy or childbirth, 99% of them in developing countries. The global **maternal mortality** ratio of 400 maternal deaths per 100 000 live births in 2005 has barely changed since 1990. Most maternal deaths occur in the African Region, where the maternal mortality ratio is 900 per 100 000 live births, with no measureable improvement between 1990 and 2005.

Progress in reducing maternal mortality and morbidity depends on better access to, and use of, good maternal and reproductive health services. The proportion of pregnant women in the developing world who had at least one **antenatal care** visit increased from slightly more than half at the beginning of the 1990s to almost three quarters a decade later. Over the period 2000–2008, 65% of **births** globally were **attended by skilled health personnel**, 4% more than in 1990–1999.

Globally, the **contraceptive prevalence** rate increased from 59% in 1990–1995 to 63% in 2000–2006. Nonetheless, in some regions it remains very difficult to reduce the considerable **unmet need for family planning** and the high rates of **adolescent fertility**. Globally, there were 48 births for every 1000 women aged 15–19 years in 2006, only a small decline from 51 per 1000 in 2000.

In 2006, an estimated 3300 million people were at risk of **malaria.** Of these, some 1200 million were in the high-risk category (living in areas with more than one reported case of malaria per 1000 population per year). Although it is still too early to register *global* changes in impact, 27 countries (including five in Africa) have reduced reported cases of the disease and/or deaths resulting from it by up to 50% between 1990 and 2006. Coverage of interventions for the prevention and treatment of malaria has increased. There has been a significant growth in the production and use of **insecticide-treated mosquito nets**, although global targets are still not being met. By June 2008, all but four countries and territories with a high burden of the disease had adopted artemisinin-based combination therapy as the first-line treatment for falciparum malaria, and use of combination therapies is being scaled up.

The MGD target in respect of halting and reversing the incidence of tuberculosis was met globally in 2004. Since then the rate has been falling slowly.[1] **Tuberculosis prevalence and death rates** per 100 000 population declined from 296 in 1990 to 206 in 2007 for the former, and from 28 in 1990 to 25 in 2006 for the latter. Globally, the tuberculosis case-detection rate under the DOTS approach increased from an estimated 11% in 1995 to 63% in 2007. The rate of improvement in case detection slowed after 2004, largely as a result of earlier successes in the countries with the largest number of cases. Data on **treatment success rates under the DOTS approach** indicate consistent improvement, with rates rising from 79% in 1990 to 85% in 2006. Multidrug-resistant tuberculosis and HIV-associated tuberculosis pose particular challenges in some regions.

New estimates indicate that 2.7 million people were newly infected with **HIV** during 2007 and that there were two million deaths related to **AIDS**, bringing the total number of people living with HIV to 33 million. The percentage of adults living with HIV globally has remained stable since 2000. Use of **antiretroviral therapy** has increased; in the course of 2007, about one million more people living with HIV received antiretroviral therapy.[2] However, despite this, of the estimated 9.7 million people in developing countries that need treatment, only 3 million were receiving the medicines. Progress has been made in prevention, but at the end of 2007 only 33% of HIV-infected women had received antiretroviral drugs to reduce the risk of **mother to child transmission**.

An estimated 1200 million people are affected by **neglected tropical diseases**, chronic disabling infections that thrive in conditions of impoverishment and weak health systems. In 2007, 546 million people were treated to prevent transmission of lymphatic filariasis. Only 9585 cases of dracunculiasis (guinea-worm disease) were reported in the five countries in which the disease is endemic, compared with an estimated 3.5 million reported in 20 such countries in 1985. The global prevalence of leprosy at the beginning of 2008 stood at 212 802 reported cases, down from 5.2 million cases in 1985.

Lack of **safe water and poor sanitation** are important risk factors for mortality and morbidity, including diarrhoeal diseases, cholera, worm infestations and hepatitis. Globally, the proportion of the population with access to improved drinking-water sources increased from 76% to 86% between 1990 and 2006. Since 1990, the number of people in developing regions using improved sanitation facilities has increased by 1100 million. Nevertheless, in 2006, there were 54 countries in which information was available where less than half the population used an improved sanitation facility.

[1] WHO. *Global tuberculosis control 2008 report.*

[2] WHO, UNAIDS, UNICEF. *Towards universal access: scaling up priority interventions in the health sector; progress report 2008.*

Although nearly all developing countries publish an essential medicines list, the **availability of medicines** at public health facilities is often poor. Surveys in about 30 developing countries indicate that availability of selected medicines at health facilities was only 35% in the public sector and 63% in the private sector. Lack of medicines in the public sector forces patients to purchase medicines privately. In the private sector, however, generic medicines are often sold at several times their international reference price, while originator brands are generally even more expensive.

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 level of the indicator at 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 charts.

Chart type I

For three indicators: under-5 mortality rate, access to improved drinking-water sources, and access to improved sanitation facilities, the charts show data for the latest available year, index of trends since 1990 (1990=100) , and the index of overall trend between 1990 and 2015 (1990=100) required for the country to achieve the Millennium Development Goal.

Chart type II

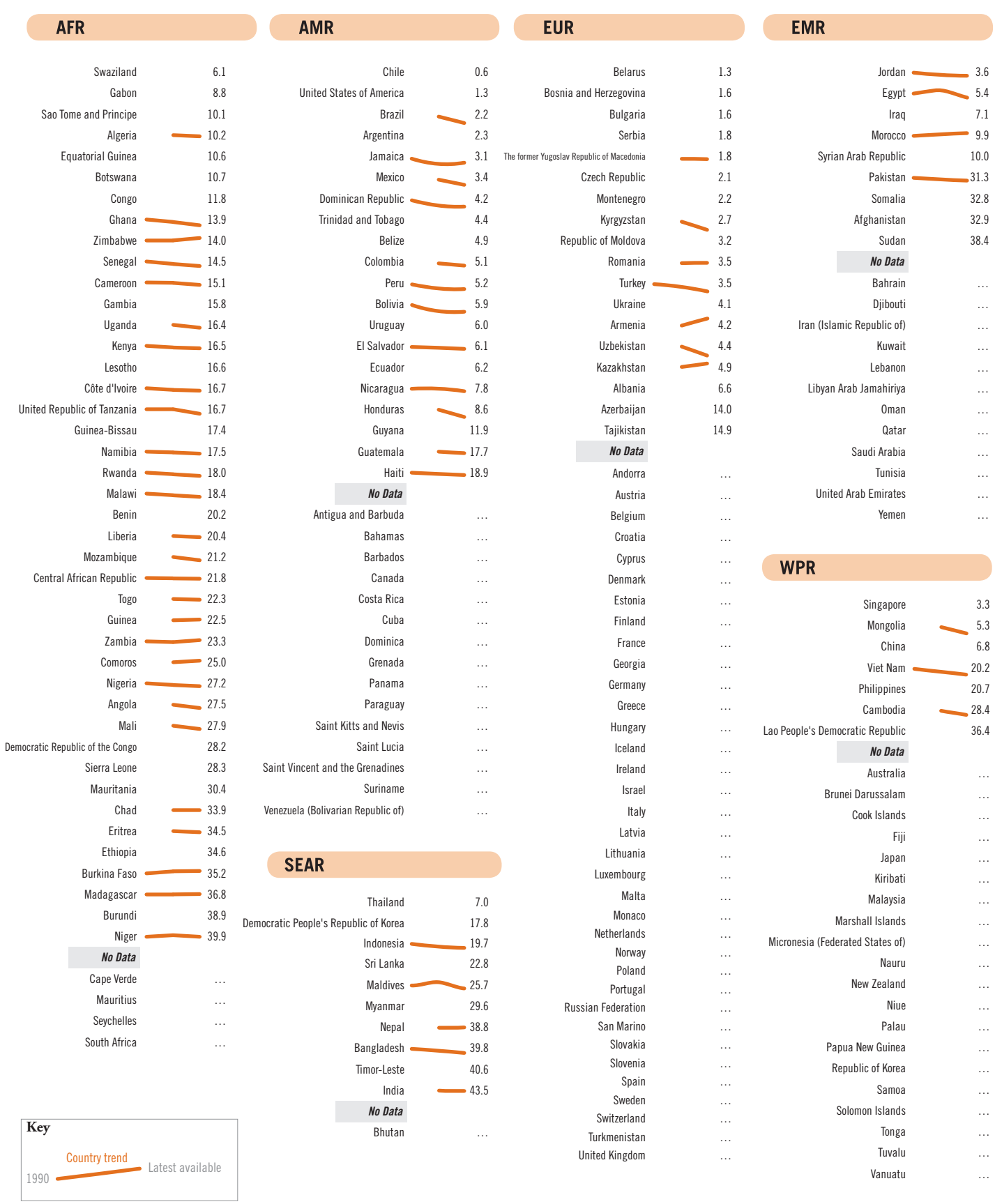
For five indicators: children under five years who are underweight, measles immunization coverage in children under one year, births attended by skilled health personnel, HIV prevalence in adults 15–49 years, and tuberculosis treatment success under DOTS, the charts show data for the latest available year and index of trends since 1990 (1990=100).

Chart type III

For 10 indicators: maternal mortality ratio, contraceptive prevalence rate, adolescent fertility rate, antenatal care coverage (at least one visit), unmet need for family planning, proportion of people aged 15–24 years with comprehensive correct knowledge of HIV/AIDS (%), antiretroviral therapy coverage among people with advanced HIV infection, mortality rate due to malaria, children aged under five years sleeping under insecticide-treated mosquito nets, and children aged under five years who received any antimalarial treatment for fever, the charts show only data for the latest available year.

