



The National Defense Authorization Act for FY 2008 (P.L. 110-181) established the Special Inspector General for Afghanistan Reconstruction (SIGAR).

SIGAR's oversight mission, as defined by the legislation, is to provide for the independent and objective

- conduct and supervision of audits and investigations relating to the programs and operations funded with amounts appropriated or otherwise made available for the reconstruction of Afghanistan.
- leadership and coordination of, and recommendations on, policies designed to promote economy, efficiency, and effectiveness in the administration of the programs and operations, and to prevent and detect waste, fraud, and abuse in such programs and operations.
- means of keeping the Secretary of State and the Secretary of Defense fully
 and currently informed about problems and deficiencies relating to the
 administration of such programs and operation and the necessity for and
 progress on corrective action.

Afghanistan reconstruction includes any major contract, grant, agreement, or other funding mechanism entered into by any department or agency of the U.S. government that involves the use of amounts appropriated or otherwise made available for the reconstruction of Afghanistan.

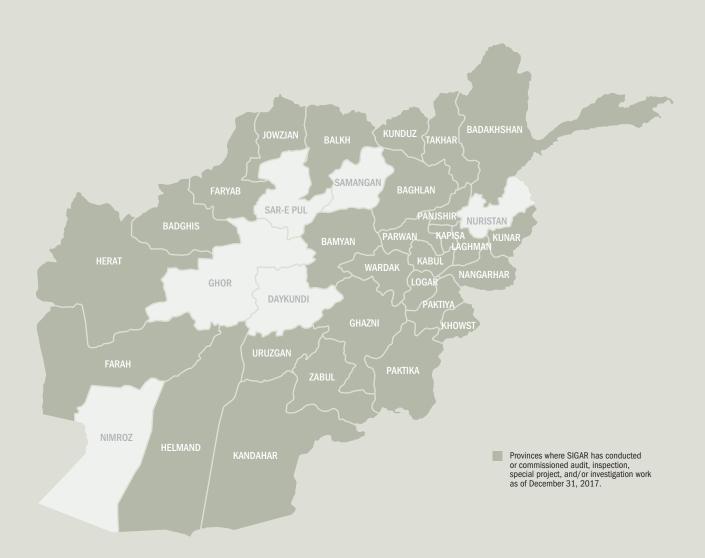
As required by the National Defense Authorization Act for FY 2018 (P.L. 115-91), this quarterly report has been prepared in accordance with the Quality Standards for Inspection and Evaluation issued by the Council of the Inspectors General on Integrity and Efficiency.

Source: P.L. 110-181, "National Defense Authorization Act for FY 2008," 1/28/2008, P.L. 115-91," National Defense Authorization Act for FY 2019," 12/12/2017.

(For a list of the congressionally mandated contents of this report, see Appendix A.)

Cover photo:

In this photograph taken on December 27, 2016, Afghan laborers work at a stone mine on the outskirts of Jalalabad. (AFP photo by Noorullah Shirzada)





SPECIAL INSPECTOR GENERAL FOR AFGHANISTAN RECONSTRUCTION

I am pleased to submit to Congress and the Secretaries of State and Defense, SIGAR's 38th quarterly report on the status of the U.S. reconstruction effort in Afghanistan.

This quarter, the Department of Defense (DOD) instructed SIGAR not to release to the public data on the number of districts, and the population living in them, controlled or influenced by the Afghan government or by the insurgents, or contested by both.* SIGAR has been reporting district-control data since January 2016, and later added estimates of population and land-area control reported by DOD. As shown in Appendix E of this quarterly report, SIGAR was informed this quarter that DOD has determined that although the most recent numbers are unclassified, they are not releasable to the public.

This development is troubling for a number of reasons, not least of which is that this is the first time SIGAR has been specifically instructed not to release information marked "unclassified" to the American taxpayer.

Aside from that, the number of districts controlled or influenced by the Afghan government had been one of the last remaining publicly available indicators for members of Congress—many of whose staff do not have access to the classified annexes to SIGAR reports—and for the American public of how the 16-year-long U.S. effort to secure Afghanistan is faring. Historically, the number of districts controlled or influenced by the government has been falling since SIGAR began reporting on it, while the number controlled or influenced by the insurgents has been rising—a fact that should cause even more concern about its disappearance from public disclosure and discussion.

This worrisome development comes as DOD this quarter, for the first time since 2009, also classified the exact strength figures for most Afghan National Defense and Security Forces (ANDSF), another vital measure of ANDSF reconstruction.** Meanwhile, for the second consecutive quarter, DOD also classified or otherwise restricted information SIGAR had previously reported including such fundamental metrics of ANDSF performance as casualties, attrition, and most capability assessments.

Ironically, DOD published population-control and exact authorized strength numbers in its own December 2017 unclassified report, *Enhancing Security and Stability in Afghanistan*. General John W. Nicholson Jr., commander of Resolute Support and U.S. forces in Afghanistan, also discussed population-control data with reporters during a press briefing on November 28. Accordingly, the population-control and authorized force-strength numbers reported in this quarterly report are drawn from either the unclassified DOD report or from General Nicholson's press briefing. The more recent data classified or deemed unreleasable to the public by DOD will, however, be reported in SIGAR's classified annex to the quarterly report.

