**Table 4. Access to Sanitation by Country, 1970 to 2002**

## Description

Adequate sanitation is also a fundamental requirement for basic human well-being, and improving access is one of the MDGs. Data are given here for the percent of urban, rural, and total populations, by country, with access to sanitation services for 1970, 1975, 1980, 1985, 1990, 1994, 2000, and 2002—the most recent year for which data are available. The World Health Organization (WHO) collected these data over various periods. Most of the data presented were drawn from responses by national governments to WHO questionnaires. Participants in data collection include the JMP, the United Nations Children's Fund, and the Water Supply and Sanitation Collaborative Council, which has continued sector monitoring and aims to support and strengthen the monitoring efforts of individual countries. Countries used their own definitions of "rural" and "urban."

For the 2000 and 2002 WHO assessments, new definitions were provided of "improved" sanitation with allowance for acceptable local technologies. The forty largest countries in the developing world account for 90 percent of population. As a result, WHO spent extra effort to collect comprehensive data for these countries. The excreta disposal system was considered adequate if it was private or shared (but not public) and if it hygienically separated human excreta from human contact. The following technologies were included in the 2000 assessment as representing improved sanitation: connection to a public sewer; connection to septic system; pour-flush latrine; simple pit latrine; ventilated improved pit latrine.

In comparison, unimproved sanitation facilities refer to: public or shared latrine; open pit latrine; bucket latrine.

## Limitations

As is the case with drinking water data, definitions for access to sanitation vary from country to country, and from year to year within the same country. Countries generally regard sanitation facilities that break the fecal-oral transmission route as adequate. In urban areas, adequate sanitation may be provided by connections to public sewers or by household systems such as pit privies, flush latrines, septic tanks, and communal toilets. In rural areas, pit privies, pour-flush latrines, septic tanks, and communal toilets are considered adequate. Direct comparisons between countries and across time within the same country are difficult and are additionally complicated by the fact that these data hide disparities between regions and socioeconomic classes.

The 2000 and 2002 WHO Assessments attempt to shift from gathering information from water providers only to include consumer-based information. The current approach uses household surveys in an effort to assess the actual use of facilities. Access to sanitation services, as reported by WHO, does not imply that the level of service is "adequate" or "safe." The assessment questionnaire did not include any methodology for discounting coverage figures to allow for intermittence or poor quality of the service provided. More details of the methods used, and their limitations, can be found at http://www.who.int/docstore/water_sanitation_health/Globassessment/GlobalTOC.htm.

| Fraction of Population with Access to Sanitation | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | URBAN | | | | | | | | RURAL | | | | | | | | TOTAL | | | | | | | |
| Region and Country | 1970 | 1975 | 1980 | 1985 | 1990 | 1994 | 2000 | 2002 | 1970 | 1975 | 1980 | 1985 | 1990 | 1994 | 2000 | 2002 | 1970 | 1975 | 1980 | 1985 | 1990 | 1994 | 2000 | 2002 |
| AFRICA | 47 | 75 | 57 | 75 | | | | | | | | | | | | | | | | | | | | |
| Algeria | 13 | 100 | | 80 | | | 90 | 99 | 6 | 50 | | 40 | | | 47 | 82 | 9 | 67 | | 57 | | | 73 | 92 |
| Angola | | | 40 | 29 | 25 | 34 | 70 | 56 | | | 15 | 16 | 20 | 8 | 30 | 16 | | | 20 | 19 | 21 | 16 | 44 | 30 |

