



## 6. Africa

This chapter presents water supply and sanitation coverage data for Africa. Urban and rural water and sanitation coverage figures are shown by country, area or territory for both 1990 and 2000. Maps of current coverage are also presented. Graphs illustrate the regional changes in coverage over time, as well as coverage targets associated with projected changes in population.

### 6.1 Overview

Africa has the lowest total water supply coverage of any region, with only 62% of the population having access to improved water supply. This figure is based on estimates from countries that represent approximately 96% of Africa's total population. The situation is much worse in rural areas, where coverage is only 47%, compared with 85% coverage in urban areas. Sanitation coverage in Africa also is poor, with only Asia having lower coverage levels. Currently, only 60% of the total population in Africa has sanitation coverage, with coverage varying from 84% in urban areas to 45% in rural areas.

In global terms, the continent contains 28% of the world's population without access to improved water supply (Figure 2.1). It also contains 13% of people without access to improved sanitation worldwide (Figure 2.2). It is predicted that Africa will face increased population growth over

the coming decades, with the greatest increase coming in urban areas. As a result, approximately 210 million people in urban areas will need to be provided with access to water supply services, and 211 million people with sanitation services, if the international coverage targets for 2015 are to be met. A similar number of people in rural areas will also need to gain access (see Table 5.1). Given the Assessment's findings concerning change in coverage over the 1990s, it appears that future needs for rural services may continue to be the most difficult to meet.

### 6.2 Water supply and sanitation coverage

Table 6.1 provides data for the years 1990 and 2000, and composite coverage data are presented in Maps 6.1 and 6.2. Figures 6.1 and 6.2 show urban and rural coverage in 1990 and 2000 for water supply and sanitation, respectively.

**TABLE 6.1 AFRICA: WATER SUPPLY AND SANITATION COVERAGE BY COUNTRY, AREA OR TERRITORY, 1990 AND 2000**

	Year	Total population <sup>1</sup> (thousands)	Urban population (thousands)	Rural population (thousands)	% urban water supply coverage	% rural water supply coverage	% total water supply coverage	% urban sanitation coverage	% rural sanitation coverage	% total sanitation coverage
Algeria	1990	24 936	13 074	11 862						
	2000	31 471	18 969	12 502	98	88	94	90	47	73
Angola	1990	9 231	2 546	6 685						
	2000	12 878	4 404	8 474	34	40	38	70	30	44
Benin	1990	4 660	1 607	3 053				46	6	20
	2000	6 097	2 577	3 520	74	55	63	46	6	23
Botswana	1990	1 276	530	746	100	91	95	84	44	61
	2000	1 622	815	807	100					
Burkina Faso	1990	9 061	1 229	7 832	74	50	53	88	14	24
	2000	11 937	2 204	9 733	84			88	16	29
Burundi	1990	5 456	342	5 114	94	63	65	67	90	89
	2000	6 695	600	6 095	96			79		
Cameroon	1990	11 472	4 622	6 850	76	36	52	99	79	87
	2000	15 085	7 379	7 706	82	42	62	99	85	92
Cape Verde	1990	342	151	191						
	2000	428	266	162	64	89	74	95	32	71
Central African Republic	1990	2 943	1 103	1 840	80	46	59	43	23	30
	2000	3 615	1 489	2 126	80	46	60	43	23	31
Chad	1990	5 745	1 209	4 536				70	4	18
	2000	7 651	1 820	5 831	31	26	27	81	13	29
Comoros	1990	527	147	380	97	84	88	98	98	98
	2000	695	231	464	98	95	96	98	98	98
Congo	1990	2 219	1 184	1 035						
	2000	2 944	1 841	1 103	71	17	51	14		
Côte d'Ivoire	1990	11 635	4 690	6 945	89	49	65	78	30	49
	2000	14 786	6 854	7 932	90	65	77			
Democratic Republic of the Congo	1990	37 364	10 442	26 922						
	2000	51 655	15 641	36 014	89	26	45	53	6	20
Djibouti	1990	517	415	102						
	2000	637	531	106	100	100	100	99	50	91
Egypt	1990	56 333	24 841	31 492	97	91	94	96	80	87
	2000	68 469	30 954	37 515	96	94	95	98	91	94