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

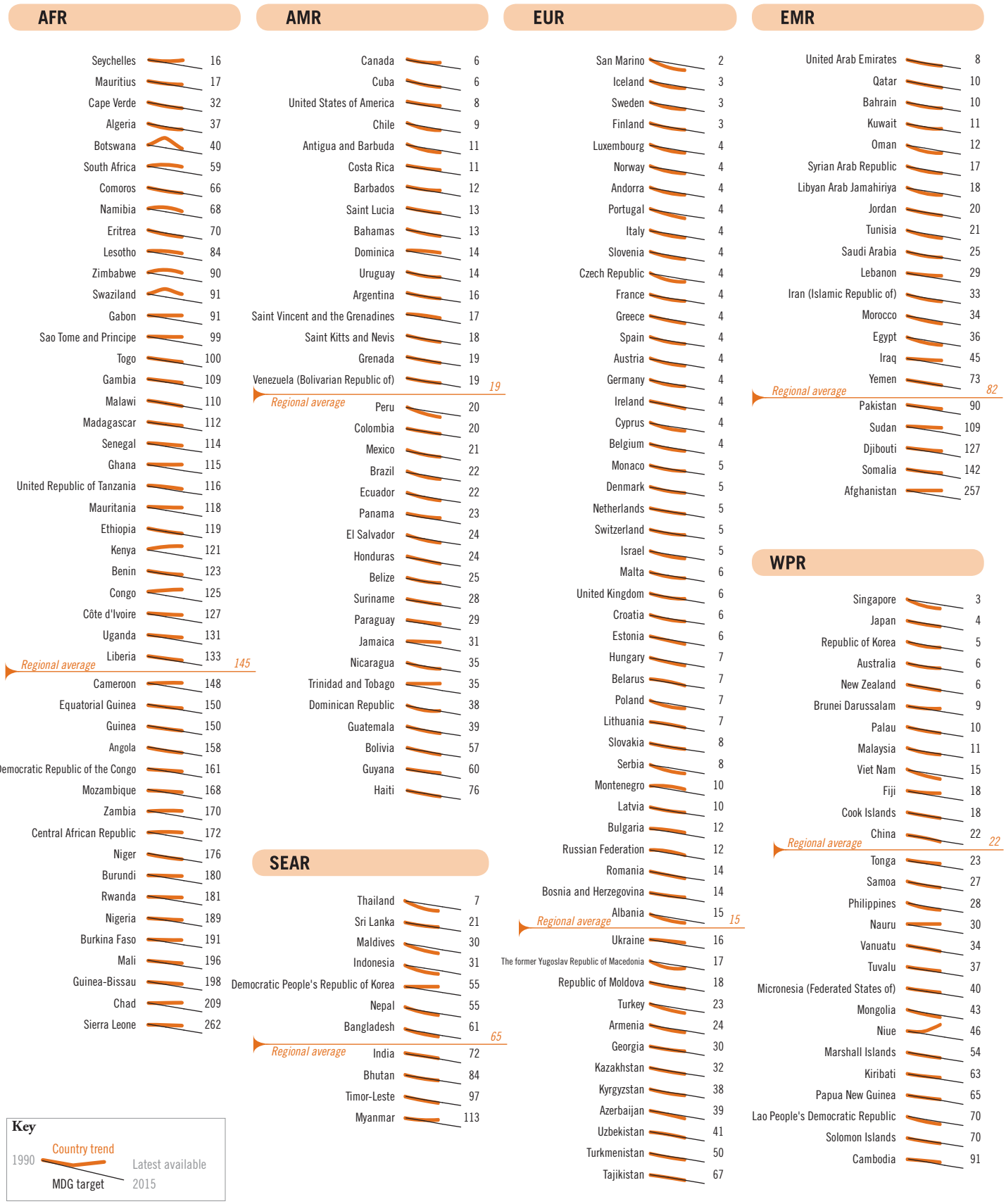
1. Children aged <5 years underweight for age (%)



AFR = WHO African Region; AMR = WHO Region of the Americas; SEAR = WHO South-East Asia Region; EUR = WHO European Region; EMR = WHO Eastern Mediterranean Region; WPR = WHO Western Pacific Region.
This chart shows the percentage of under-5-year-olds 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. The bold lines indicate trends since a baseline established in 1990–1995 (specific year varies by country).

Further details can be found in Table 5.

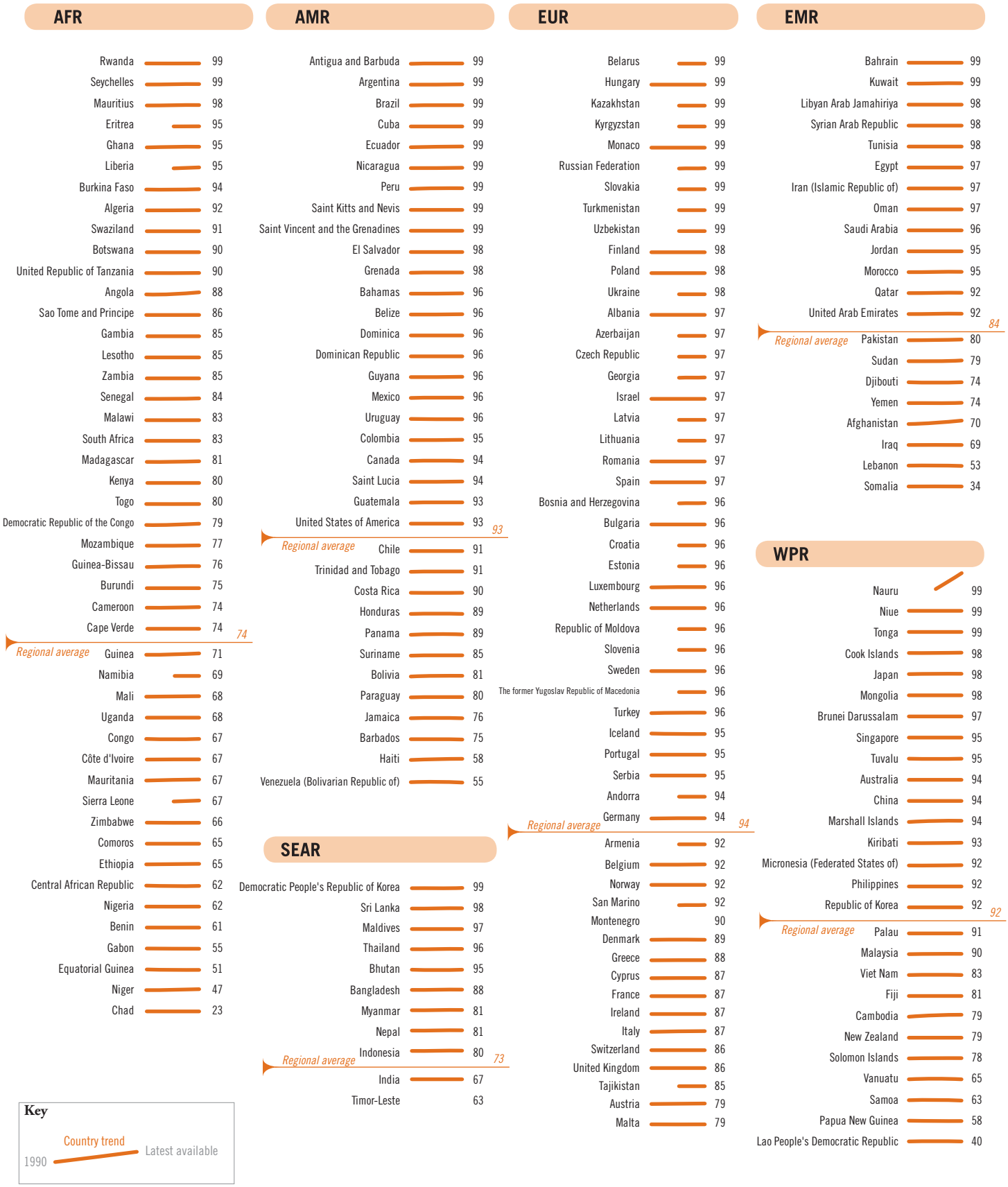
2. Under-5 mortality rate (probability of dying by age 5 per 1000 live births)



AFR = WHO African Region; AMR = WHO Region of the Americas; SEAR = WHO South-East Asia Region; EUR = WHO European Region; EMR = WHO Eastern Mediterranean Region; WPR = WHO Western Pacific Region.
This chart shows estimated under-5 mortality for 2007 with countries sorted by level within each WHO region.
The bold lines indicate trends since 1990.
The thin lines indicate the projected trend needed to achieve the MDG target of a reduction by two thirds between 1990 and 2015.

Further details can be found in Table 1.

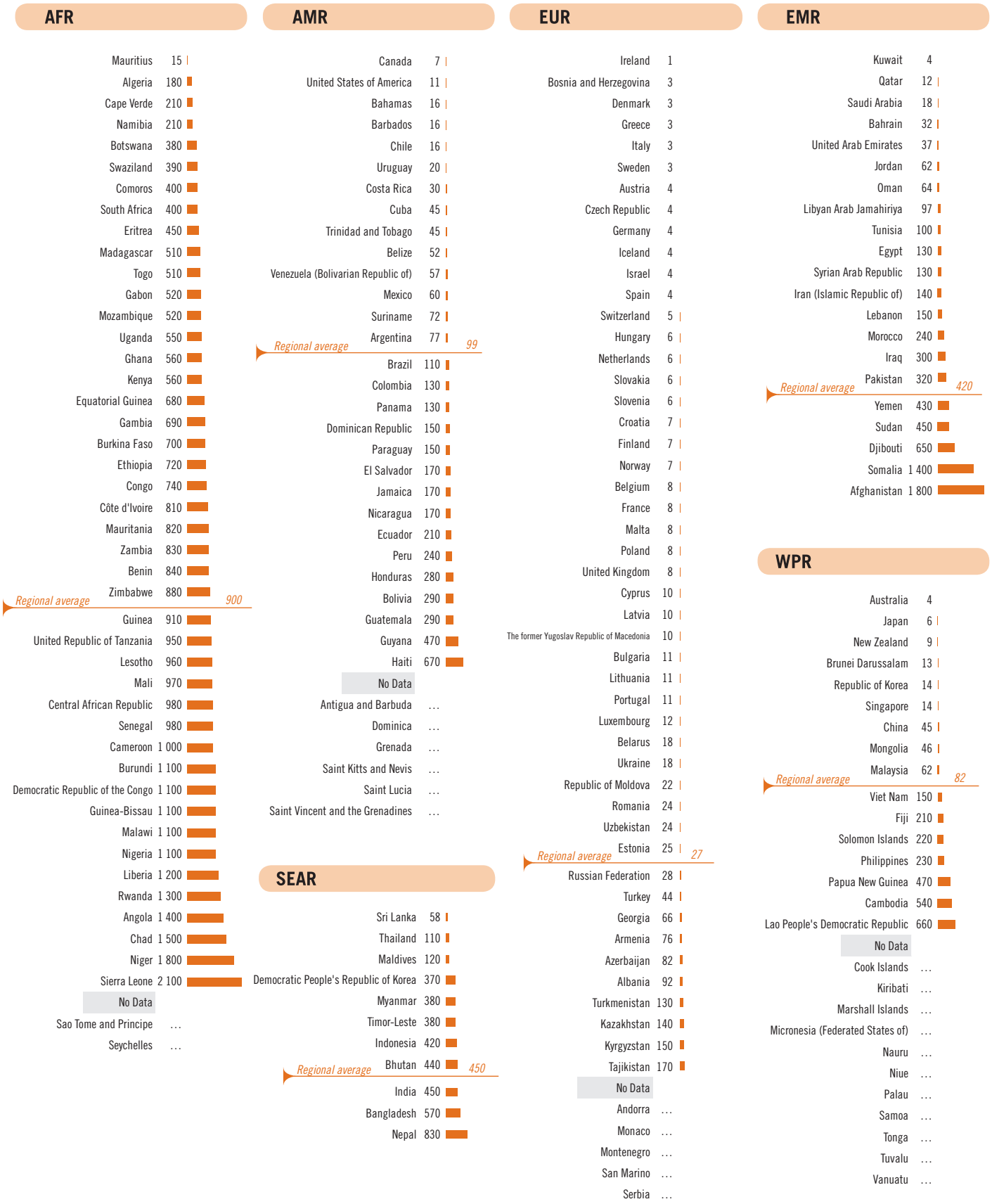
3. Measles immunization coverage among 1-year-olds (%)



AFR = WHO African Region; AMR = WHO Region of the Americas; SEAR = WHO South-East Asia Region; EUR = WHO European Region; EMR = WHO Eastern Mediterranean Region; WPR = WHO Western Pacific Region.
This chart shows the percentage of under-1-year-olds fully immunized against measles with countries sorted by 2007 level within each WHO region.
The bold lines indicate trends since 1990.