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| Benin | 83 | | 48 | 58 | 60 | 54 | 46 | 58 | 1 | | 4 | 20 | 35 | 6 | 6 | 12 | 14 | | 16 | 33 | 45 | 20 | 23 | 32 |
| Botswana | | | | 93 | 100 | | | 57 | | | | 28 | 85 | | | 25 | | | | 40 | 89 | | | 41 |
| Burkina Faso | 49 | 47 | 38 | 44 | | 42 | 88 | 45 | | | 5 | 6 | | 11 | 16 | 5 | 4 | 4 | 7 | 9 | | 18 | 29 | 12 |
| Burundi | 96 | | 40 | 84 | 64 | 60 | 79 | 47 | | | 35 | 56 | 16 | 50 | | 35 | | | 35 | 58 | 18 | 51 | | 36 |
| Cameroon | | | | 100 | | | 99 | 63 | | | | 1 | | | 85 | 33 | | | | 43 | | | 92 | 48 |
| Cape Verde | | | 34 | 32 | | 40 | 95 | 61 | | | 10 | 9 | | 10 | 32 | 19 | | | 11 | 10 | | 24 | 71 | 42 |
| Central African Republic | 64 | 100 | | | 45 | | 43 | 47 | 96 | 100 | | | 46 | | 23 | 12 | 72 | 100 | | | 46 | 46 | 31 | 27 |
| Chad | 7 | 9 | | | | 73 | 81 | 30 | | 1 | | | | 7 | 13 | 0 | 1 | 1 | | | | 21 | 29 | 8 |
| Comoros | | | | | | | 98 | 38 | | | | | | | 98 | 15 | | | | | | | 98 | 23 |
| Congo | 8 | 10 | | | | | 14 | 14 | 6 | 9 | | | | | | 2 | 6 | 9 | | | | | | 9 |
| Congo, Democratic Republic | 5 | 65 | | | 46 | 23 | 53 | 43 | 5 | 6 | | 9 | 11 | 4 | 6 | 23 | 5 | 22 | | | 21 | 9 | 20 | 29 |
| Cote D'Ivoire | 23 | | | | 81 | 59 | | 61 | | | | | 100 | 51 | | 23 | 5 | | | | 92 | 54 | | 40 |
| Djibouti | | | 43 | 78 | | 77 | 99 | 55 | | | 20 | 17 | | 100 | 50 | 27 | | | 39 | 64 | | 90 | 91 | 50 |
| Egypt | | | | | 80 | 20 | 98 | 84 | | | 10 | | 26 | 5 | 91 | 56 | | | | | 50 | 11 | 94 | 68 |
| Equatorial Guinea | | | | | 54 | 61 | 60 | 60 | | | | | 24 | 48 | 46 | 46 | | | | | 33 | 54 | 53 | 53 |
| Eritrea | | | | | | | 66 | 34 | | | | | | | 1 | 3 | | | | | | | 13 | 9 |
| Ethiopia | 67 | 56 | | 96 | | | 58 | 19 | 8 | 8 | | 96 | | | 6 | 4 | 14 | 14 | | | | | 15 | 6 |
| Gabon | | | | | | | 25 | 37 | | | | | | | 4 | 30 | | | | | | | 21 | 36 |
| Gambia | | | | | 100 | 83 | 41 | 72 | | | | | 27 | 23 | 35 | 46 | | | | | 44 | 37 | 37 | 53 |
| Ghana | 92 | 95 | 47 | 51 | 63 | 53 | 62 | 74 | 40 | 40 | 17 | 16 | 60 | 36 | 64 | 46 | 55 | 56 | 26 | 30 | 61 | 42 | 63 | 58 |