**TABLE 6.1 AFRICA: WATER SUPPLY AND SANITATION COVERAGE BY COUNTRY, AREA OR TERRITORY, 1990 AND 2000 (CONT)**

Equatorial Guinea	1990	352	126	226						
	2000	452	218	234	45	42	43	60	46	53
Eritrea	1990	2 888	456	2 432						
	2000	3 851	722	3 129	63	42	46	66	1	13
Ethiopia	1990	48 092	6 461	41 631	77	13	22	58	6	13
	2000	62 565	11 042	51 523	77	13	24	58	6	15
Gabon	1990	935	637	298						
	2000	1 226	998	228	73	55	70	25	4	21
Gambia	1990	921	237	684						
	2000	1 306	424	882	80	53	62	41	35	37
Ghana	1990	15 128	5 124	10 004	83	43	56	59	61	60
	2000	20 213	7 753	12 460	87	49	64	62	64	63
Guinea	1990	5 755	1 477	4 278	72	36	45	94	41	55
	2000	7 430	2 435	4 995	72	36	48	94	41	58
Guinea-Bissau	1990	973	195	778						
	2000	1 213	288	925	29	55	49	88	34	47
Kenya	1990	23 552	5 671	17 881	89	25	40	94	81	84
	2000	30 080	9 957	20 123	87	31	49	96	81	86
Lesotho	1990	1 722	346	1 376						
	2000	2 153	602	1 551	98	88	91	93	92	92
Liberia	1990	2 579	1 083	1 496						
	2000	3 154	1 416	1 738						
Libyan Arab Jamahiriya	1990	4 416	3 614	802	72	68	71	97	96	97
	2000	5 604	4 911	693	72	68	72	97	96	97
Madagascar	1990	11 632	2 735	8 897	85	31	44	70	25	36
	2000	15 942	4 721	11 221	85	31	47	70	30	42
Malawi	1990	9 335	1 242	8 093	90	43	49	96	70	73
	2000	10 925	2 723	8 202	95	44	57	96	70	77
Mali	1990	8 843	2 105	6 738	65	52	55	95	62	70
	2000	11 234	3 375	7 859	74	61	65	93	58	69
Mauritania	1990	2 026	881	1 145	34	40	37	44	19	30
	2000	2 669	1 541	1 128	34	40	37	44	19	33
Mauritius	1990	1 057	428	629	100	100	100	100	100	100
	2000	1 158	478	680	100	100	100	100	99	99
Morocco	1990	23 932	11 543	12 389	94	58	75	95	31	62
	2000	28 350	15 902	12 448	100	58	82	100	42	75
Mozambique	1990	14 198	3 781	10 417						
	2000	19 681	7 917	11 764	86	43	60	69	26	43
Namibia	1990	1 350	359	991	98	63	72	84	14	33
	2000	1 726	533	1 193	100	67	77	96	17	41
Niger	1990	7 732	1 245	6 487	65	51	53	71	4	15
	2000	10 730	2 207	8 523	70	56	59	79	5	20
Nigeria	1990	87 030	30 470	56 560	78	33	49	77	51	60
	2000	111 506	49 050	62 456	81	39	57	85	45	63
Réunion	1990	604	386	218						
	2000	700	496	204						
Rwanda	1990	6 987	372	6 615						
	2000	7 733	476	7 257	60	40	41	12	8	8
Saint Helena	1990	6	3	3						
	2000	6	4	2						
Sao Tome and Principe	1990	119	46	73						
	2000	147	69	78						
Senegal	1990	7 327	2 933	4 394	90	60	72	86	38	57
	2000	9 481	4 498	4 983	92	65	78	94	48	70
Seychelles	1990	69	37	32						
	2000	77	49	28						
Sierra Leone	1990	3 994	1 198	2 796						
	2000	4 855	1 779	3 076	23	31	28	23	31	28
Somalia	1990	7 773	1 882	5 891						
	2000	10 097	2 776	7 321						
South Africa	1990	34 012	16 609	17 403						
	2000	40 377	20 330	20 047	92	80	86	99	73	86
Sudan	1990	24 062	6 405	17 657	86	60	67	87	48	58
	2000	29 490	10 652	18 838	86	69	75	87	48	62
Swaziland	1990	753	179	574						
	2000	1 008	266	742						

