



2017–2018 Minerals Yearbook

AFRICA



Base modified from ESRI ArcGIS online world countries (generalized) map data, 2017
 Mercator Auxiliary Sphere projection
 World Geodetic System 1984 datum

Figure 1. Map of the Africa region. The countries covered in this report are labeled on the map; bordering countries are shown in gray and not labeled.

THE MINERAL INDUSTRIES OF AFRICA

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The countries and dependencies that are covered in this chapter have a combined population of approximately 1.08 billion people and a land area of 24.3 million square kilometers (fig. 1; table 1). The real gross domestic product (GDP) for the Africa region was \$4.19 trillion, accounting for 3% of the world's GDP. In 2018, the region's real GDP growth rate was 4.1% compared with a growth rate of 4% in 2017 (table 2).

The sub-Saharan Africa region's share of the world's cobalt production was 75%; diamond, 45.2%; chromite, 42.1%; manganese, 41.7%; gold, 20.6%; and uranium, 15.5%. Some countries of the Africa region were globally significant producers of metallic and industrial minerals, and (or) mineral fuels and related materials (fig. 2). The major producers of diamond in the region were Botswana (16.7% of the world's output), Congo (Kinshasa) (10.3%), South Africa (6.7%), and Angola (5.7%). The major producers of manganese in the region were South Africa (24.2%), Gabon (9.7%), and Ghana (5.7%). The major producers of uranium in the region were Namibia (9.9%) and Niger (5.2%). Congo (Kinshasa) accounted for 70.3% of world cobalt production and South Africa accounted for 39.7% of world chromite production. Data on mineral

production for selected mineral commodities, by country in the region, are in table 3.

Acknowledgments

The U.S. Geological Survey acknowledges and expresses its sincere appreciation to the following organizations for providing mineral production statistics, basic economic data, and exploration and mineral-related information:

For mineral production statistics—

- Botswana—Department of Mines,
- Ethiopia—Ministry of Mines and Petroleum,
- Malawi—Department of Mines,
- Mauritius—Statistics Mauritius,
- Mozambique—Ministry of Mineral Resources and Energy,
- Namibia—Ministry of Mines and Energy,
- Seychelles—Seychelles Energy Commission,
- South Africa—Department of Mineral Resources,
- Swaziland—Ministry of Natural Resources & Energy,
- Tanzania—Ministry of Minerals,
- Togo—Ministry of Mines and Energy, and
- Zambia—Ministry of Mines and Minerals Development.

TABLE 1
AFRICA: AREA AND POPULATION IN 2018

Country or territory	Area ¹ (square kilometers)	Estimated population ² (thousands)
Angola	1,246,700	30,810
Benin	112,622	11,485
Botswana	581,730	2,254
Burkina Faso	274,200	19,752
Burundi	27,830	11,175
Cameroon	475,440	25,216
Cabo Verde	4,033	544
Central African Republic	622,984	4,666
Chad	1,284,000	15,478
Comoros	2,235	832
Congo (Brazzaville)	342,000	5,244
Congo (Kinshasa)	2,344,858	84,068
Côte d'Ivoire	322,463	25,069
Djibouti	23,200	959
Equatorial Guinea	28,051	1,309
Eritrea	117,600	3,453 ³
Eswatini	17,364	1,136
Ethiopia	1,104,300	109,225
Gabon	267,667	2,119
Gambia, The	11,300	2,280
Ghana	238,533	29,767
Guinea	245,857	12,414
Guinea-Bissau	36,125	1,874
Kenya	580,367	51,393
Lesotho	30,355	2,108
Liberia	111,369	4,819
Madagascar	587,041	26,262
Malawi	118,484	18,143
Mali	1,240,192	19,078
Mauritania	1,030,700	4,403
Mauritius	2,040	1,265
Mayotte	374 ⁴	257 ⁵
Mozambique	799,380	29,496
Namibia	824,292	2,448
Niger	1,267,000	22,443
Nigeria	923,768	195,875
Reunion	2,512 ⁴	866 ⁵
Rwanda	26,338	12,302
Sao Tome e Principe	964	211
Senegal	196,722	15,854
Seychelles	455	97
Sierra Leone	71,740	7,650
Somalia	637,657	15,008
South Africa	1,219,090	57,780
South Sudan	644,329	10,976
Sudan	1,861,484	41,802
Tanzania	947,300	56,318
Togo	56,785	7,889
Uganda	241,038	42,723
Zambia	752,618	17,352
Zimbabwe	390,757	14,439
Regional total	24,296,243	1,080,389
World total	148,940,000 ⁶	7,591,945 ⁷

See footnotes at end of table.