Further details can be found in Table 4.

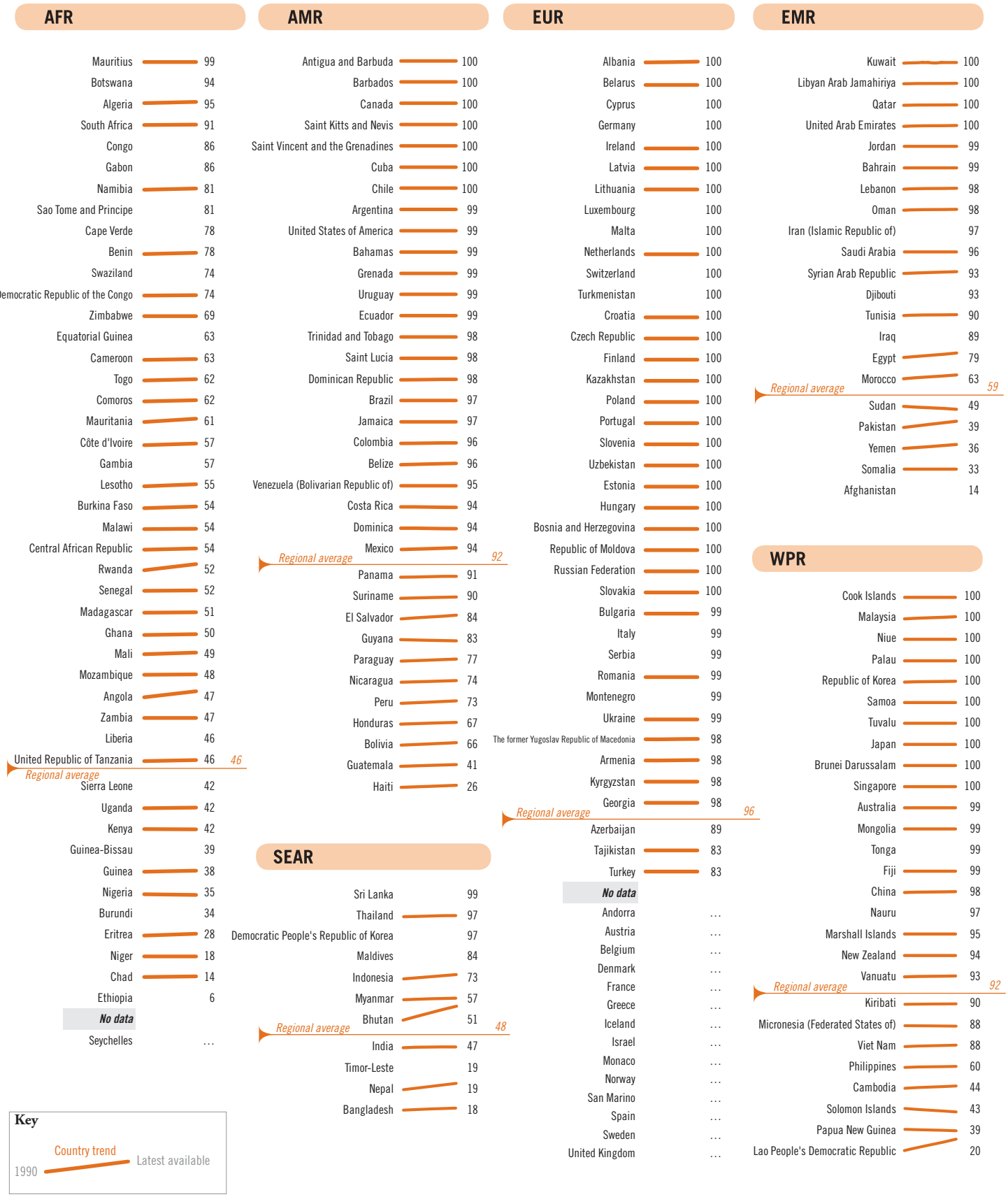
4. Maternal mortality ratio (per 100 000 live births)



AFR = WHO African Region; AMR = WHO Region of the Americas; SEAR = WHO South-East Asia Region; EUR = WHO European Region; EMR = WHO Eastern Mediterranean Region; WPR = WHO Western Pacific Region.
This chart shows the estimated maternal mortality for each country for 2005 with countries sorted by level within each WHO region.

Further details can be found in Table 2.

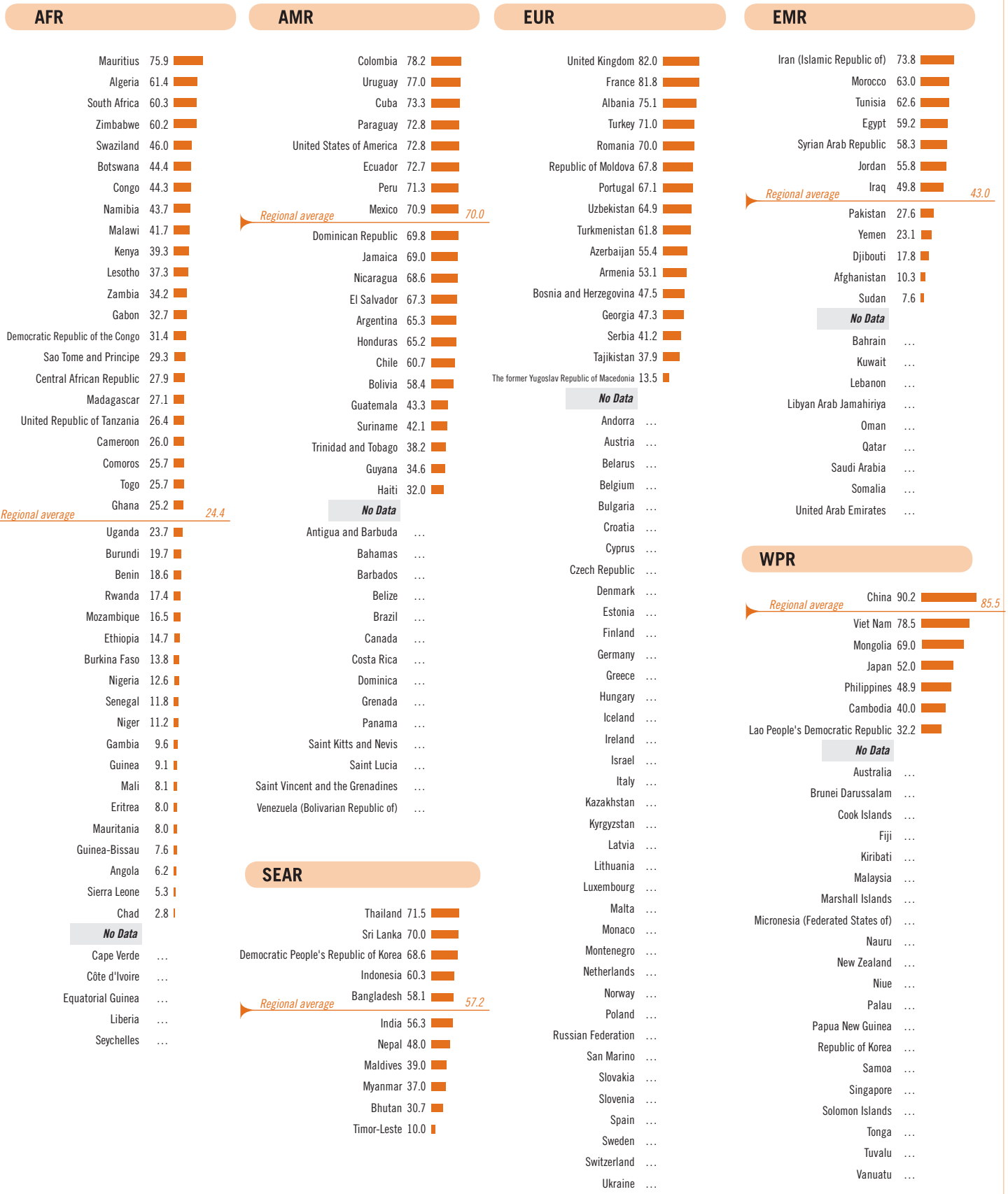
5. Births attended by skilled health personnel (%)



AFR = WHO African Region; AMR = WHO Region of the Americas; SEAR = WHO South-East Asia Region; EUR = WHO European Region; EMR = WHO Eastern Mediterranean Region; WPR = WHO Western Pacific Region.
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.
The bold lines indicate trends with baselines established between 1990–1999.

Further details can be found in Table 4.

