



2019 Minerals Yearbook

AFRICA [ADVANCE RELEASE]



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 sub-Saharan region of Africa. The countries covered in this report (with the exception of Cabo Verde, which is not shown) 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 1.11 billion people and a land area of 24.3 million square kilometers (fig. 1, table 1). In 2019, the gross domestic product (GDP) based on purchasing power parity of the Africa region was \$4.49 trillion, accounting for 3.3% of the world's GDP. The region's real GDP decreased by 4% compared with that in 2018 (table 2).

The sub-Saharan Africa region accounted for 73.3% of the world's production cobalt; 65.2%, manganese; 43.7%, diamond; 43.3%, chromium (chromite); 20.8%, gold; and 15.8%, uranium. Some countries of the Africa region were globally significant producers of metals, industrial minerals, and (or) mineral fuels and related materials. The major producers of diamond in the region were Botswana (17.2% of the world's output), Congo (Kinshasa) (9.8%), and Angola (6.6%) (fig. 2). The major producers of manganese in the region were South Africa (51.1%), Gabon (7.9%), and Ghana (4.7%). The major producers of uranium in the region were Namibia (10.1%), and Niger (5.5%). Congo (Kinshasa) accounted for 68.8% of world's cobalt production and South Africa accounted for 39.6% of world's chromium production. Data on mineral production for selected

mineral commodities, by country in the region, are in table 3 (fig. 2).

Acknowledgments

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

Botswana—Department of Mines,
Eswatini—Ministry of Natural Resources & Energy,
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,
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 2019

Country or territory	Area ¹ (square kilometers)	Estimated population ² (thousands)
Angola	1,246,700	31,825
Benin	112,622	11,801
Botswana	581,730	2,304
Burkina Faso	274,200	20,321
Burundi	27,830	11,531
Cameroon	475,440	25,876
Cape Verde	4,033	550
Central African Republic	622,984	4,745
Chad	1,284,000	15,947
Comoros	2,235	851
Congo (Brazzaville)	342,000	5,381
Congo (Kinshasa)	2,344,858	86,791
Côte d'Ivoire	322,463	25,717
Djibouti	23,200	974
Equatorial Guinea	28,051	1,356
Eritrea	117,600	3,497 ³
Eswatini	17,364	1,148
Ethiopia	1,104,300	112,079
Gabon	267,667	2,173
Gambia, The	11,300	2,348
Ghana	238,533	30,418
Guinea	245,857	12,771
Guinea-Bissau	36,125	1,921
Kenya	580,367	52,574
Lesotho	30,355	2,125
Liberia	111,369	4,937
Madagascar	587,041	26,969
Malawi	118,484	18,629
Mali	1,240,192	19,658
Mauritania	1,030,700	4,526
Mauritius	2,040	1,266
Mayotte	374 ⁴	257 ⁵
Mozambique	799,380	30,366
Namibia	824,292	2,495
Niger	1,267,000	23,311
Nigeria	923,768	200,964
Reunion	2,512 ⁴	866 ⁵
Rwanda	26,338	12,627
Sao Tome e Principe	964	215
Senegal	196,722	16,296
Seychelles	455	98
Sierra Leone	71,740	7,813
Somalia	637,657	15,443
South Africa	1,219,090	58,558
South Sudan	644,329	11,062
Sudan	1,861,484	42,813
Tanzania	947,300	58,005
Togo	56,785	8,082
Uganda	241,038	44,270
Zambia	752,618	17,861
Zimbabwe	390,757	14,645
Regional total	24,296,000	1,109,056
World total	148,940,000 ⁶	7,673,345 ⁷

See footnotes at end of table.