| Guinea | 70 | | 54 | | | | 94 | 25 | 2 | | 1 | | 0 | | 41 | 6 | 13 | | 11 | | | 70 | 58 | 13 |
| Guinea-Bissau | | | 21 | 29 | | 32 | 88 | 57 | | | 13 | 18 | | 17 | 34 | 23 | | | 15 | 21 | | 20 | 47 | 34 |
| Kenya | 85 | 98 | 89 | | | 69 | 96 | 56 | 45 | 48 | 19 | | | 81 | 81 | 43 | 50 | 55 | 30 | | | 77 | 86 | 48 |
| Lesotho | 44 | 51 | 13 | 22 | | 1 | 93 | 61 | 10 | 12 | 14 | 14 | | 7 | 96 | 32 | 11 | 13 | 14 | 15 | | 6 | 92 | 37 |
| Liberia | 100 | | | 6 | | 38 | | 49 | 9 | | | 2 | | 2 | | 7 | 19 | | | | | 18 | | 26 |
| Libya | 100 | 100 | 100 | | | | 97 | 97 | 54 | 69 | 72 | | | | 30 | 96 | 67 | 79 | 88 | | | | 97 | 97 |
| Madagascar | 88 | | 9 | 55 | | 50 | 70 | 49 | | 9 | | | | 3 | 70 | 27 | | | | | | 15 | 42 | 33 |
| Malawi | | | 100 | | | 70 | 96 | 66 | | | 81 | | | 51 | 98 | 42 | | | 83 | | | 53 | 77 | 46 |
| Mali | 63 | | 79 | 90 | 81 | 58 | 93 | 59 | | | | 3 | 10 | 21 | 100 | 38 | 8 | | | 19 | 27 | 31 | 69 | 45 |
| Mauritania | 100 | | 5 | 8 | | | 44 | 64 | | | | | | | 19 | 9 | 7 | | | | | | 33 | 42 |
| Mauritius | 51 | 63 | 100 | 100 | 100 | 100 | 100 | 100 | 99 | 100 | 90 | 86 | 100 | 100 | 99 | 99 | 77 | 82 | 94 | 92 | 100 | 100 | 99 | 99 |
| Morocco | 75 | | | 62 | 100 | 69 | 100 | 83 | 4 | | | 16 | | 18 | 42 | 31 | 29 | | | | | 40 | 75 | 61 |
| Mozambique | | | | 53 | | 70 | 69 | 51 | | | | 12 | | 70 | 26 | 14 | | | | 20 | | | 43 | 27 |
| Namibia | | | | | 24 | | 96 | 66 | | | | | 11 | | 17 | 14 | | | | | 15 | | 41 | 30 |
| Niger | 10 | 30 | 36 | | 71 | 71 | 79 | 43 | | 1 | 3 | | 4 | 4 | 5 | 4 | 1 | 3 | 7 | | 17 | 15 | 20 | 12 |
| Nigeria | | | | | 80 | 61 | 85 | 48 | | | | 5 | 11 | 21 | 45 | 30 | | | | | 35 | 36 | 63 | 38 |
| Reunion | | | | | | | | | | | | | | | | | | | | | | | | |
| Rwanda | 83 | 87 | 60 | 77 | 88 | | 12 | 56 | 52 | 56 | 50 | 55 | 17 | | 8 | 38 | 53 | 57 | 51 | 56 | 21 | | 8 | 41 |
| Sao Tome and Principe | | | | | | | | 32 | | | | 15 | | | | 20 | | | | 15 | | | | 24 |