Due to heightened interest from both U.S. and Afghan officials in Afghanistan's mining sector, Section 1 of the report contains an essay examining the prospects for mining to help the country become self-reliant. Despite Afghanistan's large and well-documented resources, mining revenues in 2016 supplied only 0.3% of the country's \$6.5 billion national budget. Among other obstacles, plans to develop the country's mineral resources have been stymied by insecurity, corruption, weak governance, and a lack of infrastructure. The essay discusses the history of interest in Afghan minerals, lessons to be drawn from past U.S. efforts assisting the extractives industry in Afghanistan, and best practices and precautions for considering future undertakings.

This quarter, SIGAR issued 17 audits, inspections, and reviews. SIGAR's work to date has identified about \$2 billion in savings for the U.S. taxpayer.

SIGAR published two performance audit reports this quarter. These audits examined DOD's accountability for U.S.-funded infrastructure transferred to the Afghan government and \$675 million obligated by DOD's Task Force for Business and Stability Operations (TFBSO). Senator Charles E. Grassley and then-Senator Kelly Ayotte requested the audit of TFBSO.

SIGAR also published an unclassified version of its assessment of the U.S. government's experience with allegations of sexual abuse of children committed by units of Afghanistan's security forces and the manner in which DOD and the State Department implemented the Leahy Laws (22 U.S. Code § 2378d) in Afghanistan. This evaluation, which was requested in 2015 by a bipartisan group of 93 U.S. Senators and members of the House of Representatives, had been classified by DOD at the time it was published in June 2017.

SIGAR completed six financial audits of U.S.-funded contracts to rebuild Afghanistan. These financial audits identified \$2.7 million in questioned costs as a result of internal-control deficiencies and noncompliance issues. To date, SIGAR's financial audits have identified more than \$417.5 million in questioned costs.

SIGAR also published two inspection reports. These reports examined phase IV of the Afghan National Army's Camp Commando construction and construction of the American University of Afghanistan's women's dormitory.

SIGAR's Office of Special Projects issued six products on a range of issues including a USACE operations-and-maintenance contract for ANDSF facilities, observations on site visits to health facilities in Khowst Province, and DOD-procured inspection equipment for ports of entry. Special Projects also issued two inquiry letters to relevant authorities on Department of State and Overseas Private Investment Corporation plans for the Marriott Kabul Hotel and Kabul Grand Residences.

During the reporting period, SIGAR investigations resulted in two indictments, one criminal information, one guilty plea, two sentencings, four arrests, \$1.6 million in cost savings to the U.S. government, more than \$1.9 million in restitutions, and a recovery of nearly \$6.7 million from a civil settlement. SIGAR initiated 12 new cases and closed 29, bringing the total number of ongoing investigations to 217.

This quarter, SIGAR's suspension and debarment program referred two individuals and four companies for suspension or debarment based on evidence developed as part of investigations conducted by SIGAR in Afghanistan and the United States. These referrals bring the total number of individuals and companies referred by SIGAR since 2008 to 883, encompassing 490 individuals and 393 companies.

While SIGAR's previous quarterly reports have always met or exceeded Council of the Inspectors General on Integrity and Efficiency (CIGIE) standards, this report, in accordance with the National Defense Authorization Act for Fiscal Year 2018 (Pub. L. No. 115-91), has been prepared in compliance with CIGIE's Quality Standards for Inspection and Evaluation, commonly referred to as the "CIGIE Blue Book." Henceforth, all SIGAR quarterly reports will be prepared to that standard of excellence, something I recommend all inspector generals follow.

With support from Congress and other stakeholders, my staff and I will continue to provide vigorous oversight of the U.S.-funded reconstruction effort in Afghanistan. We also urge members of Congress and their staff with appropriate clearances to review the classified annex to our quarterly report for a more fulsome analysis of the security situation in Afghanistan.

Respectfully,

John F. Sopko

Special Inspector General for Afghanistan Reconstruction

^{*} DOD is the primary point of contact through which SIGAR receives data about the reconstruction of the security sector. Data originate from two main sources: (1) U.S. Forces-Afghanistan (USFOR-A), the U.S. military command, and (2) the NATO Resolute Support (RS) mission to train, advise and assist the ANDSF. The RS mission comprises military personnel from the United States, including about 7,400 USFOR-A personnel, and smaller numbers from 39 other NATO members and cooperating non-NATO countries. RS officers make determinations about classification or restriction of RS-originated data that reach SIGAR. DOD is obliged to respect NATO classification markings when forwarding RS-originated data. USFOR-A also determines some classifications and/or restrictions. U.S. Army General John W. Nicholson Jr. commands both RS and USFOR-A. ** The exception was in January 2015, when DOD classified many types of ANDSF data, only to reverse itself a few weeks later.

EXECUTIVE SUMMARY

This report summarizes SIGAR's oversight work and updates developments in the four major sectors of Afghanistan's reconstruction effort from October 1 to December 31, 2017.* It also includes an essay on offering historical lessons and best practices for efforts to promote mineral development in Afghanistan. During this reporting period, SIGAR published 17 audits, inspections, reviews, and other products assessing the U.S. efforts to build the Afghan security forces, improve governance, facilitate economic and social development, and combat the sale and production of narcotics. During the reporting period, SIGAR criminal investigations resulted in two indictments, one criminal information, one guilty plea, two sentencings, four arrests, \$1.6 million in cost savings to the U.S. government, more than \$1.9 million in restitutions, and a recovery of nearly \$6.7 million from a civil settlement. SIGAR initiated 12 new cases and closed 29, bringing the total number of ongoing investigations to 217. Additionally, SIGAR's suspension and debarment program referred two individuals and four companies for suspension or debarment.