TABLE 1—Continued
AFRICA: AREA AND POPULATION IN 2019

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 2019 based on purchasing power parity		Real gross domestic product growth rate (percentage)		
	Gross value	Per capita	2017	2018	2019
	(million dollars)	(dollars)			
Angola	221,164	7,341	-0.2	-2.0	-0.5
Benin	40,431	3,422	5.7	6.7	6.9
Botswana	39,250	17,078	4.0	4.0	3.0
Burkina Faso	46,135	2,270	6.2	6.7	5.7
Burundi	9,033	783	0.5	1.6	1.8
Cameroon	98,227	3,796	3.5	4.1	3.7
Cape Verde	4,111	7,470	3.7	4.5	5.7
Central African Republic	4,674	985	4.5	3.8	3.0
Chad	26,377	1,654	-2.4	2.3	3.0
Comoros	2,712	3,105	4.2	3.6	1.8
Congo (Brazzaville)	21,406	4,687	-4.4	-4.8	-0.4
Congo (Kinshasa)	99,313	1,144	3.7	5.8	4.4
Côte d'Ivoire	139,706	5,317	7.4	6.9	6.2
Djibouti	5,638	5,791	5.1	8.5	7.5
Equatorial Guinea	26,148	19,225	-5.7	-6.2	-6.0
Eritrea	6,419	1,835	-10.0	13.0	3.8
Eswatini	10,317	9,253	2.0	2.4	2.2
Ethiopia	263,259	2,752	10.2	7.7	9.0
Gabon	33,842	16,267	0.5	0.8	3.9
Gambia, The	5,447	2,319	4.8	7.2	6.2
Ghana	175,629	5,822	8.1	6.2	6.5
Guinea	34,168	2,507	10.3	6.4	5.6
Guinea-Bissau	4,313	2,429	4.8	3.4	4.5
Kenya	243,980	5,126	3.8	5.6	5.0
Lesotho	5,650	2,759	-2.7	-1.0	-1.5
Liberia	7,409	1,619	2.5	1.2	-2.5
Madagascar	45,495	1,652	3.9	3.2	4.4
Malawi	29,844	1,471	4.0	4.4	5.4
Mali	47,569	2,493	5.3	4.7	4.8
Mauritania	25,215	6,213	6.3	4.5	5.8
Mauritius	30,169	23,817	3.8	3.8	3.0
Mayotte ³	2,956	11,502 ⁴	7.5	3.2	7.8
Mozambique	40,565	1,336	3.7	3.4	2.3
Namibia	25,596	10,409	-1.0	1.1	-0.6
Niger	29,745	1,276	5.0	7.2	5.9
Nigeria	1,075,606	5,352	0.8	1.9	2.2
Reunion ³	22,037	25,447 ⁴	3.6	2.4	2.7
Rwanda	29,315	2,364	4.0	8.6	9.5
Sao Tome e Principe	890	4,178	3.9	3.0	2.2
Senegal	57,092	3,503	7.4	6.2	4.4
Seychelles	2,817	29,220	5.0	1.3	1.9
Sierra Leone	13,919	1,781	3.8	3.5	5.5
Somalia	13,952	954	1.4	2.8	2.9
South Africa	836,715	14,236	1.2	1.5	0.1
South Sudan	11,532	862	-5.8	-1.9	0.9
Sudan	186,226	4,309	0.7	-2.7	-2.2
Tanzania	159,979	2,840	6.8	7.0	7.0
Togo	17,873	2,211	4.3	5.0	5.5
Uganda	106,448	2,673	6.8	5.6	7.7
Zambia	64,602	3,526	3.5	4.0	1.4
Zimbabwe	35,272	2,366	5.0	4.8	-6.1
Regional total	4,486,187	4,045 ⁴	3.9 ⁵	4.1 ⁵	4.0 ⁵
World total ⁶	134,916,440	17,582 ⁴	3.8	3.6	2.8

See footnotes at end of table.

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

¹Source: International Monetary Fund, World Economic Outlook Database, October 2021.

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

³Source: European Commission, Eurostat 2021, values at current prices have been converted from euro area euros (EUR) to U.S. dollars (US\$) at the annual average exchange rate of EUR0.893=US\$1.00 for 2019.

⁴Calculated as gross domestic product divided by population.

⁵Annual change in regional gross domestic product.

⁶World 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 2019¹

(Thousand metric tons, unless otherwise specified)