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| Senegal | | | 100 | 87 | 57 | 83 | 94 | 70 | | | 2 | | 38 | 40 | 48 | 34 | | | 36 | | 46 | 58 | 70 | 52 |
| Seychelles | | | | | | | | | | | | | | | | 100 | | | | | | | | |
| Sierra Leone | | | 31 | 60 | 55 | 17 | 23 | 53 | | | 6 | 10 | 31 | 8 | 31 | 30 | | | 12 | 24 | 39 | 11 | 28 | 39 |
| Somalia | | 77 | | 44 | | | | 47 | | 35 | | 5 | | | | 14 | | 47 | | 18 | | | | 25 |
| South Africa | | | | | | 79 | 99 | 86 | | | | | | 12 | 73 | 44 | | | | | | 46 | 86 | 67 |
| Sudan | 100 | 100 | 73 | 73 | | 79 | 87 | 50 | 4 | 10 | | | | 4 | 48 | 24 | 16 | 22 | | | | 22 | 62 | 34 |
| Swaziland | | 99 | | 100 | | 36 | | 78 | | 25 | | 25 | | 37 | | 44 | | 36 | | 45 | | 36 | | 52 |
| Tanzania | | 88 | | 93 | | | 98 | 54 | | 14 | | 58 | | | 86 | 41 | | 17 | 66 | | | | 90 | 46 |
| Togo | 4 | 36 | 24 | 31 | | 57 | 69 | 71 | | 12 | 10 | 9 | | 13 | 17 | 15 | 1 | 15 | 13 | 14 | | 26 | 34 | 34 |
| Tunisia | 100 | | 100 | 84 | | 100 | | 90 | 34 | | | 16 | | 85 | | 62 | 62 | | | 55 | | 96 | | 80 |
| Uganda | 84 | 82 | | 32 | 32 | 75 | 96 | 53 | 76 | 95 | | 30 | 60 | 55 | 72 | 39 | 76 | 94 | | 30 | 57 | 57 | 75 | 41 |
| Zambia | 12 | 87 | | 76 | | 40 | 99 | 68 | 18 | 16 | | 34 | | 10 | 64 | 32 | 16 | 42 | | 55 | | 23 | 78 | 45 |
| Zimbabwe | | | | | 95 | | 99 | 69 | | | | 15 | 22 | | 51 | 51 | | | | | 43 | | 68 | 57 |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| NORTH & CENTRAL | | | | | | | | | | | | | | | | | | | | | | | | |
| AMERICA & CARIBBEAN | | | | | | | | | | | | | | | | | | | | | | | | |
| Anguilla | | | | | | | | | | | | | | | | | | | | | | | | |
| Antigua and Barbuda | | | | | | | | 98 | | | | | | | | 94 | | | | | | | | 95 |
| Aruba | | | | | | | | | | | | | | | | | | | | | | | | |
| Bahamas | 100 | 100 | 88 | 100 | 98 | | 93 | 100 | 13 | 13 | | | 2 | | 94 | 100 | 66 | 65 | 88 | 100 | 63 | | 93 | 100 |
| Barbados | 100 | 100 | | 100 | 100 | | 100 | 99 | 100 | 100 | | | 100 | | 100 | 100 | 100 | 100 | | | 100 | | 100 | 99 |
| Belize | | | 62 | 87 | 76 | 23 | 59 | 71 | | | 75 | 45 | 22 | 87 | 21 | 25 | | | 69 | 66 | 50 | 57 | 42 | 47 |
| British Virgin Islands | | | | | 100 | | | 100 | | | | | 100 | | | 100 | | | | | | | | 100 |
| Canada | | | | | | | 100 | 100 | | | | | | | 99 | 99 | | | | | | | 100 | 100 |
| Cayman Islands | | | 94 | 96 | | | | | | | | 94 | | | | | 96 | | | | | | | |
| Costa Rica | 66 | 94 | 99 | 99 | | 85 | 98 | 89 | 43 | 93 | 84 | 89 | | 99 | 95 | 97 | 52 | 93 | 91 | 95 | | 92 | 96 | 92 |
| Cuba | 57 | 100 | | | 100 | 71 | 96 | 99 | | | | | 68 | 51 | 91 | 95 | | | | | 92 | 66 | 95 | 98 |
| Dominican Republic | 63 | 74 | 25 | 41 | 95 | 76 | 75 | 67 | 54 | 16 | 4 | 10 | 75 | 83 | 64 | 43 | 58 | 42 | 15 | 23 | 87 | 78 | 71 | 57 |
| Dominica | | | | | | | | 86 | | | | | | | | 75 | | | | | | | | 83 |
| El Salvador | 66 | 71 | 48 | 82 | 85 | 78 | 88 | 78 | 18 | 17 | 26 | 43 | 38 | 59 | 78 | 40 | 37 | 39 | 35 | 58 | 59 | 68 | 83 | 63 |
| Grenada | | | | | | | 96 | 96 | | | | | | | 97 | 97 | | | | | | | 97 | 97 |
| Guadeloupe | | | | | | | 61 | | | | | | | | 61 | | | | | | | | 61 | |
| Guatemala | | | 45 | 41 | 72 | | 98 | 72 | 11 | 16 | 20 | 12 | 52 | | 76 | 52 | | | 30 | 24 | 60 | | 85 | 61 |
| Haiti | | | 42 | 42 | 44 | 42 | 50 | 52 | 43 | 1 | 10 | 13 | 17 | 16 | 16 | 23 | | | 19 | 21 | 25 | 24 | 28 | 34 |
| Honduras | 64 | 53 | 49 | 24 | 89 | 81 | 94 | 89 | 9 | 13 | 26 | 34 | 42 | 53 | 57 | 52 | 24 | 26 | 35 | 30 | 63 | 65 | 77 | 68 |
| Jamaica | 100 | 100 | 12 | 92 | | | 98 | 90 | 92 | 91 | 2 | 90 | | | 66 | 68 | 94 | 94 | 7 | 91 | | | 84 | 80 |
| Martinique | | | | | | | | | | | | | | | | | | | | | | | | |
| Mexico | | | 77 | 77 | 85 | 81 | 87 | 90 | 13 | 14 | 12 | 13 | | 26 | 32 | 39 | | | 55 | 58 | | 66 | 73 | 77 |
| Montserrat | | | | | | | | 96 | | | | | | | | 96 | | | | | | | | 96 |

