



2016 Minerals Yearbook

MIDDLE EAST AND NORTH AFRICA

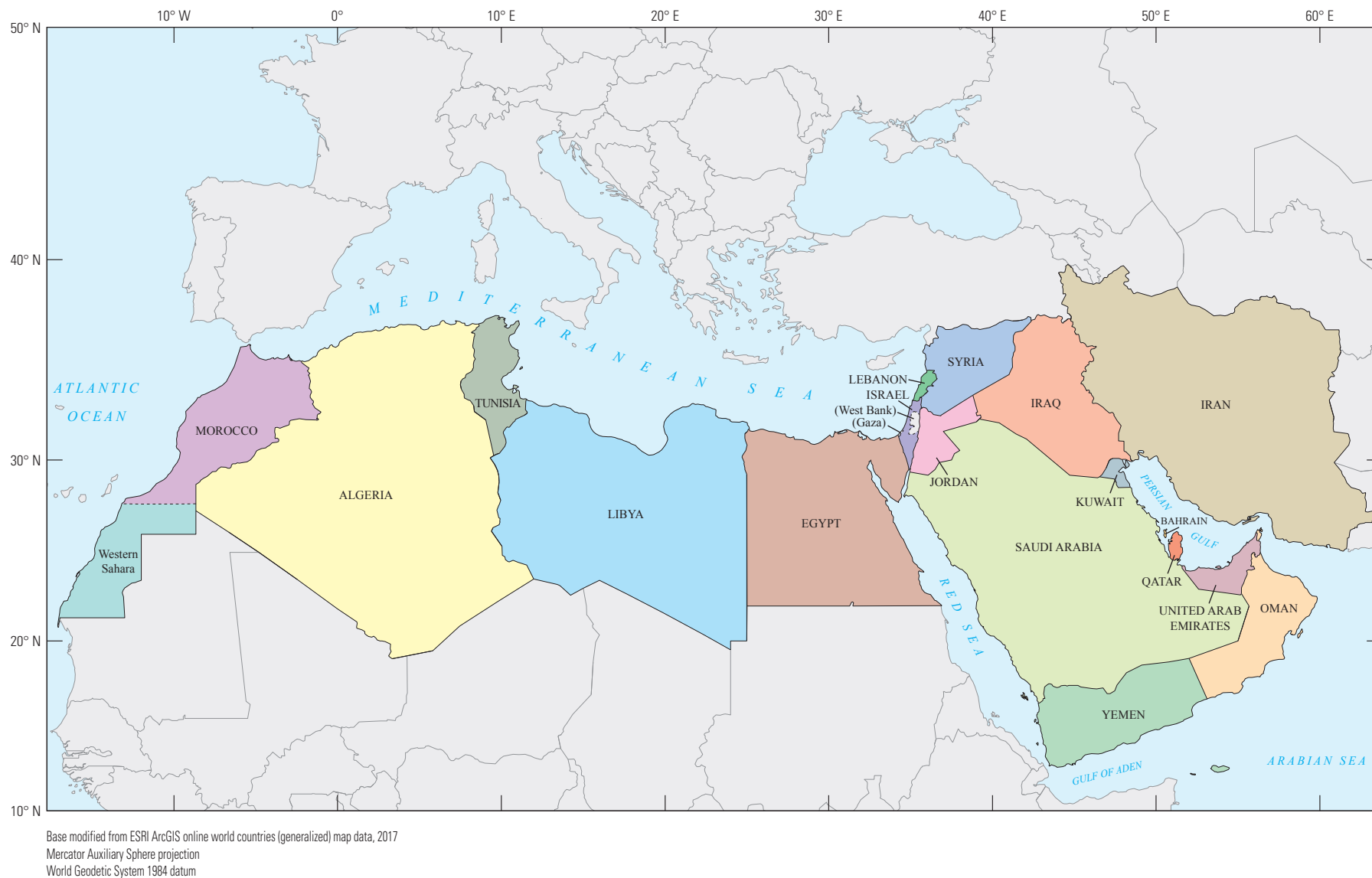


Figure 1. Map of the Middle East and North Africa region. The countries covered in this report are labeled on the map; bordering countries are shown in gray and not labeled.

THE MINERAL INDUSTRIES OF THE MIDDLE EAST AND NORTH AFRICA

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The countries and territories that are covered in this chapter had a combined population of approximately 436 million people and a land area of 11.5 million square kilometers (fig. 1; table 1). The real gross domestic product (GDP) for the Middle East and North Africa (MENA) region was \$8.243 trillion, accounting for about 7% of the world's real GDP in 2016. The MENA region real GDP growth rate was 2.6% in 2016 compared with a -0.3% in 2015 and 1.7% in 2014 (table 2).