SIGAR OVERVIEW

AUDITS AND INSPECTIONS

This quarter, SIGAR published two performance audits, six financial audits, two inspection reports, and an evaluation report.

The **performance audits** examined:

- DOD's accountability of U.S.-funded infrastructure transferred to the Afghan government.
- The obligation of \$675 million by DOD's now-closed Task Force for Business and Stability Operations.

The **financial audits** identified \$2.7 million in questioned costs from internal-control deficiencies and noncompliance issues including lack of documentation and unsupported consultant costs.

The **inspection reports** found:

- Construction at the ANA's Camp
 Commando met contract requirements
 and most facilities are being used, but
 are not well-maintained.
- Construction on the women's dormitory at the American University of Afghanistan met contract requirements and building deficiencies were corrected.

The **evaluation report**:

 At the request of a bipartisan, bicameral group of 93 members of Congress, SIGAR this quarter issued the unclassified version of a report to Congress on DOD and State's implementation of the Leahy Laws in Afghanistan. The report concerned allegations of sexual abuse of children by members of the Afghan security forces.

^{*} SIGAR may also report on products and events occurring after December 31, 2017, up to the publication date.

EXECUTIVE SUMMARY

SPECIAL PROJECTS

This quarter SIGAR's Office of Special Projects wrote eight reviews, fact sheets, and inquiry letters expressing concern on a range of issues including:

- allegations related to the U.S. Army Corps of Engineers' operations-andmaintenance contract for Afghan security forces' facilities
- observations on site visits to health facilities in Khowst Province
- the status of DOD-procured inspection equipment for ports of entry

LESSONS LEARNED

During the reporting period, SIGAR's Lessons Learned Program (LLP) influenced legislation and co-hosted a conference at the National Defense University (NDU). In the FY 2018 National Defense Authorization Act, Congress acted on a key recommendation from LLP's anticorruption report calling for an interagency anticorruption strategy during a contingency operation. LLP's report on the ANDSF led to a DOD/SIGAR-hosted conference on security-sector assistance and a hearing of the House Committee on Oversight and Government Reform.

INVESTIGATIONS

During the reporting period, SIGAR investigations resulted in two indictments, one criminal information, one guilty plea, two sentencings, four arrests, \$1.6 million in cost savings to the U.S. government, more than \$1.9 million in restitutions, and a recovery of nearly \$6.7 million from a civil settlement. SIGAR initiated 12 new cases and closed 29, bringing the total number of ongoing investigations to 217. SIGAR's suspension and debarment program referred two individuals and four companies for suspension or debarment based on evidence developed as part of investigations conducted by SIGAR in Afghanistan and the United States.

Investigations highlights include:

- a civil investigation of Farrell Lines Incorporated's transportation subcontract, yielding nearly a \$6.7 million recovery for the U.S. government
- an investigation into the performance of Advanced Constructors International LLC-Salai Construction Company, Joint Venture related to reconstruction projects, resulting in \$1.7 million in restitution
- an investigation into Babur Nabat Road Construction Company, resulting in \$1.6 million cost avoidance for the U.S. government
- a former U.S. government contractor sentenced for accepting kickbacks
- an Afghan national convicted for using a fraudulent SIGAR identification card to carry an illegal firearm

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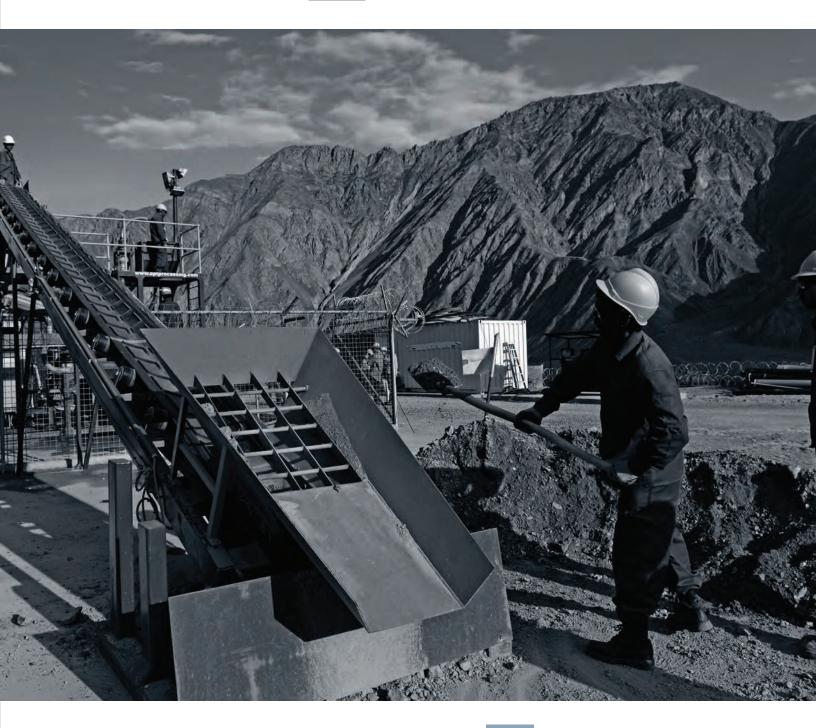
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"Afghanistan has tremendous mineral and natural resources, but to get them from deep underground to those places where they create jobs and support national growth will require a commitment to private sector reform."