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| Netherlands Antilles | | | | | | | | | | | | | | | | | | | | | | | | |
| Nicaragua | | | 34 | 35 | | 34 | 96 | 78 | 8 | 24 | | 16 | | 27 | 68 | 51 | | | | 27 | | 31 | 84 | 66 |
| Panama | 87 | 78 | 83 | 99 | | | 87 | 89 | 69 | 76 | 59 | 61 | | | 94 | 51 | 78 | 77 | 71 | 81 | | 86 | 99 | 72 |
| Puerto Rico | | | | | | | | | | | | | | | | | | | | | | | | |
| St Kitts | | | | | | | | 96 | | | | | | | | 96 | | | | | | | | 96 |
| St Lucia | | | | | | | | 89 | | | | | | | | 89 | | | | | | | | 89 |
| St Vincent | | | | | | | | | | | | | | | | 96 | | | | | | | | |
| Trinidad/Tobago | | | | | 100 | | | 100 | | | | | 92 | | | 100 | | | | | 97 | | 88 | 100 |
| Turks/Caicos Islands | 51 | 83 | 96 | 100 | | | | 98 | 96 | 97 | 88 | 95 | | | | 94 | 81 | 92 | 93 | 98 | | | | 96 |
| United States of America | | | | | | | 100 | 100 | | | | | | | 100 | 100 | | | | | | | 100 | 100 |
| United States Virgin Islands | | | | | | | | | | | | | | | | | | | | | | | | |
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| SOUTH AMERICA | | | | | | | | | | | | | | | | | | | | | | | | |
| Argentina | 87 | 100 | 80 | 75 | | | 89 | | 79 | 83 | 35 | 35 | | | 48 | | 85 | 97 | | 69 | | | 85 | |
| Bolivia | 25 | | 37 | 33 | 38 | 58 | 82 | 58 | 4 | 9 | 4 | 10 | 14 | 16 | 38 | 23 | 12 | | 18 | 21 | 26 | 41 | 66 | 45 |
| Brazil | 85 | | | 86 | 84 | 55 | 85 | 83 | 24 | | 1 | 1 | 32 | 3 | 40 | 35 | 58 | | | 63 | 71 | 44 | 77 | 75 |
| Chile | 33 | 36 | 100 | 100 | | 82 | 98 | 96 | 10 | 11 | 10 | 4 | | | 93 | 64 | 29 | 32 | 83 | 84 | | | 97 | 92 |
| Colombia | 75 | 73 | 93 | 96 | 84 | 76 | 97 | 96 | 8 | 13 | 4 | 13 | 18 | 33 | 51 | 54 | 47 | 48 | 61 | | 64 | 63 | 85 | 86 |
| Ecuador | | | 73 | 98 | 56 | 87 | 70 | 80 | | 7 | 17 | 29 | 38 | 34 | 37 | 59 | | | 43 | 65 | 48 | 64 | 59 | 72 |
| Falkland Islands (Malvinas) | | | | | | | | | | | | | | | | | | | | | | | | |
| French Guiana | | | | | | | 85 | | | | | | | | 57 | | | | | | | | 79 | |
| Guyana | 95 | 99 | 73 | 100 | 97 | | 97 | 86 | 92 | 94 | 80 | 79 | 81 | | 81 | 60 | 93 | 96 | 78 | 86 | 86 | | 87 | 70 |
| Paraguay | 16 | 28 | 95 | 89 | 31 | | 95 | 94 | | | 80 | 83 | 60 | | 95 | 58 | 6 | 10 | 86 | 85 | 46 | | 95 | 78 |
| Peru | 52 | | 57 | 67 | 76 | 62 | 90 | 72 | 16 | | 0 | 12 | 20 | 10 | 40 | 33 | 36 | | 36 | 49 | 59 | 44 | 76 | 62 |
| Suriname | | | 100 | 78 | | | 100 | 99 | | | 79 | 48 | | | 34 | 76 | | | 88 | 62 | | | 83 | 93 |
| Uruguay | 97 | 97 | 59 | 59 | | | 96 | 95 | 13 | 17 | 6 | 59 | | | 89 | 85 | 82 | 83 | 51 | 59 | | | 95 | 94 |
| Venezuela | | | 60 | 57 | | 64 | 86 | 71 | 45 | | 12 | 5 | 72 | 30 | 69 | 48 | | | 52 | 50 | | 58 | 74 | 68 |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| ASIA | | | | | | | | | | | | | | | | | | | | | | | | |
| Afghanistan | 69 | 63 | | 5 | 13 | 38 | 25 | 16 | 16 | 15 | | | | 1 | 8 | 5 | 21 | 21 | | | | 8 | 12 | 8 |
| Armenia | | | | | | | | 96 | | | | | | | | 61 | | | | | | | | 84 |
| Azerbaijan | | | | | | | | 73 | | | | | | | | 36 | | | | | | | | 55 |
| Bahrain | | | | 100 | 100 | | | 100 | | | | 100 | 0 | | | | | | | 100 | | | | |
| Bangladesh | 87 | 40 | 21 | 24 | 40 | 77 | 82 | 75 | | | 1 | 3 | 4 | 30 | 44 | 39 | 6 | 5 | 3 | 5 | 10 | 35 | 53 | 48 |
| Bhutan | | | | | 80 | 66 | 65 | 65 | | | | | 3 | 18 | 70 | 70 | | | | | 7 | 41 | 69 | 70 |
| Brunei Darus | | | | | | | | | | | | | | | | | | | | | | | | |
| Cambodia | | | 100 | | | | 58 | 53 | | | 76 | | | | 10 | 8 | | | | | | | 18 | 16 |
| China | | | | | 100 | 58 | 68 | 69 | | | | | 81 | 7 | 24 | 29 | | | | | 86 | 21 | 38 | 44 |
| Cyprus | 100 | 94 | | 100 | 96 | | 100 | 100 | 92 | 95 | | 100 | 100 | | 100 | 100 | 95 | 95 | | 100 | 98 | | 100 | 100 |