TABLE 1—Continued
AFRICA: AREA AND POPULATION IN 2018

¹Source: U.S. Central Intelligence Agency, The World Factbook.

²Source: The World Bank, 2021 World Development Indicators Database.

³Source: United Nations, UNdata 2021.

⁴Source: Ministry of Overseas, France.

⁵Source: Quick Economic Accounts for Overseas Territories, France.

⁶World area total includes the areal extent of some countries and (or) territories not covered in the Minerals Yearbook.

⁷World population total includes populations of some countries and (or) territories not covered in the Minerals Yearbook.

TABLE 2
AFRICA: GROSS DOMESTIC PRODUCT^{1,2}

Country or territory	Gross domestic product in 2018 based on purchasing power parity		Real gross domestic product growth rate (percentage)		
	Gross value (million dollars)	Per capita (dollars)	2016	2017	2018
	Angola	220,542	7,540	-2.6	-0.2
Benin	37,173	3,235	3.3	5.7	6.7
Botswana	40,704	17,441	4.3	2.9	4.5
Burkina Faso	43,113	2,183	6.0	6.2	6.8
Burundi	9,143	817	-0.6	0.5	1.6
Cameroon	93,050	3,739	4.6	3.5	4.1
Cabo Verde	3,822	7,029	4.7	3.7	4.5
Central African Republic	4,460	956	4.8	4.5	3.8
Chad	25,172	1,626	-5.6	-2.4	2.3
Comoros	2,619	3,079	3.5	4.2	3.6
Congo (Brazzaville)	20,773	4,662	-10.7	-4.4	-6.4
Congo (Kinshasa)	93,476	984	2.4	3.7	5.8
Côte d'Ivoire	129,098	5,041	7.2	7.4	6.8
Djibouti	5,120	4,881	6.7	5.4	8.4
Equatorial Guinea	27,452	20,894	-8.8	-5.7	-5.8
Eritrea	6,074	1,759	7.4	-10.0	13.0
Eswatini	10,013	9,069	1.3	2.0	2.4
Ethiopia	237,224	2,520	8.0	10.2	7.7
Gabon	32,050	15,613	2.1	0.5	1.0
Gambia, The	5,039	2,210	1.9	4.8	7.2
Ghana	158,336	5,357	3.4	8.1	6.3
Guinea	31,761	2,389	10.8	10.3	6.2
Guinea-Bissau	4,056	2,334	5.3	4.8	3.4
Kenya	221,233	4,758	5.9	4.8	6.3
Lesotho	5,999	2,949	3.4	-1.0	0.4
Liberia	7,385	1,655	-1.6	2.5	1.2
Madagascar	43,381	1,655	4.0	3.9	4.6
Malawi	19,144	971	2.3	4.0	3.2
Mali	44,796	2,416	5.9	5.0	5.2
Mauritania	22,736	5,727	1.3	3.5	2.1
Mauritius	28,775	22,736	3.8	3.8	3.8
Mayotte	3,137 ³	11,792 ³	NA	NA	NA
Mozambique	38,955	1,284	3.8	3.7	3.4
Namibia	25,072	10,388	-0.3	-0.3	0.7
Niger	27,600	1,230	5.7	5.0	7.2
Nigeria	1,033,993	5,279	-1.6	0.8	1.9
Reunion	23,975 ³	27,830 ³	NA	NA	NA
Rwanda	26,312	2,175	6.0	4.0	8.6
Sao Tome e Principe	856	4,093	4.2	3.9	3.0
Senegal	53,807	3,393	6.4	7.4	6.4
Seychelles	2,774	29,049	4.6	4.4	3.8
Sierra Leone	12,961	1,694	6.4	3.8	3.5
Somalia	1,553 ⁴	104 ⁴	2.9	1.4	2.8
South Africa	747,322	12,898	0.4	1.4	0.8
South Sudan	11,233	866	-13.5	-5.8	-1.9
Sudan	180,360	4,296	3.5	0.7	-2.3
Tanzania	146,944	2,687	6.9	6.8	7.0
Togo	12,497	1,584	5.6	4.4	4.9
Uganda	97,076	2,500	0.4	7.3	6.1
Zambia	62,572	3,521	3.8	3.5	4.0
Zimbabwe	45,379	3,099	0.7	4.7	3.5
Regional total	4,188,097	3,876 ⁵	2.7 ⁶	4.0 ⁶	4.1 ⁶
World total ⁷	128,711,608	16,954 ⁵	3.3	3.8	3.5

See footnotes at end of table.