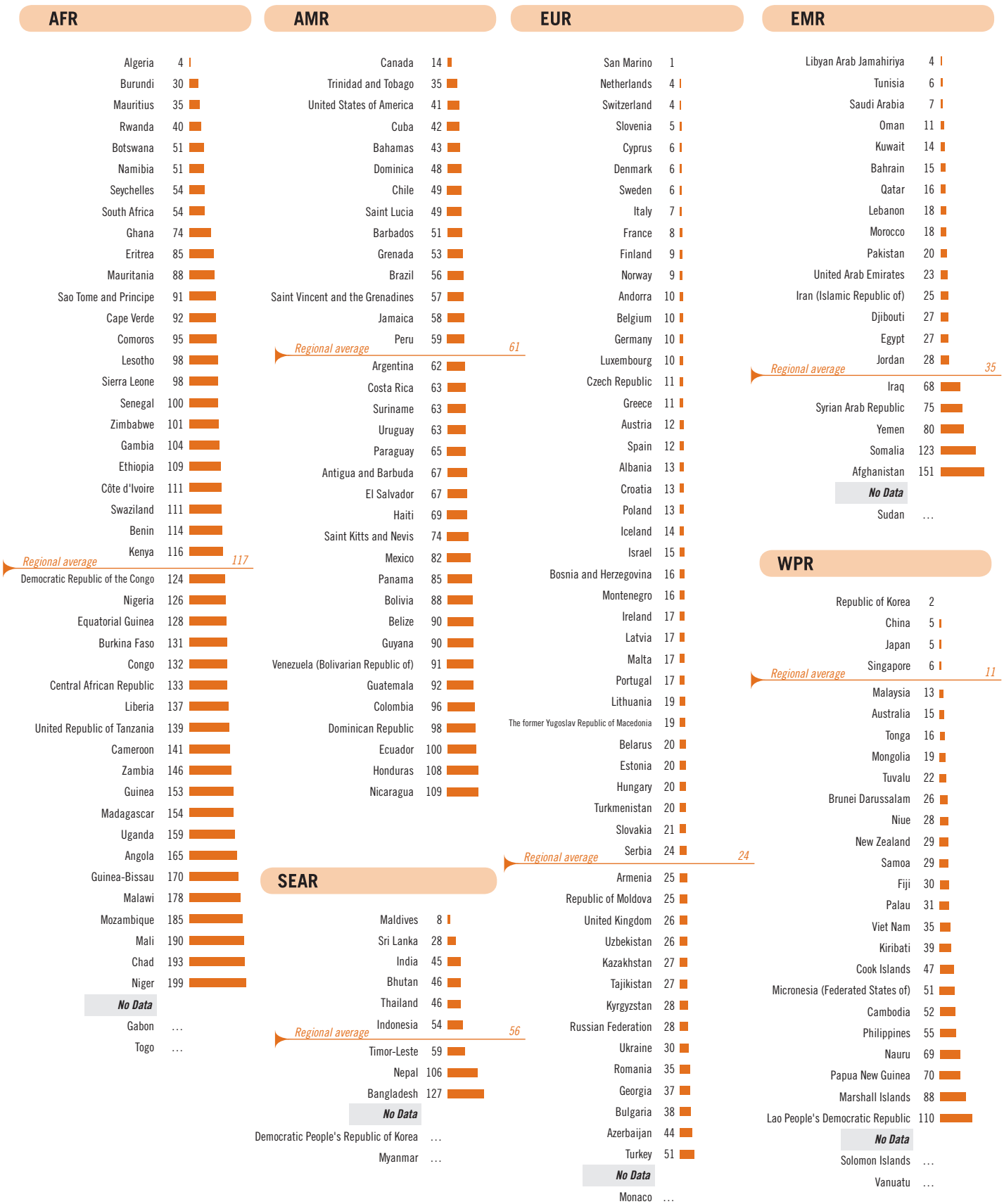
6. Contraceptive prevalence (%)



AFR = WHO African Region; AMR = WHO Region of the Americas; SEAR = WHO South-East Asia Region; EUR = WHO European Region; EMR = WHO Eastern Mediterranean Region; WPR = WHO Western Pacific Region.
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 Table 4.

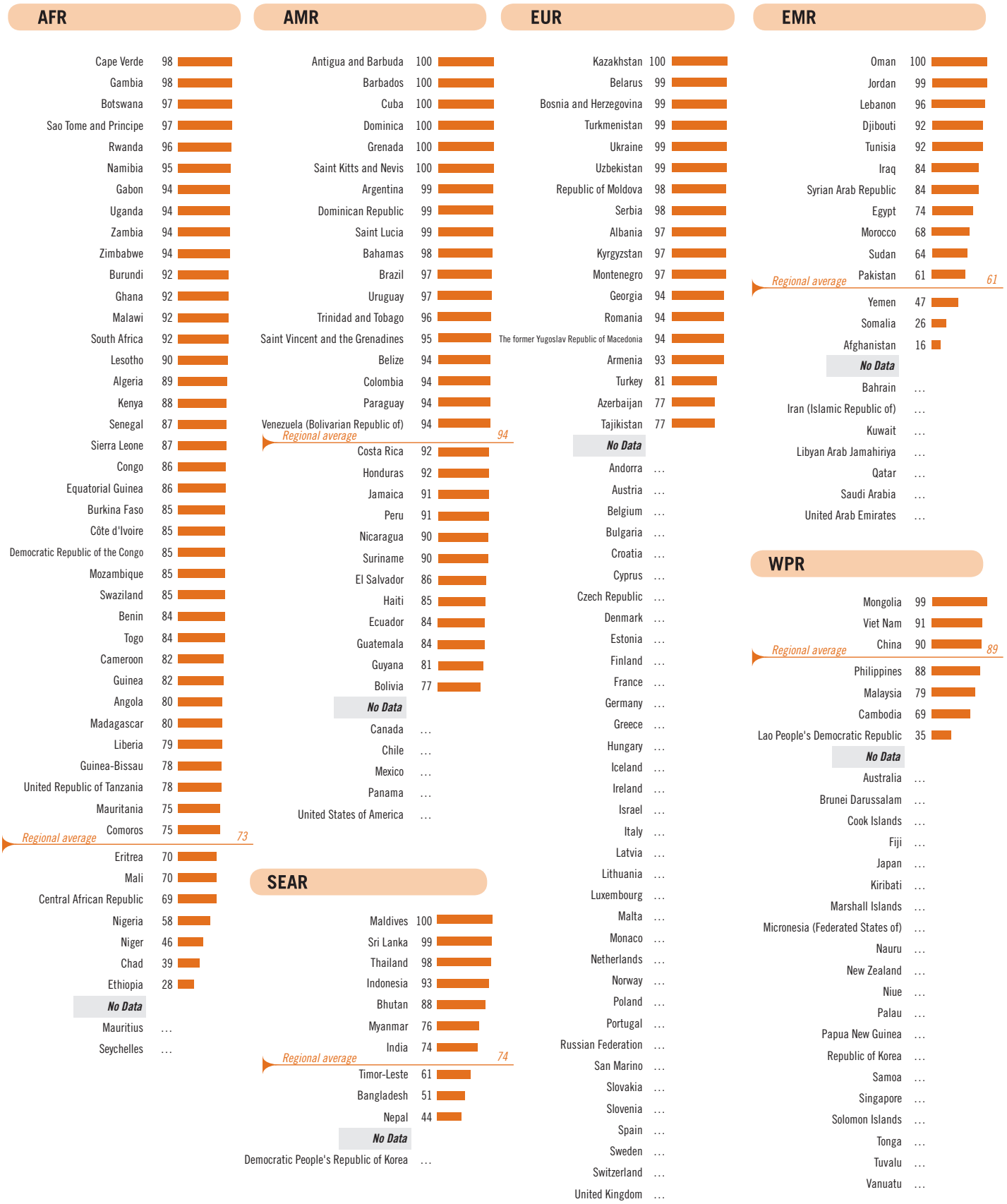
7. Adolescent fertility rate (per 1000 girls aged 15–19 years)



AFR = WHO African Region; AMR = WHO Region of the Americas; SEAR = WHO South-East Asia Region; EUR = WHO European Region; EMR = WHO Eastern Mediterranean Region; WPR = WHO Western Pacific Region.
This chart shows estimated adolescent fertility, also known as the birth rate: births in 15–19-year-old girls 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 Table 9.

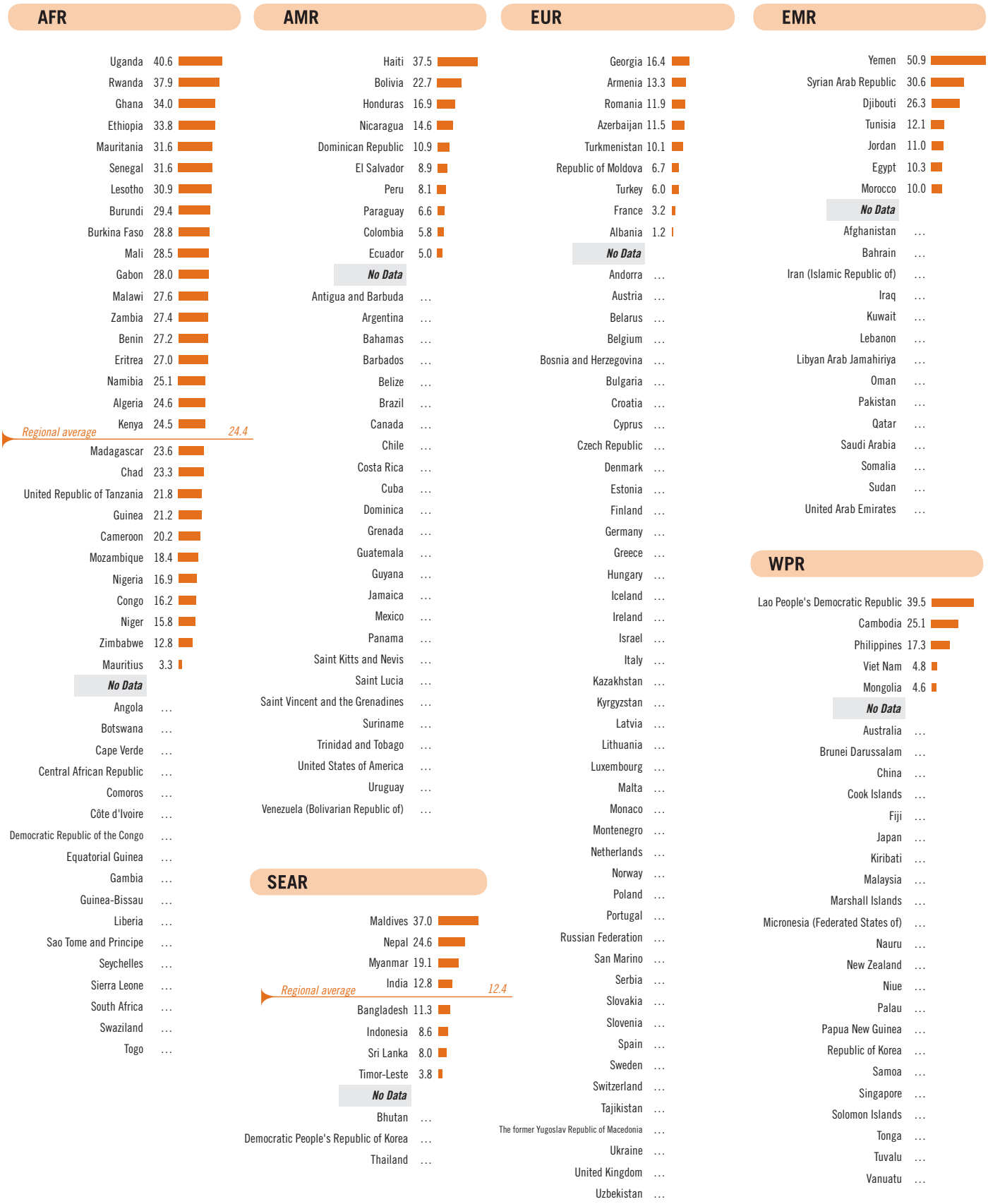
8. Antenatal care coverage (%) : at least 1 visit



AFR = WHO African Region; AMR = WHO Region of the Americas; SEAR = WHO South-East Asia Region; EUR = WHO European Region; EMR = WHO Eastern Mediterranean Region; WPR = WHO Western Pacific Region.
This chart shows the percentage of women who received antenatal care from skilled health personnel at least once during pregnancy.
Within each WHO region, countries are sorted by the latest available data since 2000.