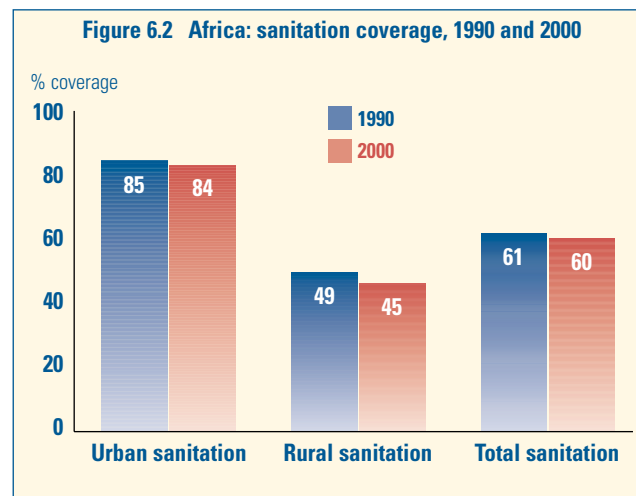
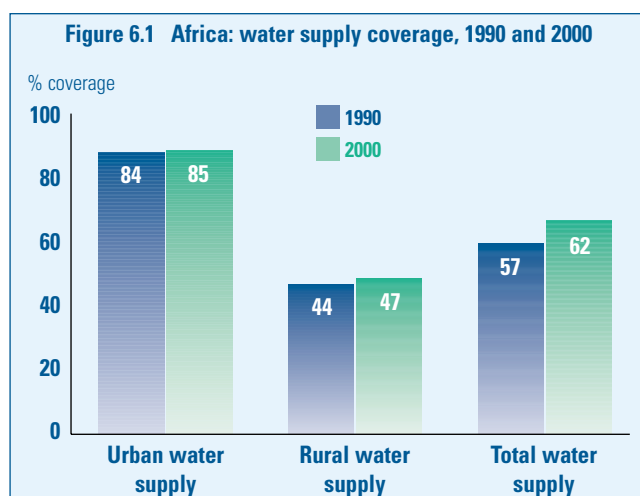
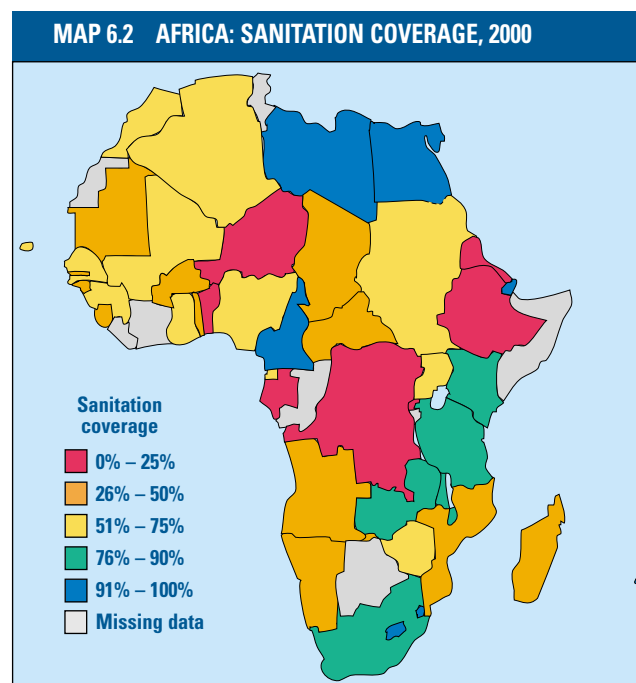
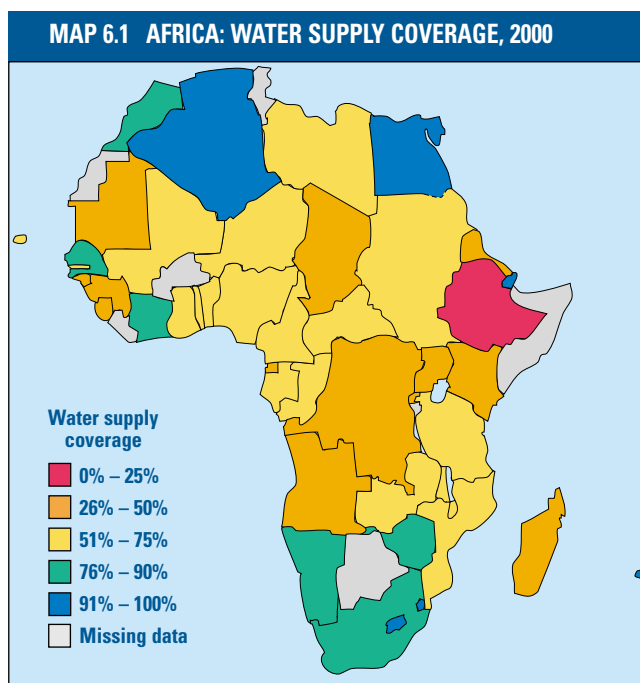
**TABLE 6.1 AFRICA: WATER SUPPLY AND SANITATION COVERAGE BY COUNTRY, AREA OR TERRITORY, 1990 AND 2000 (CONT)**