—Afghan President Ashraf Ghani

LESSONS FOR AFGHAN MINERAL DEVELOPMENT



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Afghan miners work at a site on the edge of the Hindu Kush mountains in Baghlan Province. (AFP photo by Shah Marai)

LESSONS FOR AFGHAN MINERAL DEVELOPMENT

Afghanistan has produced valuable minerals since ancient times. The lustrous blue of semiprecious lapis lazuli stones made them a prized export to Mesopotamia and Egypt some 6,000 years ago. The stones were cut into jewelry and ground into a rich blue pigment. Afghan miners of ancient times also worked the large copper deposits of Aynak. Considering Afghanistan's deep poverty, persistent insurgency, meager domestic revenues, heavy reliance on foreign aid, and low level of exports, it is no surprise that many observers have sought to expand its ancient craft of mining. As the *New York Times* observed last year, "The lure of Afghanistan as a war-torn Klondike is well established."

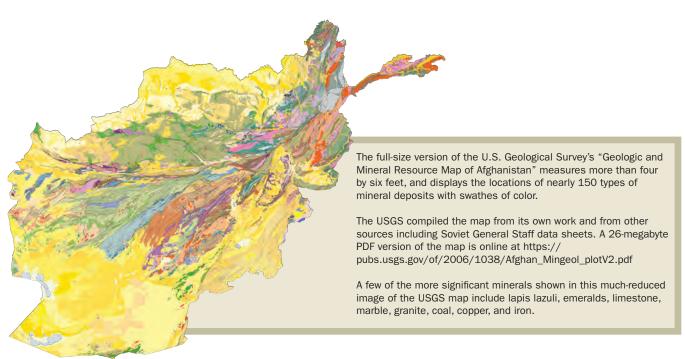
When U.S. President Donald Trump and Afghan President Ashraf Ghani met in New York City in the autumn of 2017, they too discussed this intriguing prospect.

A September White House statement said the two presidents agreed that tapping Afghan mineral resources "would help American companies develop materials critical to national security while growing Afghanistan's economy and creating new jobs in both countries, therefore defraying some



Shoppers examine lapis chunks and beads at an Afghan bazaar. (USGS photo)

MAPPING AFGHAN MINERALS



Source: U.S. Geological Survey, www.usgs.gov

of the costs of United States assistance as Afghans become more self-reliant."⁴ President Ghani said "The economic development and prosperity of Afghanistan depend on its mining sector, which will enable Afghanistan to pay its military expenditure and achieve self-reliance."⁵

U.S. hopes for Afghan minerals long pre-date the advent of both presidents. The U.S. Geological Survey (USGS), for example, produced 14 reports on the subject between 1956—during the Eisenhower administration—and 1979, and published 333 more in the decade following the start of its "Afghanistan Project" in 2004. Aerial mapping of mineral deposits proceeded during the George W. Bush Administration and an economic-development task force that included mining among its targets started operations during the Barack Obama Administration. Earlier, especially following World War II, Afghan, British, French, Soviet, Czech, and U.S. geological surveyors on the ground had identified many types of minerals scattered among sites throughout the country.

"Afghanistan has abundant mineral resources," according to the USGS, "including known deposits of copper, iron, barite, sulfur, talc, chromium, magnesium, salt, mica, marble, rubies, emeralds, lapis lazuli, asbestos, nickel, mercury, gold and silver, lead, zinc, fluorspar, bauxite, beryllium, and

lithium." Among more prosaic substances, Afghanistan is also well endowed with granite, limestone (used in making cement), marble, sandstone, and "abundant sand and gravel resources" for construction, road building, and other common uses.⁹

ALLURE OF AFGHAN MINERALS SPANS CENTURIES

Documented Western interest in Afghan minerals extends back at least two centuries. As early as 1808, surveyors from Britain's armed, quasigovernmental East India Company "scrambled through Afghanistan attempting to exploit its riches ahead of their Russian competitors," and a Company officer conducted a commercial survey in 1836–1837 in search of coal for the Company's steamers on the Indus River. ¹⁰

In 1841, Captain Henry Drummond of the East India Company's 3rd Light Cavalry Regiment spoke in India of his geological research in Afghanistan. "I believe," he said, "from the specimens of iron, lead, copper, sulphur, and coal, which have been brought to me ... that the whole of that country is a rich mineral tract." Drummond praised the high quality of Afghan iron and copper deposits, and also described observations of marble, gypsum, lead, and graphite.¹¹

Further surveys reinforced the optimism. In March 1884, Griffin W. Vyse told a London meeting of the Royal Society for the Encouragement of Arts, Manufactures and Commerce that "The mineral wealth of Afghanistan is prodigious," including gold, silver, and "iron of excellent quality." ¹²

Shortly before the outbreak of World War I, Royal Geographic Society president Colonel Sir Thomas Holdich and South Asia scholar Sir Henry Yule were coauthors of a survey article on Afghanistan. Like many others to come, they expressed the hope that Afghanistan's mineral wealth might someday allow it to pay for its own government:

Financially, Afghanistan has never, since it first became a kingdom, been able to pay for its own government, public works and army. . . . Whilst it can never (in the absence of any great mineral wealth) develop into a wealthy country, it can at least support its own population. ¹³

In 2010, media outlets around the world carried the news that the U.S. government estimated that previously unknown Afghan mineral deposits were worth nearly \$1 trillion. The *New York Times* account, citing U.S. government officials, said the resources could be "enough to fundamentally alter the Afghan economy and perhaps the Afghan war itself." The article quoted General David Petraeus, then head of U.S. Central Command, on the "stunning potential" of Afghanistan's mineral endowment, and cited a Pentagon memo that said Afghanistan could become the "Saudi Arabia of lithium"—a light metal in growing demand for use in high-tech electronics and batteries for electric cars. An advisor to the Afghan Ministry of Mines



Lapis lazuli amulet, ca. 2nd century A.D., with Greco-Egyptian deity Serapis on a throne. (Metropolitan Museum of Art photo; amulet a gift of Miss Helen Miller Gould, 1910)



Colonel Sir Thomas Holdich (1843–1929), British frontier official and geographer who served in Afghanistan. (Imperial War Museum [UK] photo)



Ruby in a calcite/marble matrix. (StrangerThanKindness photo via Wikimedia)

and Petroleum (MOMP) predicted "This will become the backbone of the Afghan economy." Afghan hopes soared.

A few days after the story of the U.S. estimates, Minister of Mines Wahidullah Shahrani was quoted as saying his country's mineral reserves were worth "at least \$3 trillion." And in December 2011, the Reuters news service quoted the minister as saying "Our prediction is that by 2024 the contribution of the mining sector to the country's GDP will be between 42 and 45 percent." ¹⁷⁷

That prediction seems dubious, but a bedrock of solid facts underlies the general optimism. The Afghanistan Investment Support Agency (AISA)—an investment-promotion, registration, and licensing entity established by a 2003 presidential decree¹⁸— says the more than 1,400 mineral sites so far identified contain, in addition to the minerals listed by the USGS earlier, cement-grade limestone, jade, amethyst, alabaster, tourmaline, quartz, and sapphire.¹⁹ The U.S. Department of Commerce believes that "The Afghan extractives industry has the potential to be a leading source of economic growth, generate jobs, and increase revenue. In fact, the extractives industry is one of a handful of industries that has the potential to bring about economic stability in Afghanistan."²⁰

As SIGAR reported in 2017, the United States has spent hundreds of millions of dollars since 2009 trying to stimulate and support mineral-resource development in Afghanistan. The Afghan government has solicited tenders for mineral contracts and signed several deals, though many other proposals remain unsigned and some that were have not progressed at all or have produced no significant revenues for the government.

MINING STILL A NEGLIGIBLE SECTOR OF THE AFGHAN ECONOMY

Despite all the hopeful rhetoric about the promises of minerals, mining constitutes only a small share of Afghan economic activity.

In 2013, the World Bank's *Afghanistan in Transition* report said mining's contribution to the Afghan economy "has been marginal, but it has good potential." The Bank calculated that mining's share of Afghan GDP had risen from 0.1% in 2002–2003 to 0.6% in 2010–2011—a significant increase, but still under 1% of all (licit) domestic output. The Bank's base-projection of 6% real GDP growth through 2018 presumed that major projects for copper mining at Aynak and iron mining at Hajigak would proceed, but had a caveat: "Failure of the two major mining investments to materialize would result in 2 percentage points slower annual GDP growth."

The projects have not yet materialized, and neither has the projected rate of growth: The Bank estimated that Afghan GDP would grow at 2.6% in 2017.²³ In November 2017, the Bank's *Afghanistan Development Update* noted that "Low levels of human capital, substantial infrastructure deficits,



Marines unloading rocks at construction site in Helmand Province, 2009. Much of Afghanistan's current mineral production consists of sand, gravel, and construction stone. (USMC photo by Lance Corporal James Purschwitz)

and weak institutions" remain challenges for development, but again said the extractives sector "has significant potential." In December 2017, the U.S. Congressional Research Service noted that "Afghanistan's mining sector has been largely dormant since the Soviet invasion [of 1979]," partly for lack of rail-line investment and lack of action on mining-law revisions. The consequence has been that most mining activity—legal or otherwise—is relatively small-scale. As the Central Asia—Caucasus Institute points out, "A wide discrepancy exists between the easily exploitable, low-volume, high-value material such as lapis lazuli and marble, which require little in the way of infrastructure, and the more diffuse elements such as gold, copper, and iron, which require an expensive infrastructure to extract and process from low-density ore." [26]

That distinction shows up in the lists of 1,050 mining contracts that MOMP posted on its website in November 2017. FIGAR examined two of the province-sorted "Small Mines Contracts" lists as examples. MOMP's list for Balkh Province has 46 contracts, mostly for gypsum and gravel, with a few for sand, salt, and construction stone. The list for Nangarhar Province has 116 contracts, mostly for gravel and talc, and some for stone, marble, and serpentine, a family of dark-green silicate minerals used as gems, ornamental stones, and a source of asbestos. The frequent entries for talc mining may seem curious to those who encounter it most often as baby powder, but the soft mineral is an important ingredient in making paint, high-quality paper, cosmetics, and rubber products like tires.)