TABLE 2—Continued
AFRICA: GROSS DOMESTIC PRODUCT^{1,2}

NA Not available.

¹Source: International Monetary Fund, World Economic Outlook Database, October 2020.

²Gross domestic product listed may differ from that reported in individual country chapters owing to differences in the source or date of reporting.

³Source: Eurostat 2020; values at current prices have been converted from euro area euros (EUR) to U.S. dollars (US\$) at an annual average exchange rate of EUR0.848=US\$1.00 for 2018.

⁴Source: United Nations data 2021, gross domestic product at current prices.

⁵Calculated as gross domestic product divided by population.

⁶Annual change in regional gross domestic product.

⁷World gross domestic product total includes the gross domestic product of some countries and (or) territories not covered in the Minerals Yearbook.

TABLE 3
AFRICA: PRODUCTION OF SELECTED MINERAL COMMODITIES IN 2018¹
(Thousand metric tons unless otherwise specified)

Country or locality	Metals										
	Aluminum		Chromite, mine output, gross weight	Cobalt, mine output, Co content (metric tons)	Copper, mine output, Cu content	Gold, mine output, Au content (kilograms)	Iron and steel		Manganese ore, mine output,		
	Bauxite	Metal, primary ²					Iron ore, gross weight	Steel, raw		Mn content	
Angola	--	--	--	--	--	--	--	--	--	--	--
Benin	--	--	--	--	--	--	--	--	--	--	--
Botswana	--	--	--	--	1	1,105	--	--	--	--	--
Burkina Faso	--	--	--	--	--	36,000 ^e	--	--	--	--	--
Burundi	--	--	--	--	--	576	--	--	--	--	--
Cameroon	--	75 ^e	--	--	--	1,000 ^e	--	--	--	--	--
Central African Republic	--	--	--	--	--	--	--	--	--	--	--
Chad	--	--	--	--	--	--	--	--	--	--	--
Congo (Brazzaville)	--	--	--	--	--	--	--	--	--	--	--
Congo (Kinshasa)	--	--	--	104,000 ^e	1,230 ^e	46,000 ^e	--	5 ^e	--	--	395
Côte d'Ivoire	--	--	--	--	--	20,000 ^e	--	--	--	--	--
Djibouti	--	--	--	--	--	--	--	--	--	--	--
Equatorial Guinea	--	--	--	--	--	--	--	--	--	--	--
Eritrea	--	--	--	--	16 ^e	3,700 ^e	--	--	--	--	--
Eswatini	--	--	--	--	--	12	--	--	--	--	--
Ethiopia	--	--	--	--	--	3,495	--	--	--	--	--
Gabon	--	--	--	--	--	--	--	--	--	--	2,331
Ghana	1,011	40 ^e	--	--	--	148,000 ^e	--	--	--	--	1,364
Guinea	57,000 ^e	--	--	--	--	18,000 ^e	--	--	--	--	--
Kenya	--	-- ^e	--	--	--	472	55 ^e	440 ^e	--	--	--
Lesotho	--	--	--	--	--	--	--	--	--	--	--
Liberia	--	--	--	--	--	7,096	3,934	--	--	--	--
Madagascar	--	--	109	3,300 ^e	--	3,000	--	--	--	--	--
Malawi	--	--	--	--	--	--	--	--	--	--	--
Mali	--	--	--	--	--	55,029	--	--	--	--	--
Mauritania	--	--	--	--	28	9,235	10,711	--	--	--	--
Mauritius	--	--	--	--	--	--	--	--	--	--	--
Mozambique	5 ^e	571	--	--	--	507	--	--	--	--	23 ^e
Namibia	--	--	--	--	15	6,171	--	--	--	--	--
Niger	--	--	--	--	--	1,000 ^e	--	--	--	--	--
Nigeria	--	--	--	--	--	39 ^e	2	620 ^e	--	--	57 ^e
Reunion	--	--	--	--	--	--	--	--	--	--	--
Rwanda	--	--	--	--	--	300 ^e	--	23 ^e	--	--	--
Senegal	--	--	--	--	--	7,628	--	--	--	--	--

See footnotes at end of table.