Togo	1990	3 512	999	2 513	82	38	51	71	24	37
	2000	4 629	1 540	3 089	85	38	54	69	17	34
Tunisia	1990	8 156	4 726	3 430	94	61	80	97	48	76
	2000	9 586	6 281	3 305						
Uganda	1990	16 457	1 837	14 620	80	40	44	96	82	84
	2000	21 778	3 083	18 695	72	46	50	96	72	75
United Republic of Tanzania	1990	25 470	5 298	20 172	80	42	50	97	86	88
	2000	33 517	11 021	22 496	80	42	54	98	86	90
Western Sahara	1990	206	181	25	89					
	2000	294	280	14						
Zambia	1990	7 239	2 853	4 386	88	28	52	86	48	63
	2000	9 169	3 632	5 537	88	48	64	99	64	78
Zimbabwe	1990	9 863	2 799	7 064	99	68	77	98	51	64
	2000	11 669	4 121	7 548	100	77	85	99	51	68

Source: (10)

Maps 6.1 and 6.2, which are based on Table 6.1, show how few countries in Africa have either water supply or sanitation coverage of more than 90%. Indeed, almost half of all the countries for which there are data have less than 50% coverage for sanitation. Even for water supply there are relatively few countries with more than 75% total water coverage.

Ten African countries have less than 50% coverage for both their current national water supply and sanitation coverage. These countries are Angola, Burkina Faso, Chad, the Democratic Republic of the Congo, Eritrea, Ethiopia, Madagascar, Mauritania, Rwanda and Sierra Leone.



### 6.3 Changes during the 1990s

The changes in water supply and sanitation coverage over the 1990s for urban and rural areas are shown in Figures 6.1 and 6.2.

The graphs suggest that urban services have remained more or less the same over the 1990s. Rural services, however, tell a different story. Rural water supply increased slightly while rural sanitation has fallen. Overall, water coverage is moderately higher in the year 2000 than it was in 1990, while sanitation coverage has fallen slightly over the same period. These findings should be considered cautiously, as data for three large countries (Algeria, the Democratic Republic of the Congo and South Africa) are only available for the year 2000 and have an effect on the totals for Africa.

### 6.4 Trends and future needs

In addition to presenting the changes over the 1990s in the number of people with and without access to improved services, Figures 6.3–6.8 also show the international development targets applied to population projections. The year 2015 targets are to reduce the proportion of people without access to improved water and sanitation by one-half, and to achieve universal coverage by the year 2025.