The MENA region accounted for 20.6% of the world's output of phosphate rock, 15.1% of nitrogen, 10.2% of aluminum, 9.9% of gypsum, 9.4% of potash, and 7.2% of cement in 2016 (table 3). Some countries of the MENA region were globally significant producers of metallic minerals, industrial minerals, and (or) mineral fuels and related materials. The major producer of aluminum in the MENA region was the United Arab Emirates, which accounted for 4% of the world's total output. The major producer of nitrogen in the region was Saudi Arabia (4%). The major producers of phosphate rock in the region were Morocco and Western Sahara (11%) and Jordan (3%). Israel and Jordan were the only producers of potash in the region; they accounted for 6% and 3% of the world potash production, respectively (fig. 2). The MENA region was a significant producer of hydrocarbon products in 2016; it accounted for 38.4% and 14.8% of the world's crude petroleum (including condensate) and refined petroleum products output, respectively. Data on mineral production for selected mineral commodities, by country in the region, are in table 3.

Acknowledgments

The U.S. Geological Survey (USGS) acknowledges and expresses its sincere appreciation to the Government agencies and international organizations listed below for providing mineral production statistics and basic economic data and exploration and mineral-related information.

For mineral production statistics—

- Algeria—Ministry of Industry and Mines;
- Bahrain—National Oil and Gas Authority;
- Israel—Department of Quarries and Mines, Ministry of National Infrastructure, Energy and Water Resources;
- Jordan—Ministry of Energy and Mineral Resources;
- Kuwait—Central Statistical Office, Ministry of Planning;
- Morocco—Ministry of Energy, Mines, Water and the Environment;
- Oman—Ministry of Commerce and Industry;
- Saudi Arabia—Central Department of Statistics and Information, Ministry of Economy and Planning; and Deputy Ministry for Mineral Resources, Ministry of Petroleum and Mineral Resources; and
- United Arab Emirates—National Bureau of Statistics.

For basic economic and population data—

- International Monetary Fund, and
- The World Bank Group.

TABLE 1
MIDDLE EAST AND NORTH AFRICA: AREA AND POPULATION IN 2016

Country or territory	Area ¹ (square kilometers)	Estimated population ² (thousands)
Algeria	2,381,740	40,606
Bahrain	760	1,425
Egypt	1,001,450	95,689
Iran	1,648,195	80,277
Iraq	438,317	37,203
Israel	20,770	8,546
Jordan	89,342	9,456
Kuwait	17,818	4,053
Lebanon	10,400	6,007
Libya	1,759,540	6,293
Morocco	446,550	35,277
Oman	309,500	4,425
Qatar	11,586	2,570
Saudi Arabia	2,149,690	32,276
Syria	185,180	18,430
Tunisia	163,610	11,403
United Arab Emirates	83,600	9,270
West Bank and Gaza Strip	6,220	4,552
Western Sahara	266,000	603 ¹
Yemen	527,968	27,584
Regional total	11,518,236	435,945
World total	148,940,000	7,444,157

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

²Source: The World Bank, 2017 World Development Indicators Database.

TABLE 2
MIDDLE EAST AND NORTH AFRICA: GROSS DOMESTIC PRODUCT^{1,2}

Country or territory	Gross domestic product in 2016 based on purchasing power parity		Real gross domestic product growth rate (percentage)		
	Gross value (million dollars)	Per capita (dollars)			
			2014	2015	2016
Algeria	609,610	14,955	3.8	3.7	3.3
Bahrain	67,078	47,115	4.4	2.9	3.2
Egypt	1,132,069	12,551	2.9	4.4	4.3
Iran	1,549,347	19,256	3.2	-1.6	12.5
Iraq	652,333	17,219	0.7	4.8	11.0
Israel	300,899	35,220	3.5	2.6	4.0
Jordan	85,554	12,264	3.1	2.4	2.0
Kuwait	293,761	68,540	0.6	-1.0	2.2
Lebanon	85,105	19,050	2.0	0.8	1.0
Libya	37,035	5,801	-53.0	-13.0	-7.4
Morocco	281,420	8,160	2.7	4.6	1.2
Oman	183,815	45,848	2.8	4.7	1.8
Qatar	327,623	125,160	4.0	3.6	2.2
Saudi Arabia	1,755,110	55,292	3.7	4.1	1.7
Syria ³	22,163	1,203	0.4	-5.3	-3.4
Tunisia	130,542	11,448	2.3	1.1	1.0
United Arab Emirates	671,117	68,092	3.3	3.8	3.0
West Bank and Gaza Strip ⁴	13,426	2,957	-0.5	4.2	4.3
Western Sahara	906.5 ⁵	2,500 ⁵	NA	NA	NA
Yemen	44,002	1,510	-0.2	-37.1	-34.3
Regional total	8,242,916	18,908 ⁶	1.7 ⁷	-0.3 ⁷	2.6 ⁷
World total	120,367,160	16,169 ⁶	2.8	2.8	2.5