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| East Timor | | | | | | | | 65 | | | | | | | | 30 | | | | | | | | 33 |
| Gaza Strip | | | | | | | | | | | | | | | | | | | | | | | | |
| Georgia | | | | | | | | 96 | | | | | | | | 69 | | | | | | | | 83 |
| Hong Kong | | | | | 90 | | | | | | | | 50 | | | | | | | | 88 | | | |
| India | 85 | 87 | 27 | 31 | 44 | 70 | 73 | 58 | 1 | 2 | 1 | 2 | 3 | 14 | 14 | 18 | 18 | 20 | 7 | 9 | 14 | 29 | 31 | 30 |
| Indonesia | 50 | 60 | 29 | 33 | 79 | 73 | 87 | 71 | 4 | 5 | 21 | 38 | 30 | 40 | 52 | 38 | 12 | 15 | 23 | 37 | 44 | 51 | 66 | 52 |
| Iran | 100 | 100 | 96 | | 100 | 89 | 86 | 86 | 48 | 59 | 43 | | 35 | 37 | 74 | 78 | 70 | 78 | 69 | | 72 | 67 | 81 | 84 |
| Iraq | 82 | 75 | | 100 | 96 | | 93 | 95 | | 1 | | 11 | | | 31 | 48 | 47 | 47 | | 74 | | 36 | 79 | 80 |
| Israel | | | | | | | | 100 | | | | | | | | | | | | | | | | |
| Japan | | | | | | | | 100 | | | | | | | | 100 | | | | | | | | 100 |
| Jordan | | | 94 | 92 | 100 | | 100 | 94 | | | 34 | | 100 | | 98 | 85 | | | 70 | | 100 | 95 | 99 | 93 |
| Kazakhstan | | | | | | | 100 | 87 | | | | | | | 98 | 52 | | | | | | | 99 | 72 |
| Korea DPR | | | | | | | 99 | 58 | | | | | | | 100 | 60 | | | | | | | 99 | 59 |
| Korea Rep | 59 | 80 | 100 | 100 | 67 | | 76 | | | 50 | 100 | 100 | 12 | | 4 | | 25 | 64 | 100 | 100 | 52 | | 63 | |
| Kuwait | | | 100 | 100 | | | | | | | 100 | | | | | | | | 100 | | | | | |
| Kyrgyzstan | | | | | | | 100 | 75 | | | | | | | 100 | 51 | | | | | | | 100 | 60 |
| Laos | | 10 | 13 | | 30 | 70 | 84 | 61 | | 2 | 4 | | 8 | 13 | 34 | 14 | | 3 | 5 | | 12 | 24 | 46 | 24 |
| Lebanon | | | | | | 100 | 100 | 100 | | | | | | 100 | 92 | 87 | | | | | | 100 | 99 | 98 |
| Macau | | | | | | | | | | | | | | | | | | | | | | | | |
| Malaysia | 100 | 100 | 100 | 100 | 94 | | | | 43 | 43 | 55 | 60 | 94 | | 41 | 98 | 59 | 60 | 70 | 75 | 94 | | | |
| Maldives | | 21 | 60 | 100 | 95 | 95 | 100 | 100 | | | 1 | 2 | 4 | 26 | 58 | 42 | | 3 | 13 | 22 | | 44 | 56 | 58 |
| Mongolia | | | | | 100 | | 46 | 75 | | | | | 47 | | 2 | 37 | | | | | 78 | | 30 | 59 |
| Myanmar (Burma) | 45 | 38 | 38 | 33 | 50 | 42 | 65 | 96 | | | | | 13 | 40 | 39 | 63 | 35 | 33 | 20 | 24 | 22 | 41 | 46 | 73 |
| Nepal | 14 | 14 | 16 | 17 | 34 | 51 | 75 | 68 | | | 1 | 1 | 3 | 16 | 20 | 20 | 1 | 1 | 1 | | 6 | 20 | 27 | 27 |
| Oman | 100 | 100 | | 88 | | | 98 | 97 | | 5 | | 25 | | | 61 | 61 | | 12 | | 31 | | 76 | 92 | 89 |
| Pakistan | 12 | 21 | 42 | 51 | 53 | 53 | 94 | 92 | | | 2 | 6 | 12 | 19 | 42 | 35 | 3 | 6 | 13 | 19 | 25 | 30 | 61 | 54 |
| Philippines | 90 | 76 | 81 | 83 | 79 | | 92 | 81 | 40 | 44 | 67 | 56 | 63 | | 71 | 61 | 57 | 56 | 75 | 67 | 70 | | 83 | 73 |
| Qatar | 100 | 100 | | | 100 | | | 100 | 16 | 100 | | | 85 | | | 100 | 83 | 100 | | | | | | 100 |
| Saudi Arabia | 67 | 91 | 81 | 100 | | | 100 | 100 | 11 | 35 | 50 | 33 | | | 100 | | 21 | 47 | 70 | 82 | | | 100 | |
| Singapore | | | 80 | 99 | 99 | | 100 | 100 | | | | | | | | | | | 80 | 99 | | | 100 | 100 |
| Sri Lanka | 76 | 68 | 80 | 65 | 68 | 33 | 91 | 98 | 61 | 55 | 63 | 39 | 45 | 58 | 80 | 89 | 64 | 59 | 67 | 44 | 50 | 52 | 83 | 91 |
| Syria | | | 74 | | | 77 | 98 | 97 | | | 28 | | | 35 | 81 | 56 | | | 50 | | | 56 | 90 | 77 |
| Tajikistan | | | | | | | | 71 | | | | | | | | 47 | | | | | | | | 53 |
| Thailand | 65 | 58 | 64 | 78 | | | 97 | 97 | 8 | 36 | 41 | 46 | 86 | | 96 | 100 | 17 | 40 | 45 | 52 | | | 96 | 99 |
| Turkey | | | 56 | | | | 98 | 94 | | | | | | | 70 | 62 | | | | | | | 91 | 83 |
| Turkmenistan | | | | | | | | 77 | | | | | | | | 50 | | | | | | | | 62 |
| United Arab Emirates | | | 93 | | | | | 100 | | | 22 | | | | | 100 | | | 80 | | | | | 100 |
| Uzbekistan | | | | | | | 100 | 73 | | | | | | | 100 | 48 | | | | | | | 100 | 57 |
| Vietnam | 100 | | | | 23 | 43 | 87 | 84 | | 2 | 55 | | 10 | 15 | 70 | 26 | 26 | | | | 13 | 21 | 73 | 41 |
| Yemen A R | | | 60 | 83 | | | 99 | 76 | | | | | | | 31 | 14 | | | | | | | 45 | 30 |

