

# 2017–2018 Minerals Yearbook

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## AFGHANISTAN

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# THE MINERAL INDUSTRY OF AFGHANISTAN

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**Note:** In this chapter, information for 2017 is followed by information for 2018.

Afghanistan has deposits of bauxite, copper, iron, lithium (spodumene), and rare-earth minerals. In 2017, minerals mined in Afghanistan included chromite, coal, fluor spar, gypsum, lime, marble, natural gas, petroleum, salt, and precious and semiprecious stones. The mineral-processing industry produced cement and secondary steel. In recent years, however, deterioration of the security situation, political uncertainty, and a lack of infrastructure prevented the development of most of these resources. According to the Afghan Anti-Corruption Network, local warlords, insurgents, and local people continued to mine some of those mineral resources in Afghanistan illegally. In 2017, gemstones, marble, semiprecious stones, and talc continued to be smuggled from Afghanistan to Pakistan and then from Pakistan to other countries (table 1; U.S. Geological Survey Project in Afghanistan, 2014; Arian, 2017).

## Minerals in the National Economy

The real gross domestic product (GDP) increased by 2.5% in 2017 compared with 2.4% (revised) in 2016; the nominal GDP was \$20.9 billion. The deterioration of the security situation negatively affected investment and the business environment; foreign direct investment decreased by 37% to \$54 million in 2017 from \$86 million in 2016. Industrial production increased by 3.4%. The annual trade deficit was 33% of the GDP and was financed mainly by foreign aid inflows (Asian Development Bank, 2018, p. 201; International Monetary Fund, 2018, p. 7, 23; United Nations Conference on Trade and Development, 2018, p. 186; World Bank, The, 2018).

## Government Policies and Programs

In 2016, the control of the mining sector was removed from the Ministry of Mines and Petroleum (MoMP) and placed under the Office of the Presidency. The High Economic Council is responsible for approving and evaluating new mining contracts according to the Mining Law of 2014, and the National Procurement Commission is responsible for tendering the licenses. The Mining Law of Afghanistan is composed of the Minerals Law (2005) and the Mining Regulations (2009). In 2011, amendments to the Minerals Law of 2005 were drafted by the MoMP. In 2014, the amendments were approved by the President of Afghanistan and passed by the Parliament. As of 2017, the Mining Law had not been finalized (Global Witness, 2015; Hansen, 2016).

## Production

Afghanistan's mineral production data were not readily available because the numerous artisanal and small- to medium-scale mining operations throughout Afghanistan were not well documented. According to the Central Statistics Organization, Afghanistan's production of cement increased by 78%;

secondary steel, by 38%; coal, by 24%; and natural gas, by 13% in 2017. Production of salt (rock) decreased by 42%; cast iron and lime, by 15% each; and crushed marble, by 6% (table 1; Central Statistics Organization, 2017, p. 206).

## Structure of the Mineral Industry

In 2017, such mineral resources as chromite, coal, gypsum, lime, marble, natural gas, salt, precious and semiprecious stones, and talc continued to be extracted through artisanal and small-scale mining. In 2017, the MoMP posted 979 mine contracts on its website, the majority of which were expired or cancelled. Table 2 is a list of major mineral facilities operating in 2017 (Ministry of Mines and Petroleum, 2018).

## Commodity Review

### Metals

**Copper and Gold.**—In 2017, Metallurgical Corp. of China Ltd. (MCC) of China continued discussions with the MoMP regarding amendments to the Aynak mining contract; the discussion was initiated in July 2015. As of yearend 2017, the MCC was awaiting feedback on proposed amendments submitted to the MoMP. The Aynak deposit was located 35 kilometers (km) south of Kabul in the northern portion of Logar Province. MCC entered into a contract with the Government of Afghanistan in 2008 to develop the deposit; however, the development was stalled for various reasons. In 2016, the Government canceled the four copper-gold prospects tendered—the Badakhshan gold prospect, the Balkhab copper prospect, the Shaida porphyry copper prospect, and the Zarkashan copper-gold prospect. The reason for cancellation was that the projects had been awarded by a nontransparent process. As of 2017, the projects were in the bidding process (Stanley and Mikhaylova, 2011, p. 40, 44; Hansen, 2016; Special Inspector General for Afghanistan Reconstruction, 2016, p. 188; Metallurgical Corp. of China Ltd., 2018, p. 28).