The graphs show that the total number of people in the region with access to water supply has increased considerably over the 1990s. For example, the data show that 135 million people in Africa gained access to improved water supply between 1990–2000 (Figure 6.3). The majority of these people (87 million) were in urban areas (Figure 6.4). For sanita-

tion, the increase in numbers of people with access has been smaller than that for water coverage. In total, 98 million additional people gained access to improved sanitation services between 1990–2000 (Figure 6.6), with the vast majority of these (84 million) living in urban areas (cf. Figures 6.7, 6.8).

Figures 6.3–6.8 also indicate population projections and targets. The African population is expected to increase by 65% over the next 25 years. This presents a huge challenge to services in the region. To achieve the year 2015 goal for urban water supply coverage – halving the percentage of those without access – an additional 210 million people over the next 15 years will have to be provided with service. In rural areas, an estimated additional 194 million people will need to have access to meet the target. Therefore, a total of approximately 400 million additional people will need to be provided with access to improved water supply to meet the 2015 target. Given the findings of the Assessment 2000, this will require a tripling of the rate at which additional people have been gaining access between 1990–2000. New approaches will be needed to face this challenge. Some of the approaches being taken, as well as the difficulties faced by one country, are given in Box 6.1. Box 6.2 also describes some promising new approaches.

To meet the 2015 target for sanitation, an additional 211 million people in urban areas and 194 million people in rural areas will need to be provided with access. This will require that four times as many additional people gain access to improved sanitation between now and 2015, as additionally gained access between 1990–2000.

#### BOX 6.1 IMPROVING ACCESS TO SAFE DRINKING-WATER IN THE UNITED REPUBLIC OF TANZANIA

The water available in the United Republic of Tanzania should be more than adequate for the population's needs. Parts of the Great Lakes Victoria, Tanganyika and Nyasa lie within the country, and there are five major river systems which are used to generate over 85% of the country's power. Yet overall water supply coverage is estimated at 42% in rural areas and 80% in urban areas. The day-to-day experience of many Tanzanians is of intermittent operation, breakdowns, droughts and poor water quality.

Developing some of the potential water sources is, however, problematic. The Great Lakes are international bodies of water, and their exploitation as water sources for the United Republic of Tanzania needs to be handled with delicacy. In the dry central region of the country, groundwater is found only at considerable depth, requiring substantial investment. Surface waters often have competing demands: water is needed for irrigation, hydroelectric power and industry, as well as for domestic use.

Even the water available for domestic use does not always reach the household, because of breakdowns, leakage, lack of finance or management problems. In Dar es Salaam, at least 35% of the water supposedly supplied to the city's inhabitants is lost in the distribution system through leaking pipes and illegal connections, particularly along the transmission main where water is illegally tapped for irrigation. In the Njombe district villages of Ilunda and Ihero, which are counted as covered, water is rationed and is only available from the village standpipe for two hours per day, because the diesel engine used to pump water to the storage tank breaks down.

In response to these difficulties, a new approach is being taken that is demand-responsive rather than supply-driven. Communities take the lead in determining how they wish to solve their water problems and then demand the assistance to do so. Delivery of services is increasingly through the private sector, with the government providing regulation and coordination.

Source: (27)

## BOX 6.2 BETTER MANAGEMENT IN ZAMBIA LEADS TO INCREASED ACCESS TO WATER SUPPLY

The Zambia handpump programme is intended to provide a piped water supply over large areas of the country. Initially, the borehole construction specifications called for large diameters and high yields. A contract was awarded for each borehole, which took from one to two weeks to drill and cost US\$ 5000.

A series of technical and administrative innovations have recently been made, including the following:

- Specifications have been reduced.
- Hydrological survey and drilling are contracted in an integrated manner.
- More mobile rigs are being used.
- Contractors are paid per unit task completed.
- No payments are made to drillers whose boreholes yield no water.

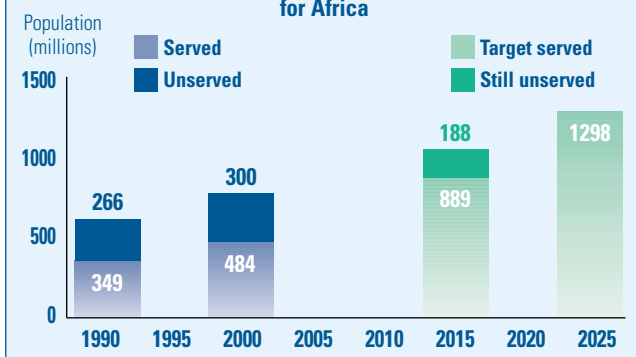
The innovations have resulted in striking improvements:

- Drilling time has been reduced to less than two days.
- The drilling costs per borehole have fallen to under US\$ 2600.
- Project completion rates have gone up.
- More boreholes are being drilled.

