

# 2019 Minerals Yearbook

# **AFGHANISTAN [ADVANCE RELEASE]**

### THE MINERAL INDUSTRY OF AFGHANISTAN

#### By Karine M. Renaud

In 2019, minerals mined in Afghanistan included chromite, coal, fluorspar, gypsum, lime, marble, natural gas, petroleum, precious and semiprecious gemstones, and salt. The mineral-processing sector produced cement and steel. Afghanistan also has deposits of bauxite, copper, iron, lithium (spodumene), and rare-earth minerals, which have not been developed (table 1; U.S. Geological Survey, 2014).

#### **Minerals in the National Economy**

The real gross domestic product (GDP) increased by 3.0% in 2019 compared with 2.7% in 2018; the nominal GDP was \$19.2 billion. The GDP growth was mainly attributed to growth in the agricultural sector; growth in the manufacturing and services sector was restricted by the uncertainty inherent in the peace negotiations and the presidential election. The country's foreign direct investment decreased by 67% to \$39 million in 2019 from \$119 million in 2018. The total value of all Afghanistan's commodity exports decreased to \$864 million in 2019 from \$875 million in 2018. The total value of commodity imports decreased to \$6.8 billion in 2019 from \$7.4 billion in 2018. In 2019, in terms of amount, 772,137 metric tons (t) of coal was exported compared with 1.12 million metric tons (Mt) in 2018. In terms of value, coal accounted for 8% of total commodity exports, and talc, 2%. The major mineral commodity imports were, in terms of amount, 4.5 Mt of coal, 77,900 barrels of crude petroleum, and 22,494 t of marble (National Statistics and Information Authority, 2018a, b; 2019a, b; Asian Development Bank, 2019, p. 184; United Nations Conference on Trade and Development, 2020, p. 240; World Bank, The, 2020).

Afghanistan's exports to the United States were valued at \$38.8 million in 2019 compared with \$28.6 million in 2018. Gemstones (other) accounted for about \$20.9 million; stone, sand, cement, and other construction materials, \$14,000; and gem diamond, \$13,000. In 2019, imports from the United States were valued at \$757.7 million compared with about \$1.23 billion in 2018. Excavating machinery accounted for \$2.48 million; iron and steel products (other), \$751,000; iron and steel mill products, \$607,000; petroleum products (other), \$508,000; drilling and oilfield equipment, \$365,000; nonferrous metals (other), \$143,000; coal and fuels, \$65,000; natural gas liquids, \$58,000; steelmaking material, \$29,000; and machinery for specialized mining, \$23,000 (U.S. Census Bureau, 2019a, b).

#### **Government Policies and Programs**

In September 2019, presidential elections were held in Afghanistan. The outcome of the votes had not been made final by the end of the year. In August 2019, peace talks began between the United States and nonofficial entities. The Government continued to work on amendments to the Mining Law of 2014 and the Mining Regulations (2009). The first drafts of the amended Mining Law of 2019 and Mining Regulations (2019)

were published on the website of the Ministry of Mines and Petroleum (MoMP). The objectives of the Mining Regulations (2019) are to promote (1) transparency in the mineral industry, (2) a healthy and safe environment for people engaged in mining activities, and (3) regulation of illegal and unlicensed mining activities. The objectives of the Mining Law of 2019 are to promote the development of the mineral industry, which would help improve the economic self-sustainability of Afghanistan; secure optimal revenue for the country from mining activities; ensure that mining is conducted in accordance with best practices for the society and country; increase domestic and international investment in the mineral industry in Afghanistan; facilitate local community participation in the mineral industry, including through the use of domestic and local goods and services; and promote peace, security, and stability, including by placing controls on the country's mineral wealth (BBC News, 2019; Ministry of Mines and Petroleum, 2019b, p. 1; 2019c, p. 1; Nickel, 2019; Qazi, 2019).