### Industrial Minerals

**Fluorspar.**—In 2017, Amania Mining Co, produced an estimated 4,000 metric tons (t) of fluorspar (metspar). Amania Mining was established in 2010 and was involved in exploration, development, mining, and processing of the Bakhud fluorite deposit in Nesh District, Kandahar Province. In 2014 (the latest date at which detailed data that were available), the reserves for all four blocks were estimated to be 8.8 million metric tons (Mt) averaging 47%  $\text{CaF}_2$ , or 4.1 Mt of fluorite. The pilot acid-grade fluorspar plant was designed in August 2014 and was expected to be commissioned with a minimum capacity of 120,000 metric tons per year (t/yr) in early 2018.

Afghanistan metasp materials were exported mainly to Pakistan and Turkey (tables 1, 2; Amania Mining Co., 2014, p. 2, 4, 7, 16, 26, 32, 43; 2015; Wong, 2017a, b).

## MINERAL INDUSTRY HIGHLIGHTS IN 2018

In 2018, the deterioration of the security situation, political uncertainty, and the lack of infrastructure continued to affect the economic growth of Afghanistan negatively. The real GDP increased by 2.3% in 2018 compared with 2.7% (revised) in 2017; the nominal GDP was \$19.6 billion. The foreign direct investment increased to \$139 million in 2018 from \$53 million (revised) in 2017. The annual trade deficit was 31% of the GDP and was financed mainly by foreign aid inflows. Industrial production increased by 2.0% (Mashal, 2018b; Asian Development Bank, 2019, p. 215; International Monetary Fund, 2019a; 2019b, p. 3; Pikulicka-Wilczewska, 2019; United Nations Conference on Trade and Development, 2019, p. 214).

In 2017, the High Economic Council approved the draft of a mining sector “roadmap.” The objectives of the mining sector roadmap are to develop the mining sector of Afghanistan and address challenges in the mining sector, including the legal framework, necessary reforms, and creation of industries and markets (Pajhwok Afghan News, 2019).

Since 2005, Afghanistan’s legislature has passed several versions of its mineral law. The newest version, Minerals Law (2018), was passed into a law in 2018. According to the Minerals Law (2018), the High Economic Council is responsible for endorsing mineral programs and for approving, rejecting, and evaluating new mining and exploration contracts; the National Procurement Authority is responsible for tendering the licenses; and the National Procurement Commission is responsible for approving and rejecting tendering processes (Ministry of Mines and Petroleum, 2019, p. 52, 55, 56).

According to the Central Statistics Organization, Afghanistan’s production of cement and sand and gravel (unspecified) decreased by 39%, and lime, by 26% in 2018. Production of salt (rock) increased by 33%, and bituminous coal, by 29% (table 1; Central Statistics Organization, 2017, p. 206).

As of 2018, MCC was still in discussion with the MoMP regarding amendments to the Aynak mining contract. In 2018, the Government approved a contract with Silk Road Mining and Development Co. for the Shaida porphyry copper prospect. In October 2018, the Badakhshan gold prospect and Balkhab copper prospects exploration contract was awarded to the United Kingdom-based company Centar Ltd., which partnered with a local company, Afghan Gold and Mineral Co. (Mashal, 2018a; Metallurgical Corp. of China Ltd., 2019, p. 32; Special Inspector General for Afghanistan Reconstruction, 2016, p. 188; 2018, p. 45, 145).

In 2018, Amania Mining produced an estimated 4,000 t of fluorspar (metasp). The sole pilot acid-grade fluorspar plant in Afghanistan planned to increase its production capacity to 122,500 t/yr by August. (tables 1, 2; Wong, 2017a, b; Greenfield, 2018).

## Outlook

Afghanistan’s mining industry, if further developed, could contribute to economic growth for the country; however, Afghanistan might be far away from being able to develop its mining sector sustainably owing to deterioration of the security situation, political uncertainty, the deficiency of its infrastructure, and stalled projects, such as the Aynak copper project. Illegal mining and insurgent control over mining sites will likely continue to be critical challenges to the development of the mineral sector in the near future (International Monetary Fund, 2018, p. 14).