TABLE 3—Continued
AFRICA: PRODUCTION OF SELECTED MINERAL COMMODITIES IN 2018¹

(Thousand metric tons unless otherwise specified)

Country or locality	Metals										
	Aluminum		Chromite, mine output, gross weight	Cobalt, mine output, Co content (metric tons)		Copper, mine output, Cu content	Gold, mine output, Au content (kilograms)		Iron and steel		Manganese ore, mine output, Mn content
	Bauxite	Metal, primary ²		Steel, raw	Iron ore, gross weight		Steel, raw	Iron ore, gross weight	Steel, raw	Mn content	
Seychelles	--	--	--	--	--	--	--	--	--	--	--
Sierra Leone	2,000 ^e	--	--	--	--	446	--	923	--	--	--
South Africa	--	714	17,600	2,300 ^e	48	117,150	6,327	74,264	5,800	--	--
South Sudan	--	--	--	--	--	--	--	--	--	--	--
Sudan	--	--	27	--	--	93,600	--	--	NA	--	--
Tanzania	7	--	--	--	10	39,300	300 ^e	--	--	--	--
Togo	--	--	--	--	--	20,000 ^{e,3}	60 ^e	--	--	--	--
Uganda	--	--	--	--	-- ^e	400 ^e	170 ^e	11	--	--	--
Zambia	--	--	--	897	677	3,899	75 ^e	--	29 ^e	--	--
Zimbabwe	--	--	895	403	9	35,054	--	--	--	--	--
Regional total	60,000 ^e	1,400 ^e	18,631	111,000 ^e	2,030 ^e	678,000 ^e	7,960 ^e	90,000 ^e	10,000 ^e	--	--
Share of world total	17.7%	2.2%	42.1%	75.0%	10.7%	20.6%	0.4%	3.5%	41.7%	--	--
United States	W	891	--	490 ^e	1,220	226,000	86,600	49,500	--	--	--
Share of world total	W	1.4%	--	0.3%	6.4%	6.9%	4.8%	1.9%	--	--	--
World total	339,000	63,600	44,300	148,000	19,000	3,290,000	1,810,000	2,560,000	24,000	--	--

See footnotes at end of table.

TABLE 3—Continued
AFRICA: PRODUCTION OF SELECTED MINERAL COMMODITIES IN 2018¹

(Thousand metric tons unless otherwise specified)

Country or locality	Metals—Continued			Industrial minerals				Mineral fuels and related materials			
	Zinc, mine output, Zn content (metric tons)	Cement, hydraulic	Diamond, natural, gemstones and industrial (thousand carats) ⁴	Graphite (metric tons)	Phosphate rock, P ₂ O ₅ content	Coal, anthracite and bituminous	Petroleum, crude, including condensate (thousand 42-gallon barrels)	Uranium, U content (metric tons)			
Angola	--	5,000 ^e	8,409	--	--	--	559,910	--			
Benin	--	1,370 ^e	--	--	--	--	--	--			
Botswana	--	1 ^e	24,498	--	--	2,482	--	--			
Burkina Faso	99,200 ^e	310 ^e	--	--	--	--	--	--			
Burundi	--	100 ^e	--	--	--	--	--	--			
Cameroon	--	2,900 ^e	2	--	--	--	25,133	--			
Central African Republic	--	--	14	--	--	--	--	--			
Chad	--	350 ^e	--	--	--	--	36,700	--			
Congo (Brazzaville)	--	1,160 ^e	48	--	--	--	118,078	--			
Congo (Kinshasa)	1,129	1,843	15,131	--	--	8 ^e	8,393	--			
Côte d'Ivoire	--	4,000 ^e	6	--	--	--	18,980	--			
Djibouti	-- ^e	190 ^e	--	--	--	--	--	--			
Equatorial Guinea	--	--	--	--	--	--	69,350	--			
Eritrea	110,000 ^e	280 ^e	--	--	--	--	--	--			
Eswatini	--	--	--	--	--	107	--	--			
Ethiopia	--	9,300 ^e	--	--	--	--	--	--			
Gabon	--	490 ^e	--	--	--	--	70,810	--			
Ghana	--	4,000 ^e	54	--	--	--	62,771	--			
Guinea	--	520 ^e	293	--	--	--	--	--			
Kenya	--	6,070	--	--	--	--	330 ^e	--			
Lesotho	--	--	1,294	--	--	--	--	--			
Liberia	--	314	79	--	--	--	--	--			
Madagascar	--	210 ^e	--	47,900	--	--	20 ^e	--			
Malawi	--	232	--	--	--	50	--	--			
Mali	--	660 ^e	--	--	--	--	--	--			
Mauritania	--	670	--	--	--	--	197	--			
Mauritius	--	--	--	--	--	--	--	--			
Mozambique	118,435	2,400 ^e	--	106,773	--	6,891	386	5,525			
Namibia	--	930 ^e	2,397	3,456	--	--	--	2,910			
Niger	--	52 ^e	--	--	--	222	6,065	--			
Nigeria	6,800 ^e	21,000	--	--	--	353	701,432	--			
Reunion	--	200 ^e	--	--	--	--	--	--			
Rwanda	--	400 ^e	--	--	--	--	--	--			