Mining's modest scope in Afghanistan is also apparent in lists of the country's industrial output and exports. The Central Intelligence Agency (CIA) characterizes Afghan industries as consisting of "small-scale production," with coal and copper bringing up the rear of a list that includes bricks, textiles, soap, furniture, shoes, fertilizer, apparel, food, beverages, and carpets. Similarly, the CIA's list of Afghan exports leads with opium, fruits and nuts, handwoven carpets, wool, cotton, and hides and pelts, before reaching precious and semi-precious gems.³⁰

To make matters worse, much of the mining that does go on is illegal. In its response to this quarter's SIGAR data call on this subject, the U.S. State Department said:

Illegal mining is widespread throughout Afghanistan. Illegal mining operations do not need to obey government labor, safety, or environmental laws and also do not pay royalties to the [Afghan government], thereby making them more profitable compared to legal mining operations which obey Afghan laws and pay mining royalties.... Most illegal mining in Afghanistan is conducted on an artisanal or small-scale. Illegal miners typically do not utilize modern mining equipment or techniques or benefit from supporting infrastructure such as 24/7 electricity and road and rail links.³¹

Illegal mining obviously deprives the Afghan government of revenues, but perhaps worse, many of the proceeds from illegal mining benefit criminals and insurgents who undermine the rule of law and threaten the stability of the Afghan government. As the U.S. Institute of Peace observed, "In some cases, communities support insurgent or mafia control of mines expressly to avoid illegal taxation by corrupt officials or to prevent the government from removing an important source of local income," while "for the Taliban, extractives are the second-largest revenue stream after narcotics: annual revenue is estimated to be between \$200 and \$300 million per year—at least three hundred times more than reported government revenues from mineral extraction." 32

WHY DOES AFGHAN MINING LANGUISH?

Many impediments lie in the path of exploiting Afghanistan's mineral wealth. Last year the CIA observed, "Corruption, insecurity, weak governance, lack of infrastructure, and the Afghan Government's difficulty in extending rule of law to all parts of the country pose challenges to future economic growth." Afghanistan's security situation is daunting and the outlook for dramatic improvement in the near term is tenuous at best. The most recent United Nations Secretary-General's report on Afghanistan calls the security situation "highly volatile," and adds, "There was no meaningful progress towards a peace settlement."

World Bank researchers note that "international investors do not typically consider FCS [fragile and conflict-affected situations] as hosts, owing to economic fundamentals and fragility, which are mutually reinforcing," adding that "The quality of public governance is also a major obstacle to private investment."³⁵ Jonathan Hillman, director of the Reconnecting Asia Project at the Center for Strategic and International Studies (CSIS), recently commented that "There is something irresistible about the idea of unearthing Afghanistan's hidden treasure," but added:

Almost as a rule, ["megaprojects"] are delivered over-cost, over-time, and with fewer benefits than were promised. But these challenges grow exponentially in weak governance environments. Afghanistan is one of the most corrupt countries in the world. The extractive sector, which includes oil and mining, is the most corrupt sector in the world. Construction and transportation are the second and third most corrupt sectors. Without stronger institutions, sinking money into Afghanistan's mines could be a recipe for as much pain as progress. 36

Hillman noted that in 2009, the Afghan minister of mines left office amid claims—which he denied—that he had accepted a \$30 million bribe from a Chinese mining enterprise. 37

Speaking of the mineral sector in particular, last year the United Kingdom's Department for International Development (DFID) noted that "The sector remains severely constrained by weak regulatory and legal frameworks, corruption, and government inertia." In line with the CIA analysis, DFID said "Corruption pervades all aspects of public life in Afghanistan … ranging from petty bribery to nepotism and misuse of power," while "the business environment can be opaque and bureaucratic." Laurel Miller, former acting special representative for Afghanistan and Pakistan at the U.S. State Department, said last year that the Afghan mining industry remains "riddled with corruption." Afghan media in 2017 reported allegations that high-ranking MOMP officials sought to extract \$10 million in bribes for awarding mining contracts, and also quoted Finance Minister Eklil Hakimi as saying the "Mining industry's revenues are being embezzled by powerful individuals."

SIGAR's Investigations Directorate, which has agents deployed to Afghanistan, has several times reported information on illegal mining and corrupt conspiracy to the Afghan government. In January 2016, for example, the directorate wrote to President Ghani about illegal extraction of lapis lazuli and evasion of royalties due the Afghan treasury. SIGAR's letter cited multiple sources for believing that nearly 2000 metric tons of lapis worth \$60–120 million had been illegally extracted in Badakhshan Province in 2015 with minimal royalties paid because miners, traders, warlords, and corrupt officials had apparently lowballed the reported value. The letter also reported that another 5,000 metric tons of illegally mined lapis worth



Afghan lapis lazuli from Badakhshan Province. (Didier Descouens photo via Wikimedia)

\$150–300 million was stored in some 300 trucks as officials again planned to undervalue the shipments. ⁴¹ There was no official response to the letter, but SIGAR understands that security threats at the mining site prevented Afghan officials from intervening there. Less than two months later, the minister of mines resigned. ⁴²

Even if constraining factors like insecurity, corruption, and poor business climate in Afghanistan were substantially mitigated, business conditions in the mining sector around the world are problematic. The *Wall Street Journal* recently reported that "The [global] mining industry is slowly recovering from a collapse in commodity prices in recent years that forced many companies to slash jobs and sell assets. Most big mining companies are wary of doing deals." And when deals are being considered, mineral-rich countries like Australia, Canada, and the United States may strike investors as more hospitable places for doing business than Afghanistan.