NA Not available.

¹Source: International Monetary Fund, World Economic Outlook Database, April 2018.

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

³Source: UN Data 2018.

⁴Source: Palestinian Central Bureau of Statistics, 2018.

⁵Source: U.S. Central Intelligence Agency, The World Factbook 2007 estimate.

⁶Calculated as gross domestic product divided by population.

⁷Annual change in regional gross domestic product.

TABLE 3
MIDDLE EAST AND NORTH AFRICA: PRODUCTION OF SELECTED MINERAL COMMODITIES IN 2016^{1,2}

(Thousand metric tons unless otherwise specified)

Country	Metals								Mineral fuels and related materials	
	Metals				Industrial minerals				Petroleum	
	Aluminum, metal, primary	Chromite, mine output, gross weight	Steel, raw	Nitrogen, N content of ammonia	Cement, hydraulic	Gypsum	Phosphate rock, P ₂ O ₅ content	Potash, K ₂ O equivalent	Crude (thousand 42-gallon barrels)	Refinery products (thousand 42-gallon barrels)
Algeria	--	--	650	2,170 ^e	23,354	2,170	375	--	576,335	227,000
Bahrain	971	--	960 ^e	384	1,400 ^e	--	--	--	73,944 ³	98,000
Egypt	296	--	5,036	2,800	55,000	2,200	1,290	--	252,215	193,000
Iran	360	340 ^e	17,895	2,500 ^e	62,000 ^e	20,000 ^e	40 ^e	--	1,678,956	678,000
Iraq	--	--	--	35 ^e	10,000 ^e	1,000 ^e	--	--	1,629,725	165,000
Israel	--	--	300 ^e	--	7,150	147	1,223 ^{e,4}	2,400	681	103,000 ^e
Jordan	--	--	150	--	4,800	880	2,557	1,202	3,297	21,100
Kuwait	--	--	--	547	4,200 ^e	--	--	--	1,150,000	337,000
Lebanon	--	--	--	--	5,401	--	--	--	--	--
Libya	--	--	492	219	4,250 ^e	150 ^e	--	--	155,490	49,000
Morocco and Western Sahara	--	--	520	--	15,800	--	8,607	--	1,781	--
Oman	386	451	2,000 ^e	1,700 ^e	5,500 ^e	5,483	--	--	367,500	83,000
Qatar	612	--	2,521	3,339	6,500 ^e	210 ^e	--	--	693,200	359,000
Saudi Arabia	869	--	5,461	4,482	55,945	1,400	1,281	--	3,828,000	910,000
Syria	--	--	5 ^e	--	2,000	150	--	--	2,900	41,000
Tunisia	--	--	92	--	9,028	850	1,100	--	17,800	11,000
United Arab Emirates	2,500	--	3,149	995	21,000 ^e	700 ^e	--	--	1,487,000	397,000
Yemen	--	--	--	--	2,400 ^e	--	--	--	9,855	21,000
Total	5,994	791	39,231	19,171	295,728	35,340	16,473 ⁵	3,602	11,928,679	3,693,100
Share of world total	10.2%	2.6%	2.4%	15.1%	7.2%	9.9%	20.6%	9.4%	38.4%	14.8%
United States	840	--	78,500	10,200 ⁶	85,000	17,000	7,700	500	3,440,000	4,350,000
Share of world total	1.4%	--	4.8%	8.1%	2.1%	4.8%	9.6%	1.3%	11.1%	17.4%
World total	59,000	30,000	1,600,000	127,000	4,100,000	357,000	80,000	38,000	31,000,000	25,000,000

^eEstimated. -- Zero.

¹U.S. data, and world totals are rounded to no more than three significant digits.

²May not add to totals shown owing to independent rounding. Percentages were calculated using unrounded data. Table includes data available as of December 8, 2018.