The MoMP was taking steps to develop the mineral industry of Afghanistan and attract domestic and foreign investment. The High Economic Council and the Cabinet approved small- and large-scale mining areas for tendering; these areas are for mining of metals and industrial minerals. For metals, the following mining areas were approved: the Balkhab area (for gold), Ghorian (iron ore), Kundalan (copper and gold), Sayadara (iron ore), Veka Dur (gold), and Zarkashan (copper and gold). For industrial minerals, the following mining areas were approved: Daykundi, Ghazni, Herat, Kabul, Kapisa, Kunar, Nangarhar, and Parwan Provinces (for marble); Farah and Herat Provinces (tourmaline and tin); Baghlan Province (clay, gypsum, and bauxite); Bamyan, Ghazni, Parwan, Helmand, and Wardak Provinces (travertine); Nangarhar Province (Achin magnesite and talc); Ghor Province (Karnak Khanjar mercury and Nalbandon lead-zinc); Panjshir Province (emerald and iron); and the northern part of Logar Province (Aynak copper) (Ministry of Mines and Petroleum, 2019a, p. 1–14; 2020, p. 9, 11, 12, 15, 27, 57, 71).

In 2017, the High Economic Council approved the draft of the Mining Sector Roadmap. The objectives of the Mining Sector Roadmap are to provide an overview of Afghanistan's natural resources, including metals (bauxite, chromite, copper, gold, iron, and other metals), industrial minerals (gemstones, rare earths, sand and gravel, sulfur, talc, and other minerals), and mineral fuels and related materials (crude petroleum and natural gas), and address challenges in the mining sector, including the legal framework, necessary reforms, and the creation of industries and markets (Ministry of Mines and Petroleum, 2019d, p. 5, 8–9, 31–33; Pajhwok Afghan News, 2019).

According to the MoMP, local warlords, insurgents, and local people continued to mine in the country illegally and to smuggle chromite, coal, marble, precious stones, talc, and semiprecious stones out of the country. In 2019, the MoMP established

the Mines Protection Committee (MPC), which includes the members of the Environment and Natural Resources Committee, the Ministry of Interior Affairs, the Ministry of Defense, the MoMP, the National Directorate of Security (NDS), the National Environmental Protection Agency, the National Security Council, and the Parliament (Wolesi Jirga). The responsibility of the MPC is to identify, evaluate, prevent, reduce, and block illegal mining activities and to collect information on illegal activities. The MPC identified a total of 236 illegal mines throughout Afghanistan, of which 93 mines were located in Kabul Province; 28, in Herat Province; 23 each, in Nangarhar and Paktiya Provinces; 15 each, in Kapisa and Panjshir Provinces; 14, in Laghman Province; 13, in Kunar Province; and 12, in Parwan Province (Barakzai, 2019; Ministry of Mines and Petroleum, 2019e, p. 1–3).

#### **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 National Statistics and Information Authority, Afghanistan's production of crushed marble increased by 285% in 2019; fluorspar, by 33%; and bituminous coal, by 12%. Production of cement decreased by 73%; chromium, by 56%; rock salt, by 37%; and lime, by 27%. These and other data on mineral production are in table 1.

#### Structure of the Mineral Industry

Table 2 is a list of major mineral facilities operating in 2019.

#### **Commodity Review**

#### Metals

Copper and Gold.—As of 2019, the Mes Aynak copper project had not been developed. Metallurgical Corp. of China Ltd. (MCC) was still in discussions with the MoMP on amendments to the Aynak mining contract. The MCC completed and submitted a feasibility study report for the underground mining proposal for the project, which was required by the Government of Afghanistan. The MCC was awaiting the final decisions by the Government of Afghanistan on relic protection and the proposed mining project (Metallurgical Corporation of China Ltd., 2020, p. 31).