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TABLE 1  
AFGHANISTAN: PRODUCTION OF MINERAL COMMODITIES<sup>1</sup>

(Metric tons, gross weight, unless otherwise specified)

Commodity <sup>2</sup>	2014	2015	2016	2017	2018
<b>METALS</b>					
Chromium, mine, chromite	6,369	5,682 <sup>r</sup>	4,545 <sup>r</sup>	4,500 <sup>e</sup>	4,500 <sup>e</sup>
Iron and steel:					
Raw steel, from scrap	24,000	2,826	24,000	33,000	33,000 <sup>e</sup>
Products, cast iron	9,009	5,030	4,620	3,945	3,790
<b>INDUSTRIAL MINERALS</b>					
Cement, hydraulic	87,000	70,000	101,000	180,000	110,000
Fluorspar	4,700 <sup>r</sup>	4,108 <sup>r</sup>	4,000 <sup>r,e</sup>	4,000 <sup>e</sup>	4,000 <sup>e</sup>
Gemstones:					
Precious stones kilograms	46,184	31,896	32,000 <sup>e</sup>	33,000 <sup>e</sup>	35,000 <sup>e</sup>
Semiprecious stones do.	4,745	5,000 <sup>e</sup>	5,030 <sup>e</sup>	5,200 <sup>e</sup>	5,500 <sup>e</sup>
Lime	14,784	89,000	78,000	66,000	49,000
Nitrogen, ammonia, N content	60,000	44,000	48,000	48,000 <sup>e</sup>	48,000 <sup>e</sup>
Salt, rock	40,992	87,014	98,000 <sup>r</sup>	57,000	75,600
Sand and gravel, unspecified	--	832,000	3,070,000	1,580,000	956,000
Stone, crushed, marble	44,220 <sup>r</sup>	42,756 <sup>r</sup>	31,036 <sup>r</sup>	29,100	28,300
<b>MINERAL FUELS AND RELATED MATERIALS</b>					
Coal, bituminous	1,347,000	1,517,400	1,364,800	1,698,200	2,191,400
Natural gas:					
Gross volume million cubic meters	155	142	146	165	156
Marketable do.	140	128	131	148	140 <sup>e</sup>
Petroleum, condensate thousand 42-gallon barrels	96	96	84	95 <sup>e</sup>	90 <sup>e</sup>

<sup>e</sup>Estimated. <sup>r</sup>Revised. do. Ditto. -- Zero.

<sup>1</sup>Table includes data available through June 3, 2019. All data are reported unless otherwise noted. Estimated data are rounded to three significant digits.

<sup>2</sup>In addition to the commodities listed, barite, gold, lapis lazuli, secondary aluminum, and talc may have been produced, but available information was inadequate to make reliable estimates of output.

TABLE 2  
AFGHANISTAN: STRUCTURE OF THE MINERAL INDUSTRY IN 2018

(Metric tons unless otherwise specified)