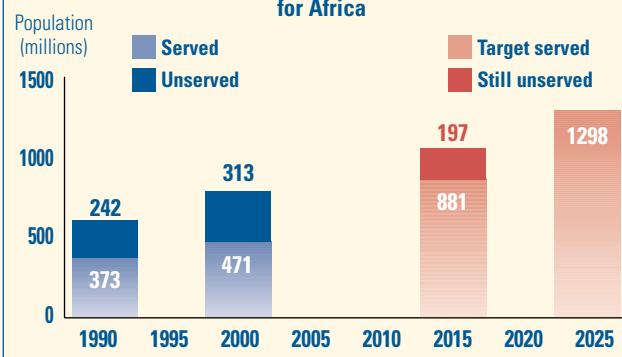
Water and sanitation committees have been formed at water points and local communities have been trained in the use and maintenance of pumps. Water point users pay token fees, which are used to maintain the pumps.

Source: (28)

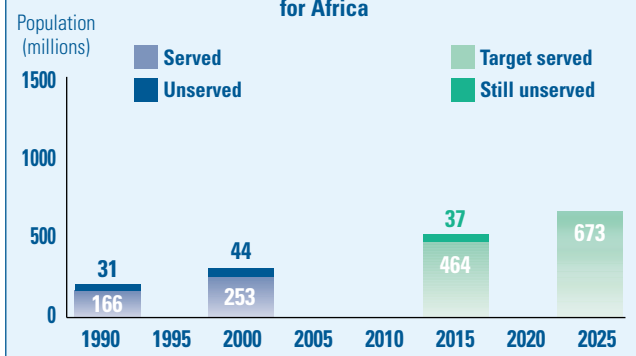
**Figure 6.3 Actual and target total water supply coverage for Africa**



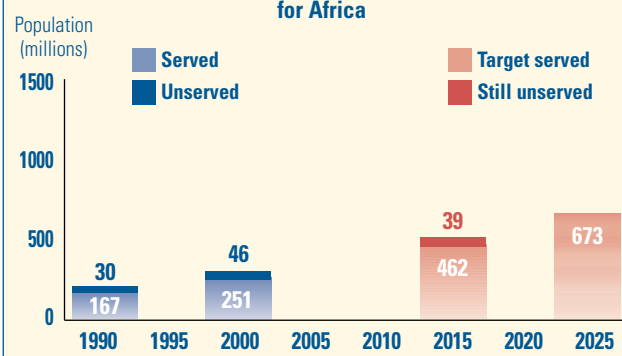
**Figure 6.6 Actual and target total sanitation coverage for Africa**



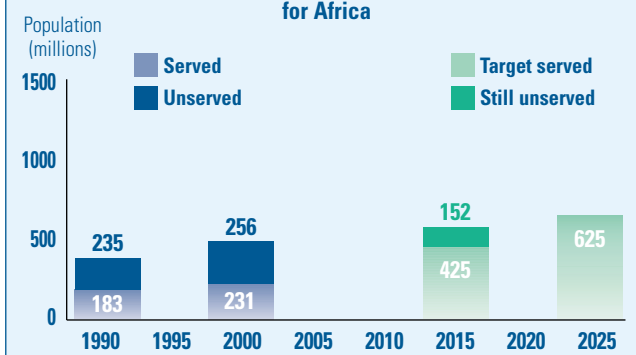
**Figure 6.4 Actual and target urban water supply coverage for Africa**



**Figure 6.7 Actual and target urban sanitation coverage for Africa**



**Figure 6.5 Actual and target rural water supply coverage for Africa**



**Figure 6.8 Actual and target rural sanitation coverage for Africa**