Country	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 mine output, Mn content
	Bauxite	Metal, primary					Iron ore, gross weight	Steel, raw	
Angola	--	--	--	--	--	--	--	--	--
Benin	--	--	--	--	--	--	--	--	--
Botswana	--	--	--	--	--	943	--	--	--
Burkina Faso	--	--	--	--	--	45,000 ^e	--	--	--
Burundi	--	--	--	--	--	567	--	--	--
Cameroon	--	63 ^e	--	--	--	--	--	--	--
Central African Republic	--	--	--	--	--	--	--	--	--
Chad	--	--	--	--	--	--	--	--	--
Congo (Brazzaville)	--	--	--	--	15 ^e	--	70 ^e	--	--
Congo (Kinshasa)	--	--	--	97,000 ^e	224 ^e	43,000 ^e	--	--	11
Côte d'Ivoire	750	--	--	--	--	32,600	--	--	400 ^e
Djibouti	--	--	--	--	--	--	--	--	--
Equatorial Guinea	--	--	--	--	--	--	--	--	--
Eritrea	--	--	--	--	16	3,700 ^e	--	--	--
Eswatini	--	--	--	--	--	8 ^e	--	--	--
Ethiopia	--	--	--	--	--	3,480	--	--	--
Gabon	--	--	--	--	--	100 ^e	--	--	2,610 ^e
Ghana	1,200 ^e	42 ^e	--	--	--	141,982	--	--	1,554
Guinea	67,000 ^e	--	--	--	--	13,663	--	--	--
Kenya	--	--	--	--	--	395	161	480 ^e	--
Lesotho	--	--	--	--	--	--	--	--	--
Liberia	--	--	--	--	--	4,900 ^e	4,088	--	--
Madagascar	--	--	76	3,400 ^e	--	2,100	--	--	--
Malawi	--	--	--	--	--	--	--	--	--
Mali	--	--	--	--	--	61,000 ^e	--	--	--
Mauritania	--	--	--	--	30 ²	13,435	12,200	--	--
Mauritius	--	--	--	--	--	--	--	--	--
Mozambique	8	565	--	--	--	430	--	--	--
Namibia	--	--	--	--	--	6,526	--	--	32 ²
Niger	--	--	--	--	--	1,000 ^e	--	--	--
Nigeria	--	--	--	--	--	160	(3)	630 ^e	21 ^e
Reunion	--	--	--	--	--	--	--	--	--
Rwanda	--	--	--	--	--	2,900 ^e	--	23 ^e	--
Senegal	--	--	--	--	--	14,134	--	--	--
Seychelles	--	--	--	--	--	--	--	--	--

See footnotes at end of table.

TABLE 3—Continued
AFRICA: PRODUCTION OF SELECTED MINERAL COMMODITIES IN 2019¹

(Thousand metric tons, unless otherwise specified)

Country	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 mine output, Mn content
	Bauxite	Metal, primary					Iron ore, gross weight	Steel, raw	
Sierra Leone	1,884	--	--	--	--	120 ^e	171	--	--
South Africa	--	717	17,700	2,100 ^e	53 ²	105,185	72,407	6,152	17,000
South Sudan	--	--	--	--	--	--	--	--	--
Sudan	--	--	30 ^e	--	--	90,000 ^e	--	--	10 ^e
Tanzania	--	--	--	--	10	48,408	--	300 ^e	--
Togo	--	--	--	--	--	20,000 ^{e,4}	60 ^e	--	--
Uganda	--	--	--	--	--	2,400 ^e	--	150 ^e	--
Zambia	--	--	--	420	656 ²	4,522	--	75 ^e	21 ^e
Zimbabwe	--	--	1,550	400 ^e	8 ²	29,386	--	--	--
Total	70,842	1,387	19,356	103,320	1,012	692,044	89,157	7,810	21,659
Share of world total	20.1%	2.2%	43.3%	73.3%	5.6%	20.8%	3.6%	0.4%	65.2%
United States	W	1,090	--	500 ^e	1,260	200,000	46,900	87,800	--
Share of world total	W	1.7%	--	0.4%	7.0%	6.0%	1.9%	4.7%	--
World total	352,000	63,000	44,700	141,000	18,100	3,320,000	2,510,000	1,880,000	33,200

See footnotes at end of table.

TABLE 3—Continued
AFRICA: PRODUCTION OF SELECTED MINERAL COMMODITIES IN 2019¹

(Thousand metric tons, unless otherwise specified)