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| Yemen Dem | | | 70 | | | | 99 | | | | 15 | | | | 31 | | | | 35 | | | | 45 | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| OCEANIA | | | | | | | | | | | | | | | | | | | | | | | | |
| American Samoa | | | | | | | | | | | | | | | | | | | | | | | | |
| Australia | | | | | | | 100 | 100 | | | | | | | 100 | 100 | | | | | | | 100 | 100 |
| Cook Islands | | | 100 | 100 | 100 | | 100 | 100 | | | 76 | 99 | 100 | | 100 | 100 | | | | 99 | | | 100 | 100 |
| Fiji | 100 | 100 | 85 | | 91 | 100 | 75 | 99 | 87 | 93 | 60 | | 65 | 85 | 12 | 98 | 91 | 96 | 70 | | 75 | 92 | 43 | 98 |
| French Polynesia+A32 | | | | | 98 | | 99 | 99 | | | | | 95 | | 97 | 97 | | | | | | | 98 | 98 |
| Guam | | | | | | | | 99 | | | | | | | | 98 | | | | | | | | 99 |
| Kiribati | | | | | 91 | 100 | 54 | 59 | | | | | 49 | 100 | 44 | 22 | | | | | | 100 | 48 | 39 |
| Marshall Islands | | | | | 100 | | | 93 | | | | | 45 | | | 59 | | | | | | | | 82 |
| Micronesia | | | | | 99 | 100 | | 61 | | | | | 46 | 100 | | 14 | | | | | | 100 | | 28 |
| Nauru | | | | | | | | | | | | | | | | | | | | | | | | |
| New Caledonia | | | | | | | | | | | | | | | | | | | | | | | | |
| New Zealand | | | | | | | | | | | | | | | | | | | | | | | | |
| Niue | | | | | 0 | 100 | 100 | 100 | | | | 100 | 100 | 100 | 100 | 100 | | | | | | 100 | 100 | 100 |
| Northern Mariana Islands | | | | | 100 | | | 94 | | | | | 71 | | 92 | 96 | | | | | | | | 94 |
| Palau | | | | | 95 | | 100 | 96 | | | | | 100 | | 100 | 52 | | | | | | | 100 | 83 |
| Papua New Guinea | 100 | 100 | 96 | 99 | 57 | 82 | 92 | 67 | 5 | 5 | 3 | 35 | | 11 | 80 | 41 | 14 | 18 | 15 | 44 | | 22 | 82 | 45 |
| Pitcairn | | | | | | | | | | | | | | | | | | | | | | | | |
| Samoa | 100 | 100 | 86 | | 100 | | 95 | 100 | 80 | 99 | 83 | | 92 | 17 | 100 | 100 | 84 | 99 | | | | | 99 | 100 |
| Solomon Islands | | | 80 | | 73 | | 98 | 98 | | | 21 | | 2 | | 18 | 18 | | | | | 13 | | 34 | 31 |
| Tokelau | | | | | | 100 | | | | | 41 | | | 100 | | 74 | | | | | | 100 | | |
| Tonga | 100 | 100 | 97 | 99 | 88 | 100 | | 98 | 100 | 100 | 94 | 40 | 78 | 100 | | 96 | 100 | 100 | 19 | 52 | 82 | 100 | | 97 |
| Tuvalu | | | 100 | 81 | | 90 | 100 | 92 | | | 80 | 73 | | 85 | 100 | 83 | | | | | | 87 | 100 | 88 |
| Vanuatu | | | 95 | 86 | | | 100 | 78 | | | 68 | 25 | | | 100 | 42 | | | | 40 | | | 100 | 50 |
| Wallis and Futuna Islands | | | | | | | | | | | | | | | | | | | | | | | | |
| Western Samoa | | | 86 | 88 | | | | | | | 83 | 83 | | | | | | | | 84 | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | |
| EUROPE | | | | | | | | | | | | | | | | | | | | | | | | |
| Albania | | | | | | | | 99 | | | | | | | | 81 | | | | | | | | 89 |
| Hungary | | | | | | | | 100 | | | | | | | | 85 | | | | | | | | 95 |
| Republic of Moldova | | | | | | | | 86 | | | | | | | | 52 | | | | | | | | 68 |
| Romania | | | | | | | | 86 | | | | | | | | 10 | | | | | | | | 51 |
| Russian Federation | | | | | | | | 93 | | | | | | | | 70 | | | | | | | | 87 |
| Serbia and Montenegro | | | | | | | | 97 | | | | | | | | 77 | | | | | | | | 87 |
| Ukraine | | | | | | | | 100 | | | | | | | | 97 | | | | | | | | 99 |