In 2018, the Government approved a contract with Silk Road Mining and Development Co. (SRMDC) for the Shaida porphyry copper prospect in Herat Province. In 2019, the SRMDC was granted exploration and mining licenses for the property. In October 2018, the Government awarded exploration contracts for the Badakhshan gold prospect and Balkhab copper prospect in northern Sar-e Pul Province to the United Statesbased company CENTAR Ltd., which was a joint venture of Afghan Gold and Mineral Co. (AGCM) and Turkish Afghan Mining Co. (TAMC). In 2019, the Government canceled both contracts because CENTAR had reportedly not fulfilled its requirements under the contracts (Business Insider, 2019; Leotaud, 2019; Silk Road Mining, 2020).

#### **Industrial Minerals**

Cement.—In 2019, the MoMP invested \$350 million and made progress on mineral industry projects, which included improvements to the Jabal-e-Saraj and Samangan cement plants worth \$170 million and \$136 million, respectively. The MoMP planned to build the new Jabal-e-Seraj cement plant in Afghanistan to reduce the country's dependence on cement imports from Iran and Pakistan. The MoMP was working in cooperation with the U.S. Agency for International Development (USAID), which provided technical advice to the MoMP on key areas of the project, including a review of the technical and financial bids (Arman, 2019).

The Orbit International FZE Consortium proposed to invest \$170 million to develop a 20-megawatt powerplant and cement production facility near the city of Jabal-e-Seraj in Parwan Province. The cement plant's capacity was expected to be 1.2 million metric tons per year of cement, which would supply nearly 20% of Afghanistan's annual cement consumption, create more than 500 new jobs, and generate approximately \$10 million in annual tax and royalty payments. The approval of the project was delayed owing to a lack of capability at the Ministry's Large-Scale Mining Directorate to develop discounted cash flow models. A USAID-funded advisor developed a discounted cash flow model, which helped to secure approval for the proposal. The MoMP and Orbit International were then able to proceed with contract negotiations (U.S. Agency for International Development, 2019).

In 2019, the MoMP canceled the contract for the Ghori cement plant, which was operated by Afghan Investment Co. The Ghori cement plant was to be placed under Government control (Cement News, 2019; Omid, 2019).

#### Outlook

The Government has intensified its efforts to develop mineral resources by implementing changes in the Mineral Law and mineral-related regulations, to improve and strengthen Government transparency and accountability, and to provide responsible security around mine sites through peace agreement talks. The Government is also actively working to attract foreign investment into the country's mineral industry. Foreign investment in infrastructure and transportation for mining is expected to be a key factor in the development of the mineral industry in the future as the Government continues to offer tenders or bids for development of metal and industrial mineral resources.

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 $\label{eq:table 1} \textbf{TABLE 1} \\ \textbf{AFGHANISTAN: PRODUCTION OF MINERAL COMMODITIES}^1$ 

(Metric tons, gross weight, unless otherwise specified)

Commodity <sup>2</sup>		2015	2016	2017	2018	2019
META						
Chromium, mine, chromite		5,700 <sup>r</sup>	4,545	6,400 <sup>r</sup>	4,500 e	2,000 e
Iron and steel:						
Raw steel, from scrap	_	2,826	24,000	33,000	33,000 <sup>e</sup>	33,000 e
Products, cast iron		5,030	4,620	3,945	3,790	3,800 e
INDUSTRIAL I	MINERALS					
Cement, hydraulic	thousand metric tons	70	101	180	110	30
Fluorspar		4,108	7,600 r, e	7,500 r, e	7,500 r, e	10,000 e
Gemstones:						
Precious <sup>e</sup>	kilograms	500	520	610	610 <sup>r</sup>	610
Semiprecious <sup>e</sup>	metric tons	5,000	5,000	4,500	4,500	4,000
Gypsum, mine		57,000 r	57,000 r	40,000	36,161 <sup>r</sup>	36,200 °
Lime		89,000	78,000	66,000	49,000	35,970
Nitrogen, ammonia, N content		44,000	48,000	48,000 e	48,000 e	48,000 e
Salt, rock salt		87,014	98,000	57,000	75,600	47,900
Sand and gravel, unspecified		832,000	3,070,000	1,580,000	956,000	865,800
Stone, crushed, marble		42,756	31,036	29,100	28,300	108,900
MINERAL FUELS AND R	ELATED MATERIALS					
Coal, bituminous		1,517,400	1,364,800	1,698,200	2,191,400	2,445,600
Natural gas:						
Gross volume	million cubic meters	142	146	165	156	153 <sup>e</sup>
Marketable	do.	128	131	148	140 e	137
Petroleum, condensate	thousand 42-gallon barrels	96	84	95 °	90 e	NA

<sup>&</sup>lt;sup>e</sup>Estimated. <sup>r</sup>Revised. do. Ditto. NA Not available.