Country	Metals—					Mineral fuels		
	Continued	Industrial minerals			Petroleum, crude			
	Zinc, mine output (metric tons)	Cement, hydraulic	Diamond, natural (thousand carats) ⁵	Graphite (metric tons)	Phosphate rock, P ₂ O ₅ content	Coal, anthracite and bituminous ⁶	including condensate (thousand 42-gallon barrels)	Uranium, U content (metric tons)
Angola	--	2,900	9,150	--	--	--	517,205	--
Benin	--	2,500 ^e	--	--	--	--	--	--
Botswana	--	-- ^e	23,687	--	--	2,111	--	--
Burkina Faso	163,200 ²	310 ^e	--	--	--	--	--	--
Burundi	--	75 ^e	--	--	--	--	--	--
Cameroon	--	3,000 ^e	2	--	--	--	25,996	--
Central African Republic	--	--	24	--	--	--	--	--
Chad	--	360 ^e	--	--	--	--	37,000 ^e	--
Congo (Brazzaville)	4,000 ^e	730 ^e	3	--	--	--	120,158	--
Congo (Kinshasa)	6,452	1,164	13,470	--	--	8 ^e	8,200 ^e	--
Côte d'Ivoire	--	4,000 ^e	4	--	--	--	19,000 ^e	--
Djibouti	--	190 ^e	--	--	--	--	--	--
Equatorial Guinea	--	--	--	--	--	--	65,700	--
Eritrea	121,260	280 ^e	--	--	--	--	--	--
Eswatini	--	--	--	--	--	110	--	--
Ethiopia	--	10,100 ^e	--	--	--	--	--	--
Gabon	--	490 ^e	--	--	--	--	79,570	--
Ghana	--	5,990 ^e	38	--	--	--	71,395	--
Guinea	--	1,500 ^e	229 ^e	--	--	--	--	--
Kenya	--	5,967	--	--	--	--	240	--
Lesotho	--	--	1,114	--	--	--	--	--
Liberia	--	340	54	--	--	--	--	--
Madagascar	--	230 ^e	--	53,400	--	--	90 ^e	--
Malawi	--	243	--	--	1 ^e	33	--	--
Mali	--	660 ^e	--	--	--	--	--	--
Mauritania	--	1,040 ^e	--	--	--	--	--	--
Mauritius	--	--	--	--	--	--	--	--
Mozambique	--	2,610 ^e	--	153,000	--	4,983	--	--
Namibia	117,002 ²	1,000 ^e	2,018	--	--	--	--	5,476
Niger	--	260 ^e	--	--	--	222 ^e	6,100 ^e	2,983
Nigeria	12,000 ^e	22,600 ^e	--	--	--	810	735,244	--
Reunion	--	250 ^e	--	--	--	--	--	--
Rwanda	--	450 ^e	--	--	--	--	--	--
Senegal	--	6,900 ^e	--	--	1,160 ^e	--	95 ^e	--

See footnotes at end of table.

TABLE 3—Continued
AFRICA: PRODUCTION OF SELECTED MINERAL COMMODITIES IN 2019¹

(Thousand metric tons, unless otherwise specified)

Country	Metals—					Mineral fuels		
	Continued Zinc, mine output Zn content (metric tons)	Industrial minerals			Phosphate rock, P ₂ O ₅ content	Petroleum, crude including condensate (thousand 42-gallon barrels)		Uranium, U content (metric tons)
		Cement, hydraulic	Diamond, natural (thousand carats) ⁵	Graphite (metric tons)		Coal, anthracite and bituminous ⁶		
Seychelles	--	--	--	--	--	--	--	--
Sierra Leone	--	350 ^e	812	--	--	--	--	--
South Africa	125,157 ²	12,726	7,181	--	676	254,808 ^e	--	138
South Sudan	--	--	--	--	--	--	55,000 ^e	--
Sudan	--	4,000 ^e	--	--	--	--	37,230	--
Tanzania	--	6,514	417	--	--	712	--	--
Togo	--	1,600 ^e	-- ^e	--	240 ^e	--	--	--
Uganda	--	3,072	--	--	--	--	--	--
Zambia	--	2,480 ^e	--	--	--	335	--	--
Zimbabwe	--	1,470 ^e	2,108	--	10 ^e	2,078	--	--
Total	549,071	108,351	60,311	206,400	2,087	266,210	1,778,223	8,597
Share of world total	4.3%	2.6%	43.7%	12.7%	3.0%	5.3%	5.7%	15.8%
United States	753,000	89,000	--	--	6,530	245,000	4,470,000 ⁷	58 ⁸
Share of world total	5.9%	2.1%	--	--	9.5%	4.9%	14.3%	0.1%
World total	12,800,000	4,200,000	138,000	1,620,000	69,100	4,980,000 ⁷	31,300,000 ⁷	54,300 ⁸

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

¹Table includes data available through June 23, 2021. All data are reported unless otherwise noted. World totals, 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.

²Metal content of concentrate.

³Less than ½ unit.

⁴Data reported by 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.

⁵Gemstones and industrial diamond.