Nonetheless, Afghanistan has negotiated a handful of major mineral deals, including for large-scale iron and copper mining by Chinese and Indian investors. SIGAR quarterly reports have regularly provided details on the contracts. However, in reply to recent inquiries from SIGAR, the State Department says four large-scale undertakings are "stalled," and neither State nor USAID know of any expressions of interest from other potential investors in the projects. ⁴⁴ It therefore appears that U.S. efforts to assist mineral-sector development in Afghanistan are in hiatus. In response to a SIGAR request for information, USAID said it has no major active mining or hydrocarbon programs, and none are currently planned. Its most recent mining and gas-generation programs ended March 31, 2017, and July 31, 2016, respectively. The agency told SIGAR it needs a commitment to institutional reform "from the highest levels of the Afghan government" to ensure that its assistance to the mining sector is used effectively. ⁴⁵ Apparently that commitment has not yet been made.

In the meantime, USAID has agreements with the Department of Commerce and the U.S. Geological Survey to provide legal advisory and technical services to the Ministry of Mines and Petroleum (MOMP), which is developing a "roadmap" to guide a market transition to generate mineral-sector growth. MOMP's September 2017 Roadmap for Reform described the major impediments to developing the Afghan extractives sector such as: weak policy and legislative frameworks, low managerial/technical capacity at MOMP, an inadequate information-management system for geological data, lack of a strategy to link extractives to the broader economy, corruption, insufficient infrastructure, illegal mining, and insecurity. 47

In some countries, companies or foreign donors will construct large support facilities for economic development. But not everywhere. A USAID consultant's 2017 "mid-course stocktaking" report states flatly, "[the expectation] that donors and private investors will make large-scale investments in transit infrastructure and logistics services which are



Acting Minister of Mines and Petroleum Nargis Nehan (in headscarf) visits a cement factory in Afghanistan. The country mines large amounts of limestone for making cement. (MOMP photo)

linked to Afghanistan is *not true*" [emphasis in original]. That same report echoed MOMP's self-diagnosis: "Continued weak institutional capacity in the Ministry of Public Works and MOMP affect management, maintenance and new development." As the United States and Afghanistan continue to look to mineral resources for large sources of revenue, it is well to consider some of the lessons that emerge from SIGAR examination of previous efforts to develop Afghan mineral resources.

DIGGING UP LESSONS FROM U.S. EFFORTS

Since 2009, the Department of Defense's Task Force for Business and Stability Operations (TFBSO) and USAID have been the two main U.S. entities providing direct assistance to Afghanistan's extractive industries. ⁴⁹ TFBSO efforts included assisting the Afghan government in documenting its mineral and hydrocarbon resources; researching, designing, and executing tenders for mineral and hydrocarbon contracts; rehabilitating a natural-gas pipeline between Sheberghan and Mazar-e Sharif; and developing technical capacity within the MOMP, the Afghanistan Geological Survey, and the Afghan Petroleum Authority. TFBSO obligated about \$200 million in direct support of these and other extractives projects before concluding operations in Afghanistan on December 31, 2014. ⁵⁰

USAID's main extractives programs included the four-and-a-half-year Sheberghan Gas Development Project (SGDP), which concluded in

August 2016, and the four-year Mining Investment and Development for Afghanistan Sustainability (MIDAS), which ended in March 2017. SGDP was originally designed to rehabilitate existing natural-gas wells, develop new natural-gas wells, construct a 200-megawatt power plant, and refurbish the Northern Fertilizer and Power Plant. SGDP established a second major program, the Sheberghan Gas Generation Activity (SGGA), to deliver technical and financial assistance to MOMP and other Afghan entities involved in the hydrocarbons sector. Meanwhile, USAID's MIDAS program aimed to increase technical and institutional capacity at MOMP, assist in exploration and the development of new tenders, and support the growth of Afghan businesses involved in the extractives sector. As of December 31, 2017, USAID had disbursed about \$34 million for MIDAS, \$30 million for SGDP, and \$29 million for SGGA.

SIGAR has previously documented that despite massive investment, these efforts have shown limited progress overall. ⁵⁵ Speaking at a recent CSIS event, Assistant to the USAID Administrator for the Office of Afghanistan and Pakistan Affairs Greg Huger confirmed SIGAR's assessment when he commented that these efforts "really weren't very successful." ⁵⁶ Yet donors continue to emphasize the potential for extractives to generate economic growth, increase government revenues, and produce foreign-exchange earnings despite the numerous challenges that SIGAR has documented here and elsewhere. ⁵⁷ Although some of these challenges, such as insecurity and corruption, are inherent in the Afghanistan context, others were self-inflicted and avoidable. ⁵⁸ SIGAR's previous reviews of U.S. programming in extractives, as well as others' work, suggest a handful of critical lessons that agencies should consider before pursuing any new programming in order to avoid future missteps.