<sup>&</sup>lt;sup>1</sup>Table includes data available through June 4, 2020. All data are reported unless otherwise noted. Estimated data are rounded to no more than three significant digits.

<sup>&</sup>lt;sup>2</sup>In addition to the commodities listed, aluminum, barite, gold, lapis lazuli, 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 2019

(Metric tons unless otherwise specified)

Cement			Major operating companies	T C C	Annual
Do.   Phigaman Mugdeb Co.   Cemen plant in Hern Province   70	Commodit	-	and major equity owners	Location of main facilities	capacitye
Do.   do.   Silagaman Magdeh Co.   Cement plant in Heart Province    100	Cement		Ghori I (Government, 100%)	Pul-e-Khomri, Baghlan Province	144
Do.   do. Samingain cement plant (Government, 100%)   Samingain Province   Hasheni Brothers   Mine at Dado Khil Deh. Naw Arca, Logar Province   N. Coal	Do.	do.	Jabal-e Saraj cement plant (Government, 100%)	Parwan Province <sup>1</sup>	37
Chromine	Do.	do.	Pishgaman Magdeh Co.	Cement plant in Herat Province <sup>2</sup>	700
Coal	Do.	do.	Samangan cement plant (Government, 100%)	Samangan Province <sup>1</sup>	160
Do.	Chromite		Hashemi Brothers	Mine at Dado Khil Deh Naw Area, Logar Province	NA
Do.	Coal		Afghan Investment Co.	Mine in Baghlan Province	NA
Do.   Klueslak Brothers Co.   Data-e-Staff Mine, Samangan Province   N.	Do.		Arya Popal Co.	Maloma coal mine, Karkh District, Herat Province	NA
Do.   Misaq Sharq Ltd.   Abkhorak Mine, Samangan Province   N.	Do.		Ensaf Lal	Saighan District, Bamyan Province	NA
Do.   North Coal Enterprise   Mine in Baghlan Province   N.	Do.		Khushak Brothers Co.	Dara-e-Suf Mine, Samangan Province	NA
Do.         Klushak Brothers Co.         Sabzak Mine, Herat Province         N.           Gemstones:         Horspaar         Amania Mining Co.         Bakhud Mine, Kandahar Province         4,00           Gemstones:         Precious:         Frecious:         Frecious:         Sar-General Mining Co.         Bakhi, Butak, Buzmal, Darun, Mikeni, and Khenj Mines, Panjshir Province         31           Ruby         do.         Partially under governent control, partially under governent partially under governent, governent, governent, governent, governent, governent,	Do.		Misaq Sharq Ltd.	Abkhorak Mine, Samangan Province	NA
Fluorspar	Do.		North Coal Enterprise	Mine in Baghlan Province	NA
Gemistones:         Precious:           Emerald         kilograms         NA         Bakhi, Butak, Buzmal, Darum, Mikeni, and Khenj Mines, Panjshir Province         51           Ruby         do.         Partially under governent control, partially under governent, go	Do.		Khushak Brothers Co.	Sabzak Mine, Herat Province	NA
Precious:	Fluorspar		Amania Mining Co.	Bakhud Mine, Kandahar Province	4,000
Emerald kilograms NA Bakhi, Butak, Buzmal, Darun, Mikeni, and Khenj Mines, Panjshir Province Ruby do. Partially under governemt control, partially under private control Semiprecious:  Lapis lazuli Ljewardeen Mining Co. Sare-Sang area, Kuran Wa Munjan District, No. Badakhshan Province Do. NA Jewardeen Mining Co. Jewardeen M			-		
Ruby	Precious:				
Ruby	Emerald	kilograms	NA	Bakhi, Butak, Buzmal, Darun, Mikeni,	510