Further details can be found in Table 4.

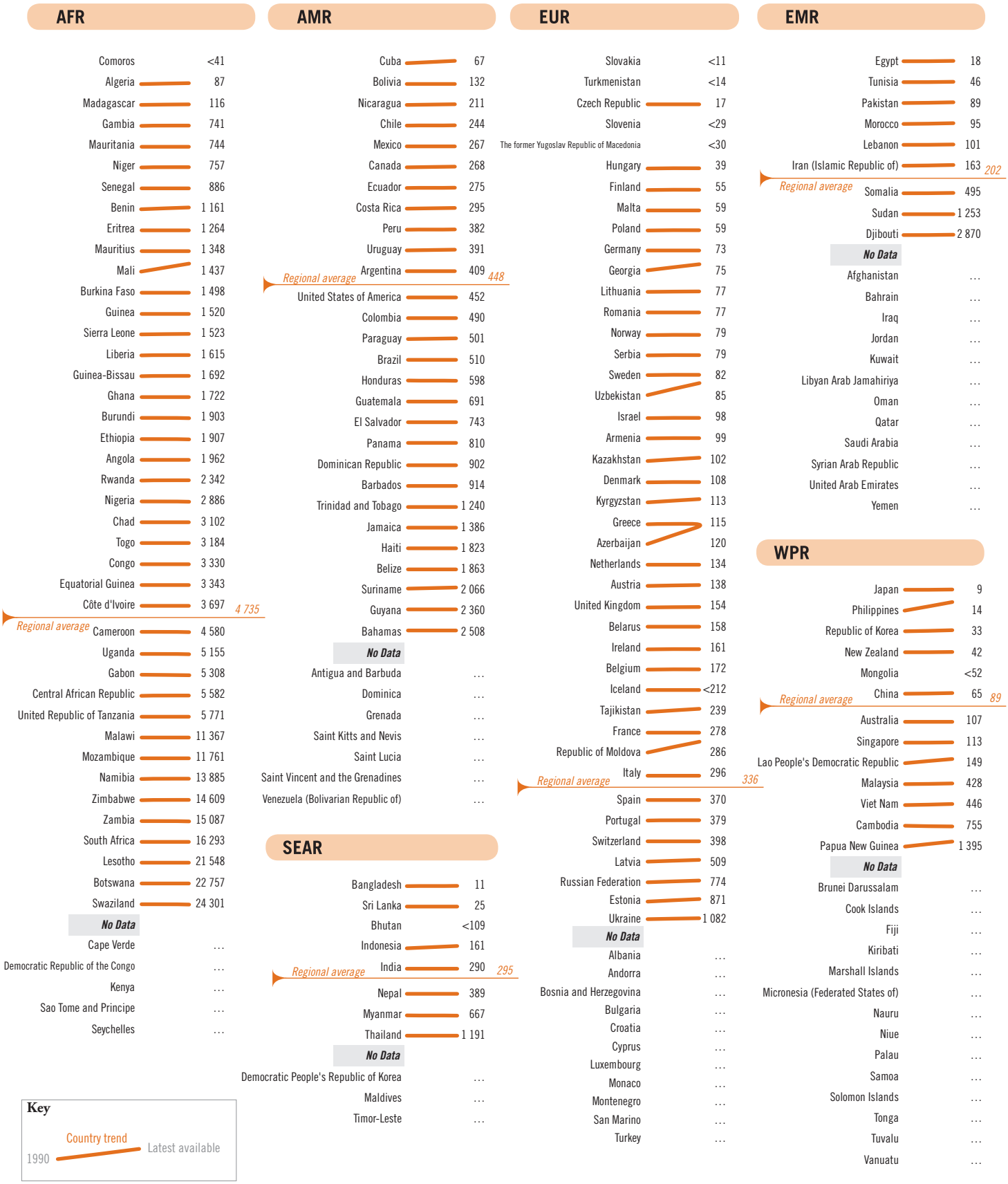
9. Unmet need for family planning (%)



AFR = WHO African Region; AMR = WHO Region of the Americas; SEAR = WHO South-East Asia Region; EUR = WHO European Region; EMR = WHO Eastern Mediterranean Region; WPR = WHO Western Pacific Region.
This chart shows the percentage of women who are fertile and sexually active but report that they are not using any method of contraception.
Within each WHO region, countries are sorted by the latest available data since 2000 .

Further details can be found in Table 4.

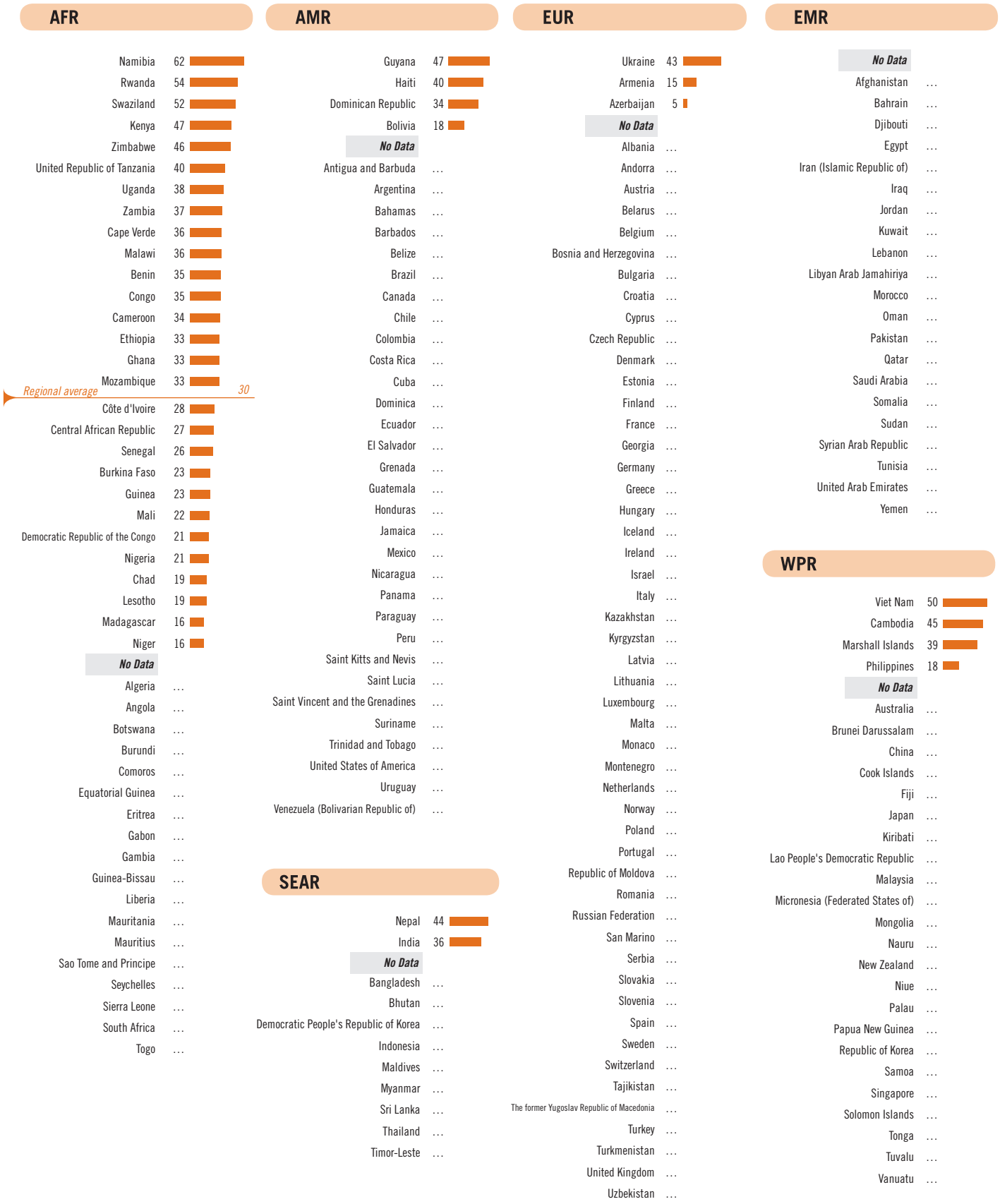
10. Prevalence of HIV among adults aged ≥15 years per 100 000 population



AFR = WHO African Region; AMR = WHO Region of the Americas; SEAR = WHO South-East Asia Region; EUR = WHO European Region; EMR = WHO Eastern Mediterranean Region; WPR = WHO Western Pacific Region.
This chart shows the estimated prevalence of HIV infection in adults aged 15–49 years with countries sorted by 2007 level within each WHO region.
Limited data availability for the MDG target age group 15–24 has obliged us to report prevalence in the 15+ age group.
The bold lines indicate trends since 2001.

Further details can be found in Table 2.

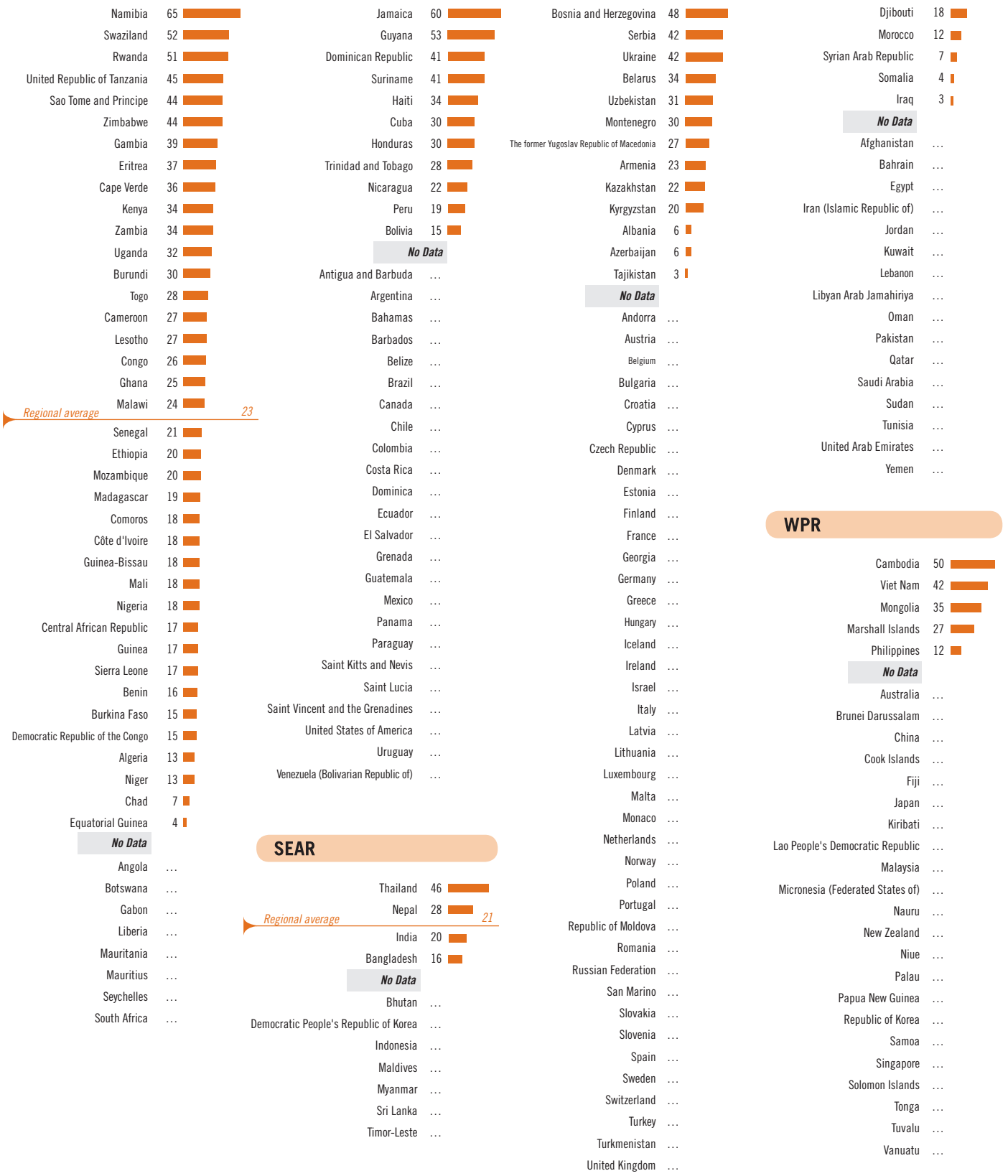
11. Proportion of males aged 15–24 years with comprehensive correct knowledge of HIV/AIDS (%)