³Includes the country's share of production from the Abu Saafa Field.

⁴Beneficiated.

⁵Includes production from countries that have reported P₂O₅ content only.

⁶Synthetic anhydrous ammonia; excludes coke oven byproduct ammonia.

Middle East and North Africa region

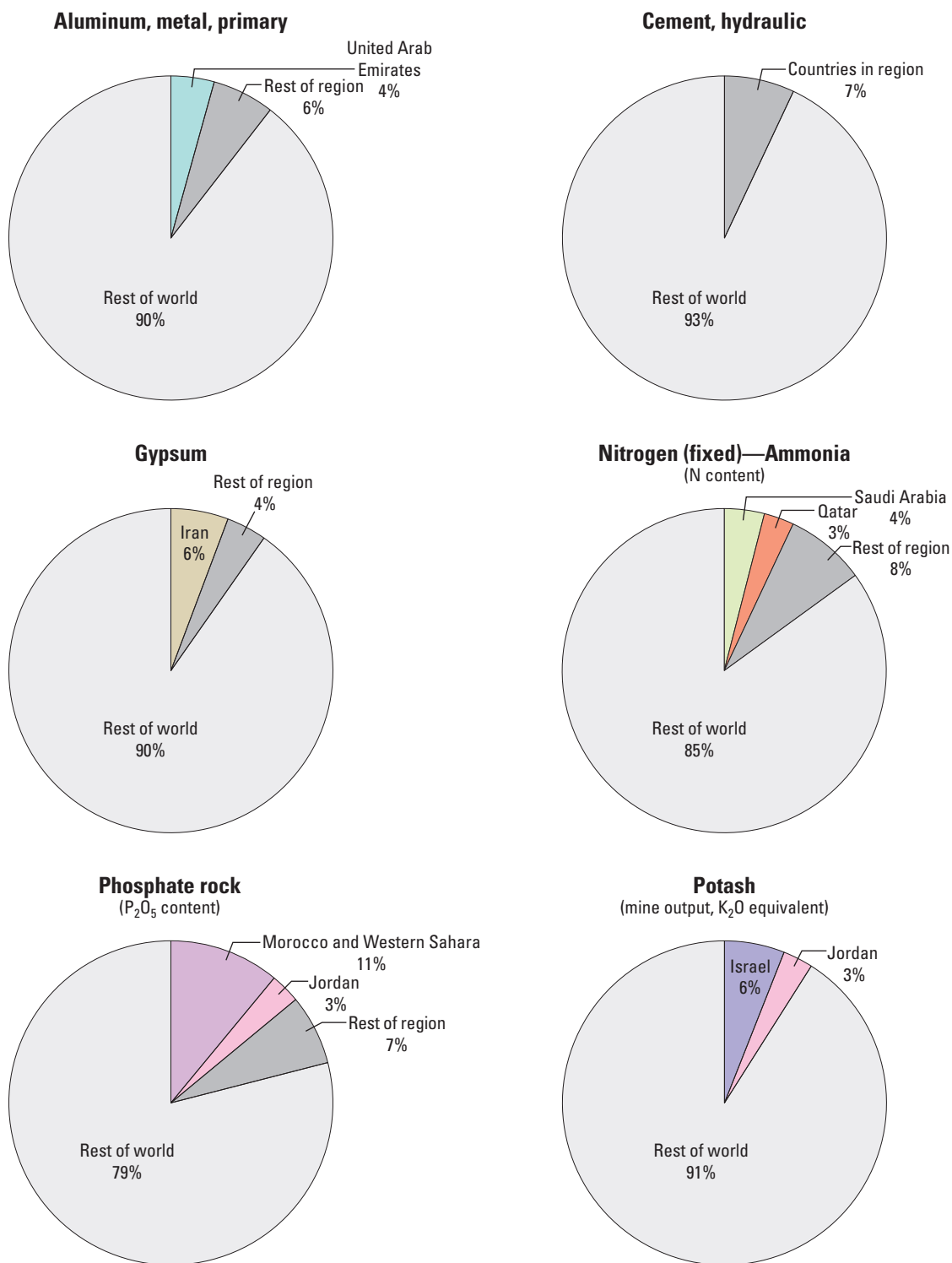


Figure 2. Pie charts showing percentage of world production of selected mineral commodities (aluminum, cement, gypsum, nitrogen, phosphate rock, and potash) by countries of the Middle East and North Africa region in 2016. Individual countries of the region are labeled if they accounted for at least 3% 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.