Ruby do Partially under governent control, partially under governent control winder private control  Semiprecious:  Lapis lazuli Lapis		C		and Khenj Mines, Panjshir Province	
	Ruby	do.			100
Lipewardeen Mining Co.	Semiprecious:		•		
Do.         NA         Jurm District, Badakhshan Province         N/A           Do.         NA         Zebak District, Badakhshan Province         N/A           Tournaline         NA         Deo Darrah Mine, Kash District, Badakhshan Province         N/A           Gypsum         Ahmad Sar Jangan Construction Co.         Mine in Nawar, Ghazni Province         10,000           Do.         Almas Ghaznawyan         do.         41           Do.         Emsatullah Asem         Mine in Daimiradad District, Maidan Wardak Province         10,000           Do.         United Engineers Co.         Mine in Ghazni Province         N/A           Natural gas         million cubic meters         Afghan Gas Ltd. (Government, 100%)         Blocks in Sheberghan, Jowzjan Province         7/A           Do.         do.         do.         1/A           Do.         do.         do.         1/A           Do.         do.         do.         1/A           Petroleum, condensate         thousand         Ghazzanfar Group, 20%         Balkh Province         N/A           Petroleum, condensate         thousand         Ghazzanfar Group, 20%         Ghazzanfar oil refinery, Hairatan Town,         150,000           Petroleum, condensate         thousand         Ghazzanfar Group         Ghazzan			Ljewardeen Mining Co.		NA
Do.         NA         Zebak District, Badakhshan Province         N/           Tournaline         NA         Deo Darrah Mine, Kash District, N/Badakhshan Province         N/           Gypsum         Ahmad Sar Jangan Construction Co.         Mine in Nawar, Ghazni Province         10,000           Do.         Almas Ghaznawyan         do.         41'           Do.         Emsatullah Asem         Mine in Daimiradad District, Maidan Wardak Province         N/           Do.         United Engineers Co.         Mine in Ghazni Province         N/           Natural gas         million cubic meters         Afghan Gas Ltd. (Government, 100%)         Blocks in Sheberghan, Jowajan Province         N/           Do.         do.         do.         1-           Do.         do.         do.         1-           Do.         Dragon Oil ple, 40%; Türkiye Petrolleri A.O., 40%; Ghazanfar Oil refinery, Hairatan Town, Ghazanfar Group, 20%         Sanduqli and Mazar-i-Sharif Blocks, N/         N/           Petroleum, condensate         thousanfar Group, 20%         Balkh Province         N/           Petroleum, condensate         thousanfar Group, 20%         Ghazanfar Group 20%         Sanduqli and Mazar-i-Sharif Blocks, N/         N/           Do.         Algan base Algan Base Bustrict         Mine in Takhar Province         N/	Do.		NA		NA