⁶Coal output for countries other than Eswatini and South Africa, represent bituminous production only.

⁷Source: U.S. Energy Information Administration.

⁸Source: World Nuclear Association.

Sub-Saharan Africa region

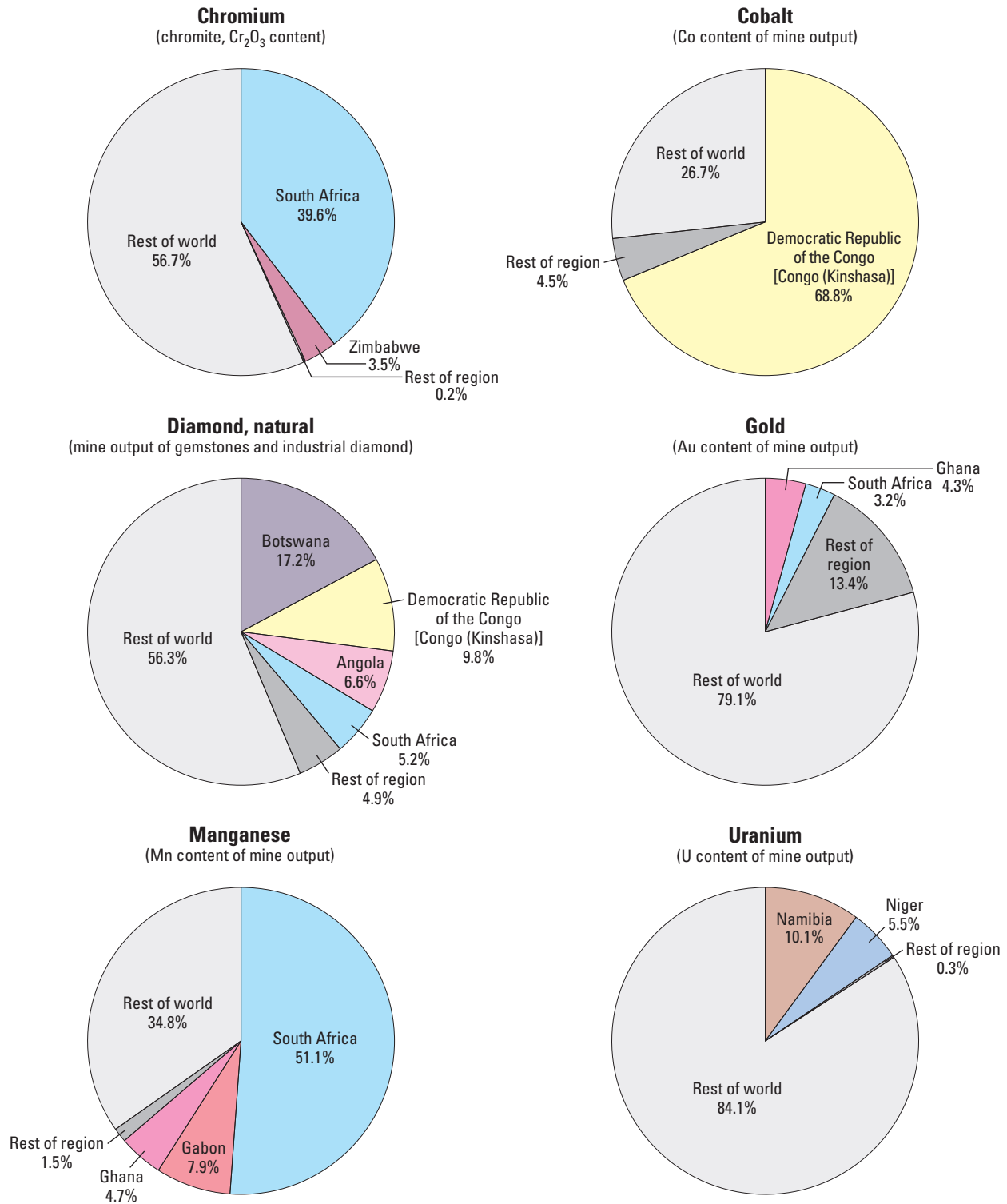


Figure 2. Pie charts showing percentage of world production of selected mineral commodities (chromite, cobalt, diamond, gold, manganese, and uranium) by countries of the sub-Saharan Africa region in 2019. Individual countries of the region are labeled if they accounted for at least 3% of world production. 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.