See footnotes at end of table.

TABLE 3—Continued
AFRICA: PRODUCTION OF SELECTED MINERAL COMMODITIES IN 2018¹

(Thousand metric tons unless otherwise specified)

Country or locality	Metals—			Industrial minerals			Mineral fuels and related materials			
	Continued Zinc, mine output, Zn content (metric tons)	Cement, hydraulic	Diamond, natural (thousand carats) ⁴	Graphite (metric tons)	Phosphate rock, P ₂ O ₅ content	Coal, anthracite and bituminous	Petroleum, crude (thousand 42-gallon barrels)	Uranium, U content (metric tons)		
Senegal	--	5,412	--	--	560 ^e	--	95 ^e	--		
Seychelles	--	--	--	--	--	--	--	--		
Sierra Leone	--	325 ^e	742	--	--	--	--	--		
South Africa	28,129	15,000 ^e	9,911	--	761	249,317	--	196		
South Sudan	--	--	--	--	--	--	45,990	--		
Sudan	NA	4,053	--	--	--	--	36,500	--		
Tanzania	--	4,509	383	--	--	726	--	--		
Togo	--	1,600 ^e	--	--	240 ^e	--	--	--		
Uganda	--	2,200 ^e	--	--	--	--	--	--		
Zambia	--	2,751	--	--	--	345	--	--		
Zimbabwe	--	1,800 ^e	3,255	--	20 ^e	3,348	--	--		
Regional total	364,000	103,000	66,516	158,129	1,580	264,000	1,760,000	8,631		
Share of world total	2.9%	2.5%	45.2%	14.4%	2.2%	5.1%	5.6%	15.5%		
United States	824,000	87,000	--	--	7,250	254,000 ⁵	4,000,000 ⁵	582 ⁶		
Share of world total	6.6%	2.1%	--	--	10.3%	4.9%	12.8%	1.0%		
World total	12,500,000	4,140,000	147,000	1,100,000	70,600	5,160,000	31,200,000	55,800		

^eEstimated. NA Not available. W Withheld to avoid disclosing company proprietary data. -- Zero or zero percent.

¹Table includes data available through March 10, 2021. All data are reported unless otherwise noted. World total, U.S. data, and estimated data are rounded to no more than three significant digits; may not add to totals shown owing to independent rounding. Percentages were calculated using unrounded data.

²Primary production also includes undifferentiated (primary and secondary) production for some countries listed.

³Data reported by the Government of Togo as gold exports that predominantly include artisanal gold mine production transiting Togo from neighboring countries and, to a lesser extent, domestic artisanal mine production. Data may include gold from other than artisanal sources.

⁴Gem-quality and industrial-quality diamond.

⁵Source: U.S. Energy Information Administration.

⁶Source: World Nuclear Association.