Tourmaline NA hamad Sar Jangan Construction Co. Mine in Nawar, Ghazni Province 10,000 Do. Almas Ghaznawyan do. 41' Do. Emsatullah Asem Mine in Daimiradad District, 10,000 Do. United Engineers Co. Mine in Ghazni Province NA Natural gas Million cubic meters Afghan Gas Ltd. (Government, 100%) Blocks in Sheberghan, Jowzjan Province NA Do. Dragon Oil plc, 40%; Türkiye Petrolleri A.O., 40%; Balkh Province Balkh Province Ghazanfar Group, 20% Balkh Province Ghazanfar Group, 20% Balkh Province Ghazanfar Group, 20% Balkh Province Ghazanfar oil refinery, Hairatan Town, 150,000 Do. Naseer Omid Salt Extraction Co. Mine in Takhar Province NA Do. Naseer Omid Salt Extraction Co. Mine in Takhar Province NA Do. Qayyum Ghane Co. Mine in Herat Province NA Do. Qayyum Ghane Co. Mine in Andkhoy Town, Faryab Province NA Do. Westo International FZE Kalfagan Mine, Kaflagan area, Takhar Province NA Do. Westo International FZE Kalfagan Mine, Kaflagan area, Takhar Province NA Do. Schar Perez Co. Mine in Qala Haider Khan, Kabul Province 96,000 Do. Che Changest Co. Mine in Tanhi Gharo, Kabul Province 96,000 Do. Geshar Perez Co. Mine in Tanhi Gharo, Kabul Province 96,000 Do. Gestimad Qarabagh Co. Estalif Mine, Kabul Province 940,000 Do. Heimad Qarabagh Co. Estalif Mine, Kabul Province 96,000 Do. Heimad Qarabagh Co. Estalif Mine, Kabul Province 96,000 Do. Heimad Qarabagh Co. Estalif Mine, Kabul Province 96,000 Do. Heimad Qarabagh Co. Estalif Mine, Kabul Province 96,000 Do. Heimad Qarabagh Co. Estalif Mine, Kabul Province 96,000 Do. Heimad Qarabagh Co. Estalif Mine, Kabul Province 96,000 Do. Heimad Qarabagh Co. Estalif Mine, Kabul Province 96,000 Do. Heimad Qarabagh Co. Heimad Co. He					NA
Gypsum         Ahmad Sar Jangan Construction Co.         Mine in Nawar, Ghazni Province         10,00           Do.         Almas Ghaznawyan         do.         41°           Do.         Emsatullah Asem         Mine in Daimiradad District, Maidan Wardak Province         10,00°           Do.         United Engineers Co.         Mine in Ghazni Province         N/           Natural gas         million cubic meters         Afghan Gas Ltd. (Government, 100%)         Blocks in Sheberghan, Jowzjan Province         77           Do.         do.         do.         do.         40           Do.         Dragon Oil plc, 40%; Türkiye Petrolleri A.O., 40%; Sanduqli and Mazar-i-Sharif Blocks, Sanduqli and Mazar-i				Deo Darrah Mine, Kash District,	NA
Do. Almas Ghaznawyan do. 41  Do. Emsatullah Asem Mine in Daimiradad District, 10,000  Maidan Wardak Province  Do. United Engineers Co. Mine in Ghazni Province  Notural gas million cubic meters Afghan Gas Ltd. (Government, 100%) Blocks in Sheberghan, Jowzjan Province 77  Do. do. do. do. do. do. do. Sanduqli and Mazar-i-Sharif Blocks, Note Chazanfar Group, 20% Balkh Province  Petroleum, condensate thousand 42-gallon barrels  Salt Khaje Akash Business Ltd. Mine in Takhar Province Note 142-gallon barrels  Salt Khaje Akash Business Ltd. Mine in Takhar Province Note 142-gallon barrels  Salt Khaje Akash Business Ltd. Mine in Herat Province Note 142-gallon barrels  Salt Khaje Akash Business Ltd. Mine in Herat Province Note 142-gallon barrels  Salt Khaje Akash Business Ltd. Mine in Herat Province Note 142-gallon barrels  Salt Khaje Akash Business Ltd. Mine in Herat Province Note 142-gallon barrels  Salt Khaje Akash Business Ltd. Mine in Herat Province Note 142-gallon barrels  Salt Khaje Akash Business Ltd. Mine in Herat Province Note 142-gallon barrels  Salt Khaje Akash Business Ltd. Mine in Herat Province Note 142-gallon barrels  Salt Khaje Akash Business Ltd. Mine in Herat Province Note 142-gallon barrels  Salt Khaje Akash Business Ltd. Mine in Herat Province Note 142-gallon barrels  Salt Khaje Akash Business Ltd. Mine in Herat Province Note 142-gallon barrels  Salt Khaje Akash Business Ltd. Mine in Herat Province Note 142-gallon barrels  Do. Qayyum Ghane Co. Mine in Herat Province Note 142-gallon barrels  Salt Robert Co. Mine in Andkhoy Town, Faryab Province 142-gallon barrels  Do. Schar Perez Co. Mine in Qala Haider Khan, Kabul Province 142-gallon 1	Gypsum		Ahmad Sar Jangan Construction Co.		10,000