AFR = WHO African Region; AMR = WHO Region of the Americas; SEAR = WHO South-East Asia Region; EUR = WHO European Region; EMR = WHO Eastern Mediterranean Region; WPR = WHO Western Pacific Region.
This chart shows the percentage of men 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 Table 5.

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



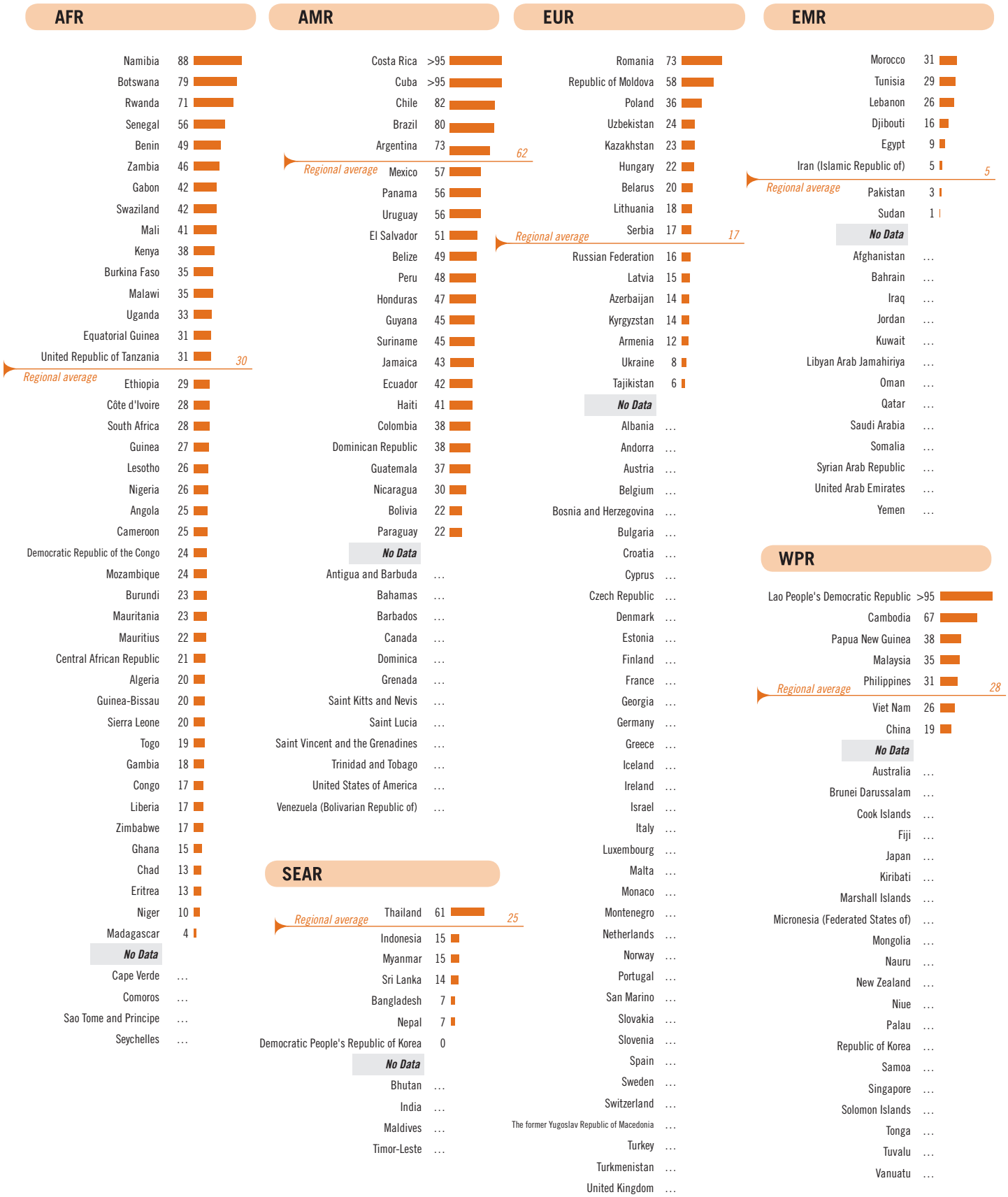
AFR = WHO African Region; AMR = WHO Region of the Americas; SEAR = WHO South-East Asia Region; EUR = WHO European Region; EMR = WHO Eastern Mediterranean Region; WPR = WHO Western Pacific Region.

This chart shows the percentage of women 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 Table 5.

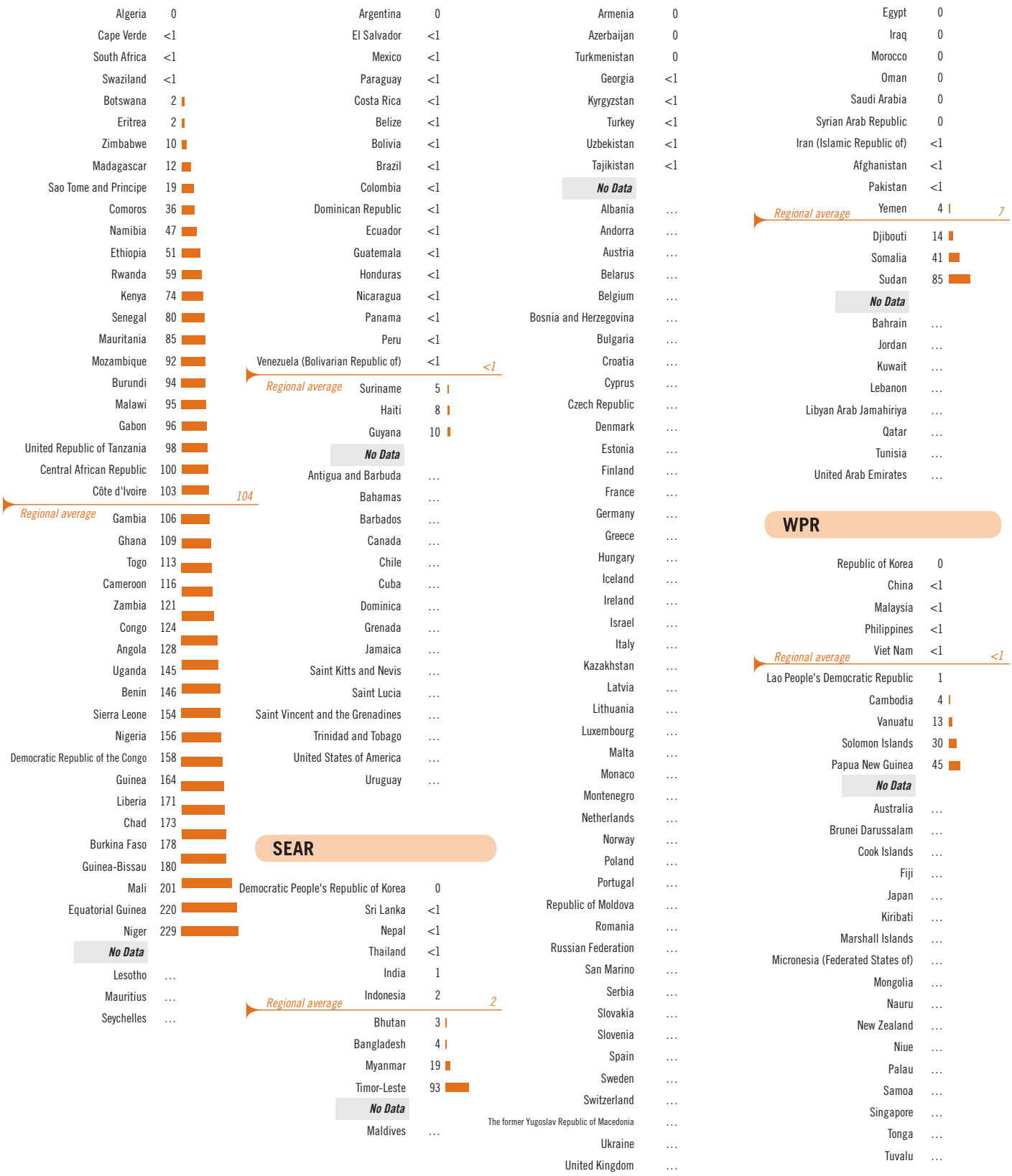
13. Antiretroviral therapy coverage among people with advanced HIV infection (%)



AFR = WHO African Region; AMR = WHO Region of the Americas; SEAR = WHO South-East Asia Region; EUR = WHO European Region; EMR = WHO Eastern Mediterranean Region; WPR = WHO Western Pacific Region.
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 sorted by level within each WHO region.

Further details can be found in Table 4.