Commodity		Major operating companies and major equity owners	Location of main facilities	Annual capacity <sup>c</sup>
Aluminium, secondary:				
Extrusion and powder coating		Qader Najib Ltd.	Kabul Province	NA
Manufacture		Khalil Najeeb Steel Mills Ltd.	Bagrami industrial area, Kabul Province	36,000
Do.		Javed Waziri PVC and Aluminium Production Ltd.	Pol-e-Charkhi, Kabul Province	NA
Do.		Salam Bilal Ltd.	Kandahar Province	360
Cement	thousand metric tons	Ghori I [Afghan Cement L.L.C. (subsidiary of Government-owned Afghan Investment Co.)]	Pul-e-Khomri, Baghlan Province	144
Do.	do.	Jabal-e Saraj cement plant	Parwan Province	37
Chromite	do.	Hashemi	Dado Khil Deh Naw Area, Logar Province	400
Coal		Abkhorak Mine (Misaq Sharq Ltd.)	Samangan Province	70,000
Do.		Dara-e-Suf (Khushak Brothers Co.)	do.	20,000
Do.		Ensaf Lal	Saighan District, Bamyan Province	57,000
Do.		Maloma coal mine (Arya Popal Co.)	Karkh District, Herat Province	NA
Do.		Sabzak Mine (Khushak Brothers Co.)	Herat Province	15,000
Fluorspar		Amania Mining Co.	Bakhud fluorite mine in Nesh District, Kandahar Province	4,000
Gemstones:				
Emerald	kilograms	NA	Buzmal, Parwan Province	76
Do.	do.	NA	Kench, Miken, Darun, Butak, Bakhi Parwan Province	6
Ruby	do.	Partially under Government control, partially private	Jegdalek, Sorobi District, Kabul Province	10
Tourmaline		NA	Deodarra, Jurim District	NA
Gypsum		Ahmad Sar Jangan Construction Co.	Nawar, Ghazni Province	10,000
Do.		Almas Ghaznawyan	do.	417
Do.		Emsatullah Asem	Daimiradad, Maidan Wardak Province	10,000
Do.		United Engineers Co.	Ghazni Province	NA
Natural gas	cubic meters	Afghan Gas Ltd. (Government-owned)	Jawzjan	70,000
Do.		do.	Sheberghan	14,000
Do.		Dragon Oil plc, 40%; Türkiye Petrolleri A.O., 40%; Ghazanfar Group, 20%	Sanduqli and Mazar-i-Sharif blocks	NA
Petroleum, condensate	thousand 42-gallon barrels	Ghazanfar Group	Ghazanfar oil refinery in Hairaton Town	150,000
Salt		Khaje Akash Business Ltd.	Takhar Province	NA
Do.		Naseer Omid Salt Extraction Co.	Herat Province	NA
Do.		Qayyum Ghane Co.	do.	NA
Do.		Qarizada Rebsazi Co.	Andkhoy, Faryab Province	150
Do.		Westco International FZE	Kalfagan Mine, Kalfagan area, Takhar Province	70,000
Sand and gravel		Estimad Qarabagh Co.	Estalif, Kabul Province	40,000
Do.		Kawoon Construction Co.	Khuaja Musafer Paghman, Kabul Province	160
Do.		Sehar Perez Company	Qala Haider Khan, Kabul Province	96,000
Do.		Technologist Co.	Tanhi Gharo, Kabul Province	31,000
Do.		do.	do.	730
Do.		Bakhtar Cristal	Dehdadi, Balkh Province	80,000
Do.		Fordbamika	do.	48,000
Semiprecious stones, lapis-lazuli		Sar-e-San (Ljewardeen Mining Co.)	Sar-e-Sang, Kuran Wa Munjan District, Badakhshan Province	NA
Do.		NA	Jurim District, Badakhshan Province	NA
Do.		NA	Zebak District, Badakhshan Province	NA
Steel, raw, from scrap		Afghan Folad Steel Mill Corp. Ltd.	Herat Province	29,000
Do.		Maisam Steel Mill	Pul-e-Charkhi, Kabul Province	36,500
Do.		Sino-Afghan Steel Co. (Watan Group)	Kabul Province	NA

See footnotes at end of table.

TABLE 2—Continued  
AFGHANISTAN: STRUCTURE OF THE MINERAL INDUSTRY IN 2018

(Metric tons unless otherwise specified)

Commodity	Major operating companies and major equity owners	Location of main facilities	Annual capacity <sup>c</sup>
Stone, marble	Ahmad Fazil Stone Extraction Co.	Herat Province	3,000
Do.	Adel Brothers Co.	Chesht Sharif, Herat Province	2,000
Do.	Afghan Marble Mining Co.	do.	NA
Do.	Baharart Marble Extraction and Processing Co.	Ouba, Herat Province	NA
Do.	Gold Mining Co.	Herat Province	6,300
Do.	Green Construction Co.	Maidan Wardak Province	NA
Do.	Homebuiding Enterprise	Kabul Province	NA
Do.	Jamal Asia Marble Extraction and Processing Co.	Chesht Sharif, Herat Province	NA
Do.	Mica Stone Processing Co.	do.	NA
Do.	Mines Investment Co.	Herat Province	NA
Do.	Murwarid Herat Co.	Chesht Sharif, Herat Province	NA
Do.	Rahmat Fazel Construction and Construction Material Production Co.	Maidan Wardak Province	NA
Do.	Natural Rock Processing Co.	do.	NA
Do.	Naghsh Jahan Co.	do.	NA
Talc	Afghanistan Shirzad Co.	Shirzad, Nangrahar Province	17,500
Do.	Bilal Sakhal Co.	Achin, Nangrahar Province	50,000
Do.	Habib Shahab Co.	Shirzad, Nangrahar Province	50,000
Do.	Jalil Hasanzai Co.	Nangrahar Province	NA
Do.	Khaled Ayaaz Co.	Shirzad, Nangrahar Province	70,000
Do.	Riahan Yunes Ahmadazi Ltd.	do.	163
Do.	Spinghar Talc Co	Nangrahar Province	NA
Do.	Shemshir Samir Co.	do.	NA

<sup>c</sup>Estimated; estimated data are rounded to no more than three significant digits. Do., do. Ditto. NA Not available.