Sub-Saharan Africa region

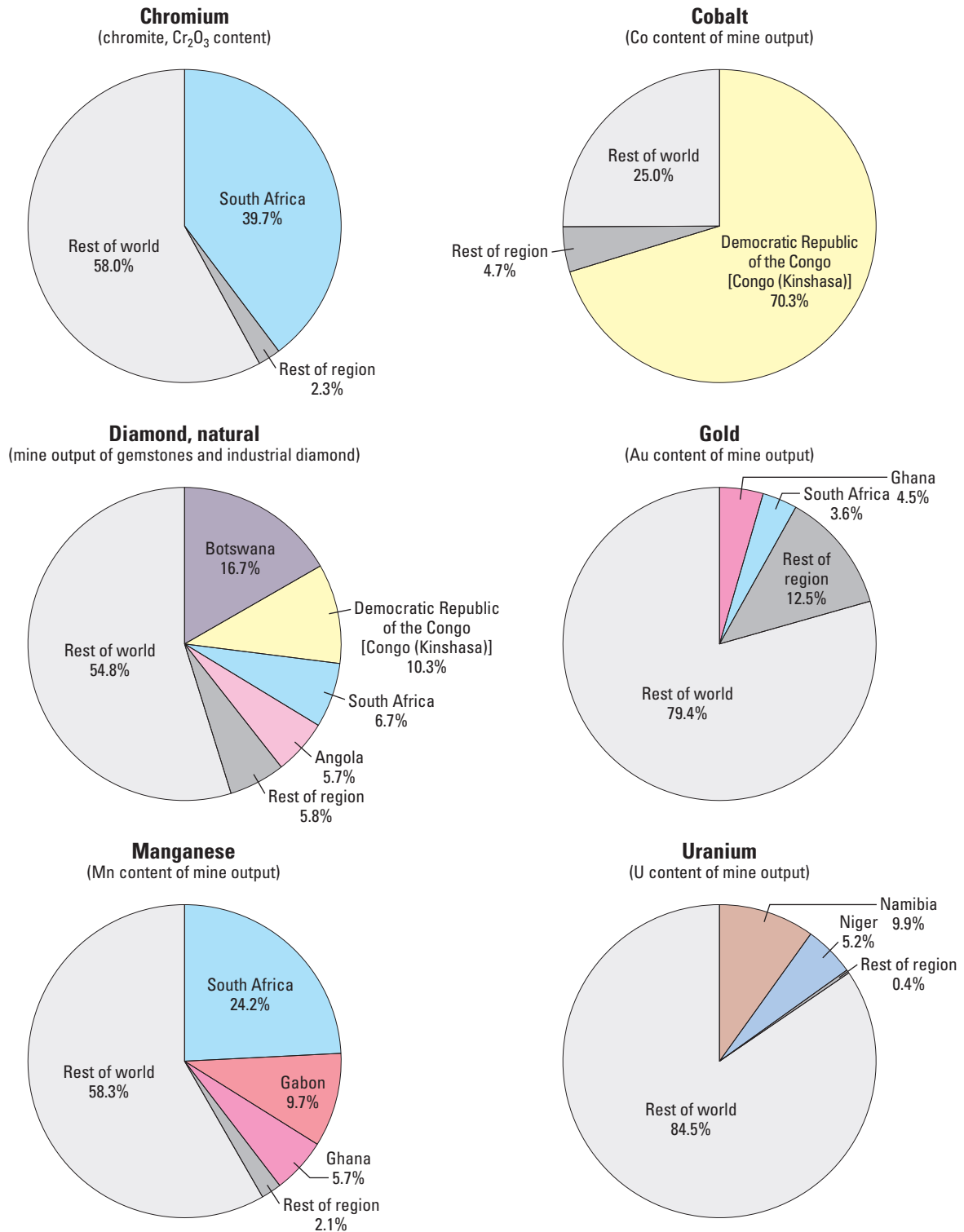


Figure 2. Pie charts showing percentage of world production of selected mineral commodities (chromite, cobalt, diamond, gold, manganese, and uranium) by countries of the Africa region in 2018. Individual countries of the region are labeled if they accounted for at least 3% of world production. Data are from table 3; however, percentages may differ slightly from those shown in table 3 because of independent rounding. Also, percentages may differ from those reported in individual country chapters owing to differences in the source or date of reporting.