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Do.   United Engineers Co.   Mine in Ghazni Province   N./   Natural gas   million cubic meters   Afghan Gas Ltd. (Government, 100%)   Blocks in Sheberghan, Jowzjan Province   7.7   Do.   d			·	Mine in Daimiradad District.	10,000
Natural gas million cubic meters Afghan Gas Ltd. (Government, 100%) Blocks in Sheberghan, Jowzjan Province  Do. do. do. do. do.  Dragon Oil plc, 40%; Türkiye Petrolleri A.O., 40%; Sanduqli and Mazar-i-Sharif Blocks, North Ghazanfar Group, 20% Balkh Province  Petroleum, condensate thousand 42-gallon barrels  Salt Khaje Akash Business Ltd. Mine in Takhar Province North Mine in Herat Province North Mine in Herat Province North Mine in Herat Province North Mine in Andkhoy Town, Faryab Province North Mine				· · · · · · · · · · · · · · · · · · ·	.,
Natural gas million cubic meters Afghan Gas Ltd. (Government, 100%) Blocks in Sheberghan, Jowzjan Province  Do. do. do. do. do.  Dragon Oil plc, 40%; Türkiye Petrolleri A.O., 40%; Sanduqli and Mazar-i-Sharif Blocks, North Ghazanfar Group, 20% Balkh Province  Petroleum, condensate thousand 42-gallon barrels  Salt Khaje Akash Business Ltd. Mine in Takhar Province North Mine in Herat Province North Mine in Herat Province North Mine in Herat Province North Mine in Andkhoy Town, Faryab Province North Mine	Do.		United Engineers Co.	Mine in Ghazni Province	NA
Do. do. do. do. do. do. do. do. lo. lo. lo. lo. lo. lo. lo. lo. lo. l		ion cubic meters			70
Do. Dragon Oil plc, 40%; Türkiye Petrolleri A.O., 40%; Sanduqli and Mazar-i-Sharif Blocks, Balkh Province  Petroleum, condensate thousand 42-gallon barrels  Salt Khaje Akash Business Ltd. Mine in Takhar Province  Naseer Omid Salt Extraction Co. Mine in Herat Province  Do. Qayyum Ghane Co. do. Mine in Andkhoy Town, Faryab Province  No. Qarizada Rebsazi Co. Mine in Andkhoy Town, Faryab Province  No. Westco International FZE Kalfagan Mine, Kalfagan area, Takhar Province  Do. Westco International FZE Kalfagan Mine, Kalfagan area, Takhar Province  Do. Kawoon Construction Co. Khuaja Musafer Mine, Paghman, Kabul Province  Do. Sehar Perez Co. Mine in Qala Haider Khan, Kabul Province  Do. Sehar Perez Co. Mine in Tanhi Gharo, Kabul Province  Do. Technologest Co. Mine in Tanhi Gharo, Kabul Province  Do. Estimad Qarabagh Co. Estalif Mine, Kabul Province  Do. Bestimad Qarabagh Co. Estalif Mine, Kabul Province  Do. Maisam Steel Mill Corp. Ltd. Plant in Herat Province  29,000  Do. Maisam Steel Mill Plant in Pul-e-Charkhi, Kabul Province			•		14