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| *Sources:* | UNEP 1989; WRI 1988 | UNEP 1989; WRI 1988 | UNEP 1989; WRI 1988 | UNEP 1989; WRI 1988 | UNEP 1993 | WHO 1996 | WHO 2000 | WHO/UNICEF 2004 | UNEP 1989; WRI 1988 | UNEP 1989; WRI 1988 | UNEP 1989; WRI 1988 | UNEP 1989; WRI 1988 | UNEP 1993 | WHO 1996 | WHO 2000 | WHO/UNICEF 2004 | UNEP 1989; WRI 1988 | UNEP 1989; WRI 1988 | UNEP 1989; WRI 1988 | UNEP 1989; WRI 1988 | Calculated from UNEP 1993 | WHO 1996 | WHO 2000 | WHO/UNICEF 2004 |

**Sources**


UNEP. 1989. United Nations Environment Programme, *Environmental data report*, GEMS Monitoring and Assessment Research Centre, Basil Blackwell, Oxford.

UNEP. 1993. United Nations Environment Programme, 1993–94, *Environmental data report*, GEMS Monitoring and Assessment Research Centre in cooperation with the World Resources Institute and the UK Department of the Environment, Basil Blackwell, Oxford.

WHO. 1996. World Health Organization, *Water supply and sanitation sector monitoring report: 1996 (Sector status as of 1994),* in collaboration with the Water Supply and Sanitation Collaborative Council and the United Nations Children's Fund, UNICEF, New York.

WHO. 2000. World Health Organization. *Global water supply and sanitation assessment 2000 report*. http://www.who.int/docstore/water_sanitation_health/Globassessment/GlobalTOC.htm.

WRI. 1988. World Health Organization data, cited by the World Resources Institute, *World resources 1988–89*, World Resources Institute and the International Institute for Environment and Development in collaboration with the United Nations Environment Programme, Basic Books, New York.