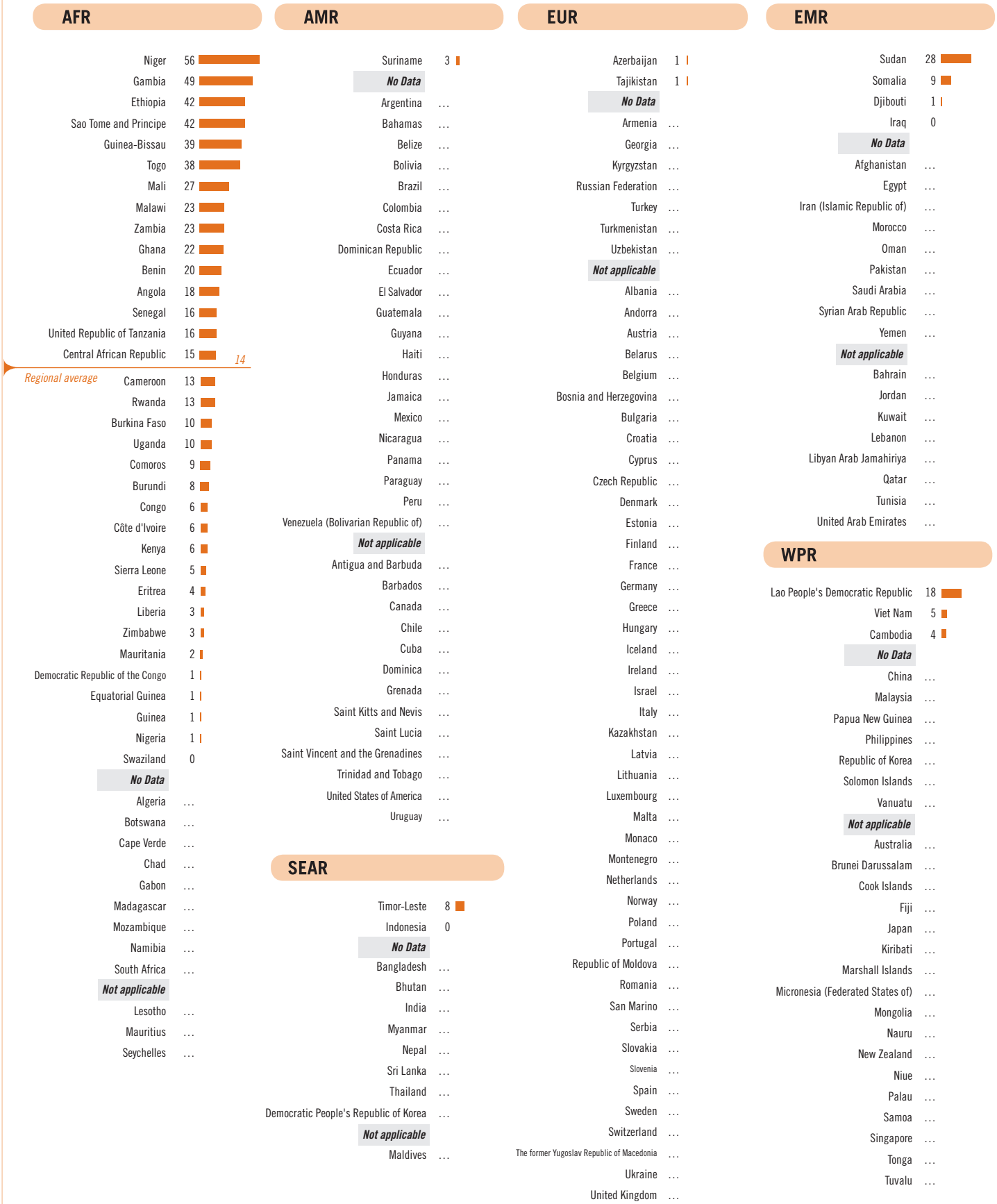
14. Malaria mortality rate per 100 000 population



AFR = WHO African Region; AMR = WHO Region of the Americas; SEAR = WHO South-East Asia Region; EUR = WHO European Region; EMR = WHO Eastern Mediterranean Region; WPR = WHO Western Pacific Region.
This chart shows the estimated number of deaths from malaria for 2006 with countries sorted by level within each WHO region.

Further details can be found in Table 2.

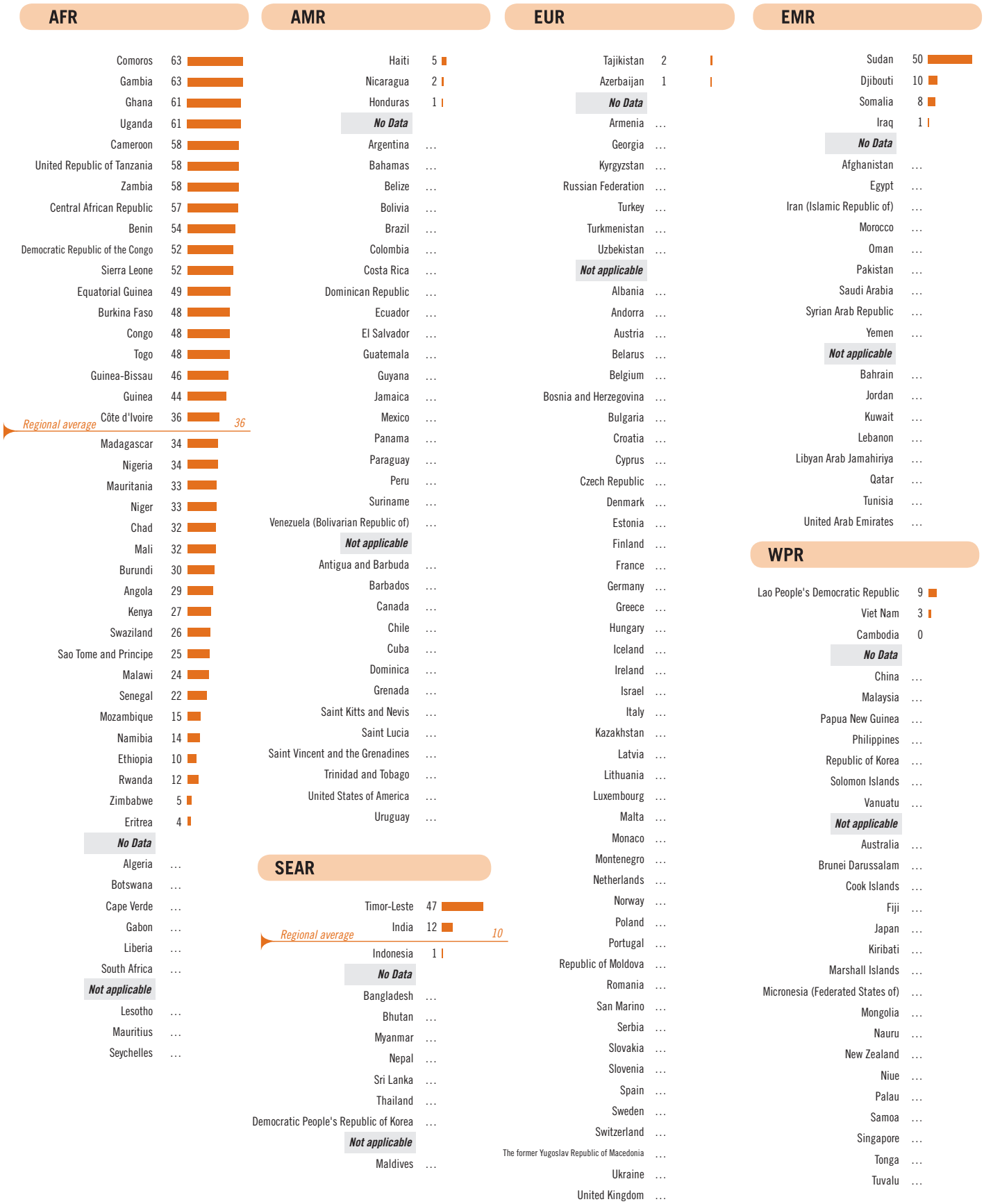
15. Children aged <5 years sleeping under insecticide-treated bednets (%)



AFR = WHO African Region; AMR = WHO Region of the Americas; SEAR = WHO South-East Asia Region; EUR = WHO European Region; EMR = WHO Eastern Mediterranean Region; WPR = WHO Western Pacific Region.
This chart shows the percentage of children under five years of age who slept under an insecticide-treated mosquito 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 Table 4.

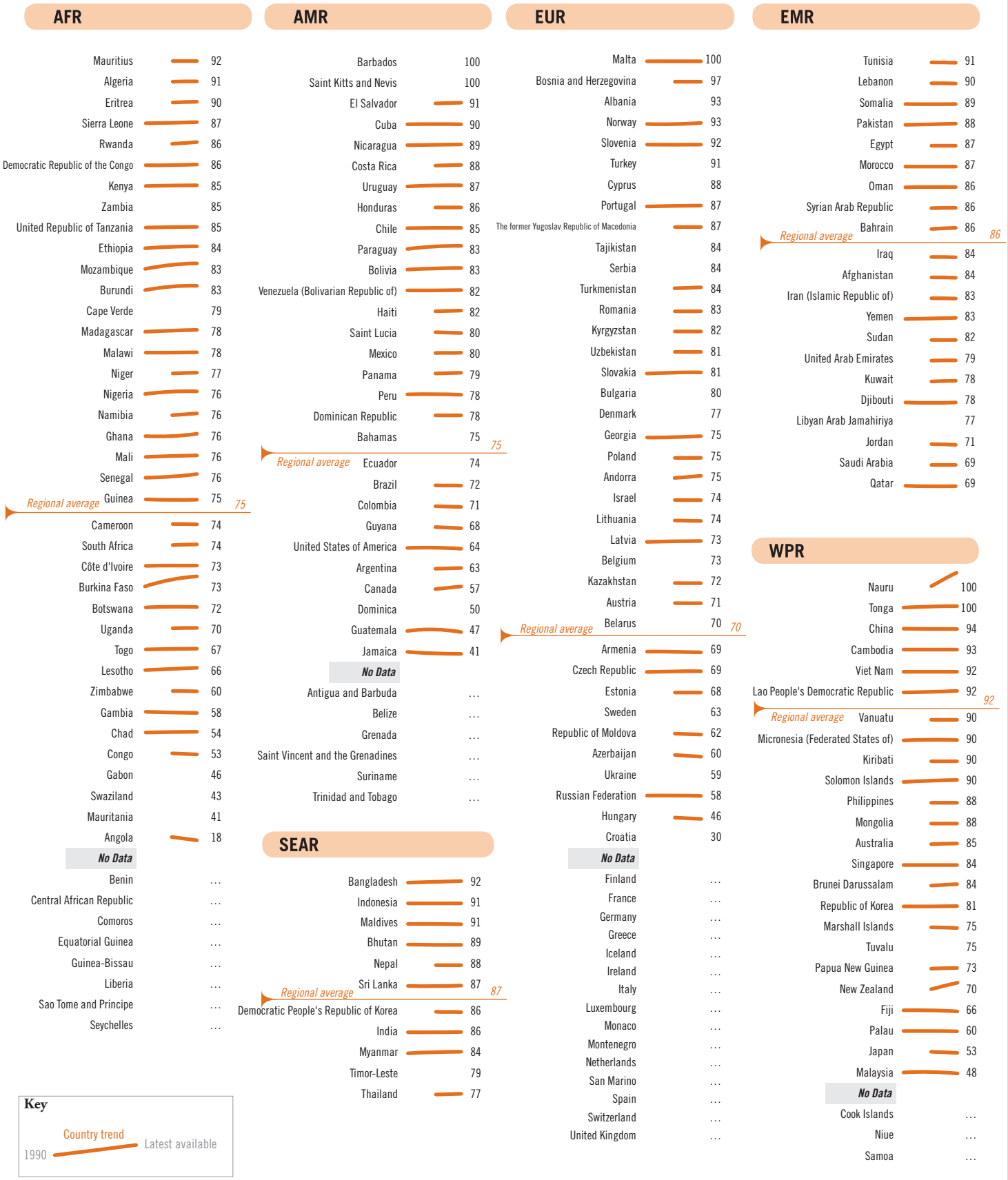
16. Children aged <5 years who received any antimalarial treatment for fever (%)



AFR = WHO African Region; AMR = WHO Region of the Americas; SEAR = WHO South-East Asia Region; EUR = WHO European Region; EMR = WHO Eastern Mediterranean Region; WPR = WHO Western Pacific Region.
This chart shows the percentage of children under five 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 Table 4.