Petroleum, condensate thousand 42-gallon barrels  Salt Khaje Akash Business Ltd. Mine in Takhar Province  NA  Do. Naseer Omid Salt Extraction Co. Mine in Herat Province  NA  Do. Qayyum Ghane Co. do. Mine in Andkhoy Town, Faryab Province  NA  Do. Westco International FZE Kalfagan Mine, Kalfagan area, Takhar Province  NA  Do. Westco International FZE Kalfagan Mine, Kalfagan area, Takhar Province  NA  Do. Kawoon Construction Co. Khuaja Musafer Mine, Paghman, Kabul Province  Do. Sehar Perez Co. Mine in Qala Haider Khan, Kabul Province  Do. Technologest Co. Mine in Tanhi Gharo, Kabul Province  Do. Sestimad Qarabagh Co. Estalif Mine, Kabul Province  Do. Estimad Qarabagh Co. Estalif Mine, Kabul Province  Do. Fordbamika  Do. Hent in Herat Province  40,000  Do. Hent in Herat Province  Plant in Herat Province  29,000  Do. Maisam Steel Mill  Plant in Pul-e-Charkhi, Kabul Province			Dragon Oil plc, 40%; Türkiye Petrolleri A.O., 40%;	Sanduqli and Mazar-i-Sharif Blocks,	NA
42-gallon barrelsBalkh ProvinceSaltKhaje Akash Business Ltd.Mine in Takhar ProvinceNADo.Naseer Omid Salt Extraction Co.Mine in Herat ProvinceNADo.Qayyum Ghane Co.do.NADo.Qarizada Rebsazi Co.Mine in Andkhoy Town, Faryab ProvinceNADo.Westco International FZEKalfagan Mine, Kalfagan area, Takhar Province70,000Sand and gravel, unspecifiedBakhtar CristalDehdadi, Balkh Province80,000Do.Kawoon Construction Co.Khuaja Musafer Mine, Paghman, Kabul Province160Do.Sehar Perez Co.Mine in Qala Haider Khan, Kabul Province96,000Do.Technologest Co.Mine in Tanhi Gharo, Kabul Province31,000Do.Estimad Qarabagh Co.Estalif Mine, Kabul Province40,000Do.Fordbamikado.48,000Steel, raw, from scrapAfghan Folad Steel Mill Corp. Ltd.Plant in Herat Province29,000Do.Maisam Steel MillPlant in Pul-e-Charkhi, Kabul Province36,500			1 '		
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Do.Kawoon Construction Co.Khuaja Musafer Mine, Paghman, Kabul Province160Do.Sehar Perez Co.Mine in Qala Haider Khan, Kabul Province96,000Do.Technologest Co.Mine in Tanhi Gharo, Kabul Province31,000Do.do.do.730Do.Estimad Qarabagh Co.Estalif Mine, Kabul Province40,000Do.Fordbamikado.48,000Steel, raw, from scrapAfghan Folad Steel Mill Corp. Ltd.Plant in Herat Province29,000Do.Maisam Steel MillPlant in Pul-e-Charkhi, Kabul Province36,500	Do.		Westco International FZE	Kalfagan Mine, Kalfagan area, Takhar Province	70,000
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Do.Estimad Qarabagh Co.Estalif Mine, Kabul Province40,000Do.Fordbamikado.48,000Steel, raw, from scrapAfghan Folad Steel Mill Corp. Ltd.Plant in Herat Province29,000Do.Maisam Steel MillPlant in Pul-e-Charkhi, Kabul Province36,500	Do.		Technologest Co.	Mine in Tanhi Gharo, Kabul Province	31,000
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Steel, raw, from scrapAfghan Folad Steel Mill Corp. Ltd.Plant in Herat Province29,000Do.Maisam Steel MillPlant in Pul-e-Charkhi, Kabul Province36,500	Do.			do.	48,000
Do. Maisam Steel Mill Plant in Pul-e-Charkhi, Kabul Province 36,500					29,000
					36,500
					NA

See footnotes at end of table.

# TABLE 2—Continued AFGHANISTAN: STRUCTURE OF THE MINERAL INDUSTRY IN 2019

#### (Metric tons unless otherwise specified)

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

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

<sup>&</sup>lt;sup>1</sup>The plants were going through reconstruction in 2019.

<sup>&</sup>lt;sup>2</sup>The plant was under tendering process since 2018. No further information was available.