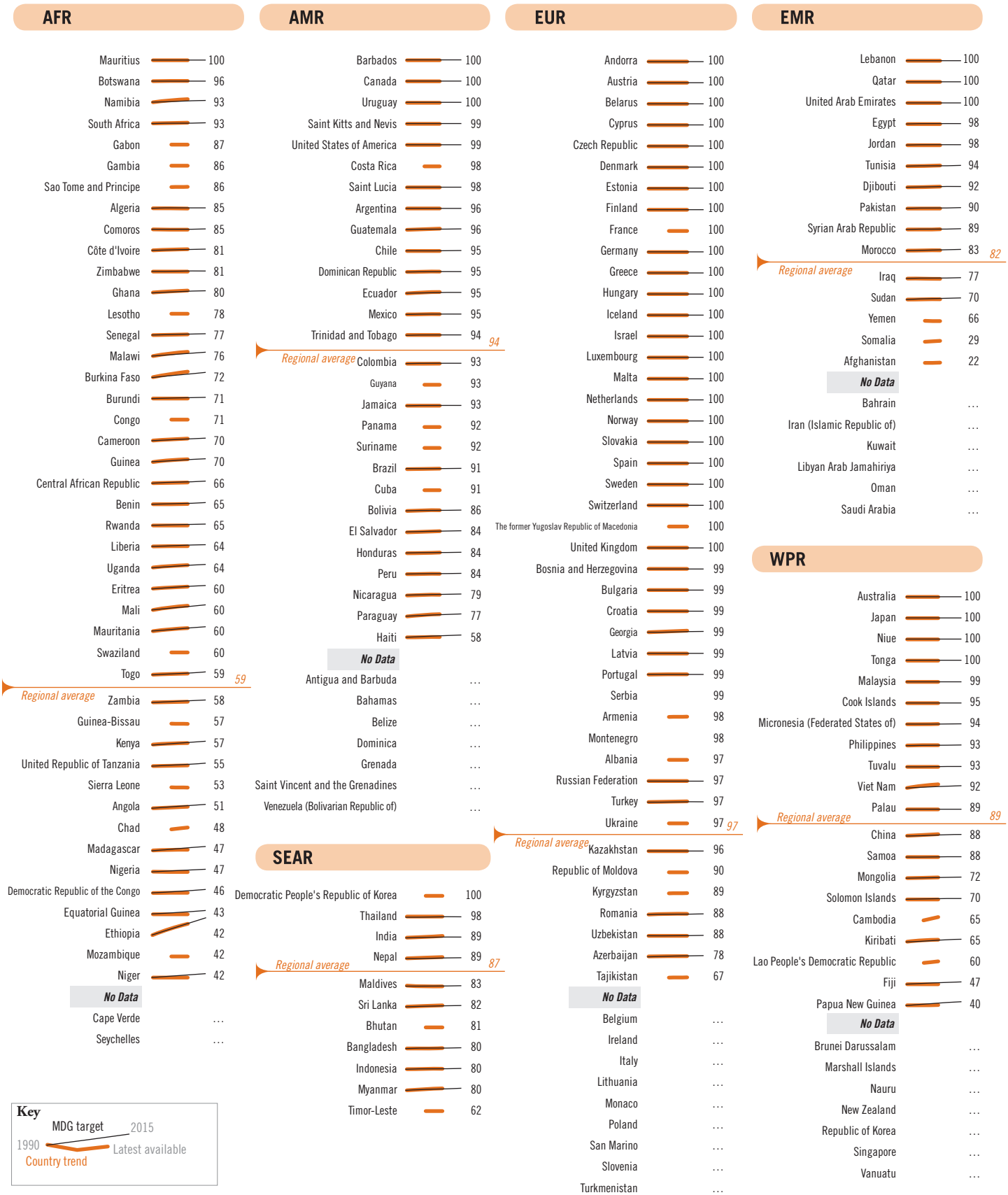
17. Tuberculosis treatment success under DOTS (%)



AFR = WHO African Region; AMR = WHO Region of the Americas; SEAR = WHO South-East Asia Region; EUR = WHO European Region; EMR = WHO Eastern Mediterranean Region; WPR = WHO Western Pacific Region.
This chart shows the percentage of new smear-positive patients registered for treatment under DOTS who were cured (with laboratory confirmation) or completed their course of treatment in 2006 with countries sorted by level within each WHO region.
The average for each region is shown in the horizontal line. The bold lines indicate trends since 1990.

Further details can be found in Table 4.

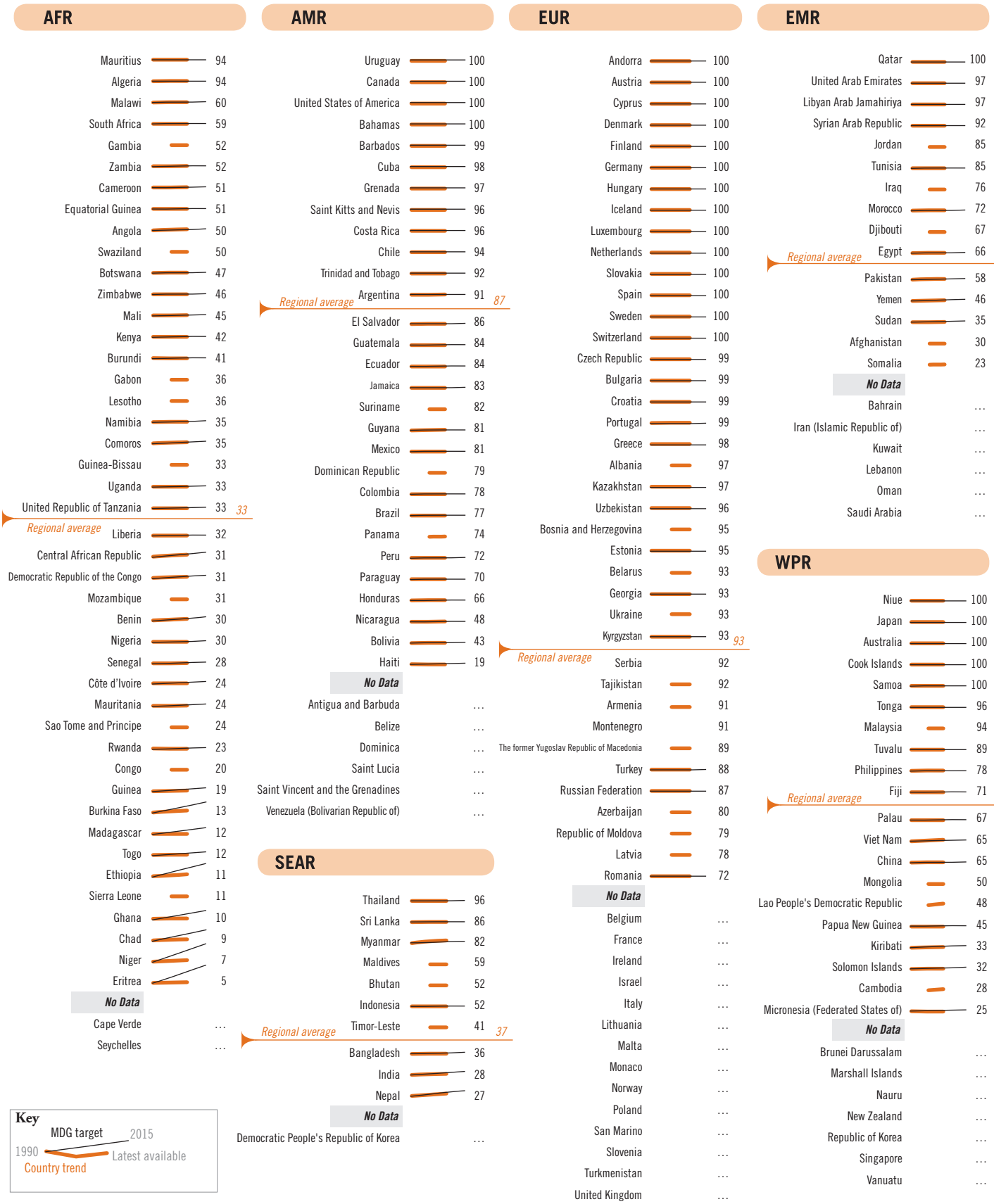
18. Access to improved drinking-water sources (%)



AFR = WHO African Region; AMR = WHO Region of the Americas; SEAR = WHO South-East Asia Region; EUR = WHO European Region; EMR = WHO Eastern Mediterranean Region; WPR = WHO Western Pacific Region.
This chart shows the percentage of the population using an improved drinking-water source with countries sorted by 2006 level within each WHO region.
The bold lines indicate trends since 1990.
The thin lines indicate the projected trend needed to double, by 2015, the proportion of people with sustainable access to safe drinking-water.
The MDG target is worded in terms of halving, by 2015, the proportion of people without sustainable access to safe drinking-water.

Further details can be found in Table 5.

19. Access to improved sanitation (%)



AFR = WHO African Region; AMR = WHO Region of the Americas; SEAR = WHO South-East Asia Region; EUR = WHO European Region; EMR = WHO Eastern Mediterranean Region; WPR = WHO Western Pacific Region.
This chart shows the percentage of the population using an improved sanitation facility with countries sorted by 2006 level within each WHO region.
The bold lines indicate trends since 1990.
The thin lines indicate the projected trend needed to double, by 2015, the proportion of people with sustainable access to basic sanitation.
The MDG target is worded in terms of halving, by 2015, the proportion of people without sustainable access to basic sanitation.

Further details can be found in Table 5.