Be Wary of Unrealistic Expectations

As in other areas of Afghanistan reconstruction, U.S. efforts to develop extractives have been hindered by unrealistic implementation timelines and inflated expectations, sometimes shaped by overestimation of the Afghan government's ability to provide critical enabling support.⁵⁹

For example, SIGAR found that despite TFBSO's \$51 million investment towards building MOMP capacity for mining contract tender support, not a single tender resulted in a signed contract. ⁶⁰ The failure largely reflected delays caused by the Afghan central government, such as the delayed passage of a new minerals law and the contract-review process created by the National Unity Government that emerged after the 2014 Afghan elections. ⁶¹

Similarly, USAID's Sheberghan Gas Generation Activity program, which was intended to provide training and technical assistance in support of Afghanistan's hydrocarbons industry, completed less than a third of its program objectives for fiscal year 2014. SIGAR found that among other factors, MOMP's inability to absorb on-budget assistance—funding channeled

through the Afghan government's core budget—played a significant role in USAID's inability to achieve its objectives. ⁶² USAID's performance evaluation of the MIDAS program, meanwhile, concluded that many of the program's capacity-building goals were "not achievable within the defined time frame and budgetary constraints." ⁶⁸

The Afghan government itself has a record of excessive optimism. ⁶⁴ Although TFBSO estimated that the value of Afghanistan's mineral and hydrocarbon deposits was about \$1.1 trillion, in 2010 mining minister Wahidullah Shahrani declared that the value was nearly three times that high. ⁶⁵ Minister Shahrani also projected that mining revenues would provide \$1.5 billion to government coffers in 2016. Actual revenues that year were \$20 million, a figure which represented just 0.3% of the Afghan government's \$6.5 billion national budget. ⁶⁶

Failure to achieve the \$1.5 billion figure may have contributed to continuing reorganization at MOMP, which in turn has posed significant challenges to U.S. capacity-building initiatives. ⁶⁷ From December 2011 to July 2016, leadership turnover at MOMP was exceedingly high: the ministry was led by no fewer than five ministers—three permanent, and two acting. ⁶⁸ MOMP still lacks a permanent minister, and is unlikely to have one in the near term: Acting Minister Nargis Nehan, nominated by President Ghani for a permanent position, was rejected by the Afghan parliament in early December—the only one of 12 Ghani nominees who failed to secure a majority of parliamentarians' votes. ⁶⁹ She continues to serve in an acting capacity.

Such history warrants caution and tempered expectations. Speaking at CSIS, Huger said, "We're not going to get ahead of the Afghan government and ahead of Afghanistan on supporting the extractive industry, because it can be a huge diversion and waste of money and time." Time is another area for expectations management. Economist Michael Heydari, who headed a USAID project focused on Afghan mining, cautioned last year that mining projects typically have a lead time of about 10 to 12 years from deposit identification to production. But for Afghanistan, Heydari said, it is unlikely that mining companies would make large investments in a war-torn country, so "Come back in 50 years."

Employ a Coordinated, Whole-of-Government Approach

Previous U.S. efforts to develop Afghanistan's extractives sector were at times either duplicative, conflicting, or insufficiently attentive to the need for interagency collaboration. To For example, in a performance audit released this month, SIGAR found that TFBSO did not consistently coordinate its activities with other U.S. government stakeholders in Afghanistan—namely State, USAID, and U.S. Forces-Afghanistan (USFOR-A)—leading to conflicting projects and wasted money.

In one case, TFBSO planned and executed a \$39.6 million natural-gas pipeline project opposed by State and USAID. A senior official from the U.S.



Emerald in a matrix. (Uncredited photo via Wikimedia)

Embassy in Kabul told SIGAR that State and USAID did not find out that TFBSO had gone through with the project until Afghan government officials thanked the American ambassador for the U.S. government's support.⁷⁴

The lack of coordination and information sharing between TFBSO and other U.S. agencies was a long-standing problem. A Government Accountability Office (GAO) audit of the task force in 2011 found that TFBSO "has not developed written guidance to be used by its personnel in managing Task Force projects" and practiced "limited and irregular" information sharing. ⁷⁵ In another case, implementers of USAID's MIDAS program failed to sufficiently engage with USGS to bring technical experts to MOMP. According to a scathing USAID evaluation report, MIDAS' lack of engagement with USGS "ultimately destroyed MOMP/ AGS faith in the USAID commitment" to assisting MOMP with critical capacity-building needs. ⁷⁶

The concept of coordination implies integration not only among efforts that are ongoing, but among those past and present. Here, too, U.S. programming has at times come up short. For example, MIDAS implementers "ignored a well-documented and easily accessible record of past capacity-building interventions at MOMP and its directorates," which led to less effective training, according to a project performance-evaluation report prepared for USAID.⁷⁷

But beyond duplicative programming, development in Afghanistan must proceed in a setting of deeply interdependent factors, inherent volatility, and limited manageability. SIGAR has previously emphasized that rampant corruption, lack of infrastructure, a flawed minerals law, and a poor security environment all pose substantial obstacles to developing Afghanistan's extractives sector. All of these factors, according to DOD, "limit the willingness of international mining companies to commit risk capital to exploration and production in Afghanistan when similar resources are more efficiently extracted from other countries." The presence of such obstacles underscores the need for a considered, coordinated, whole-of-government approach that extends well beyond the bounds of a particular project or sector.

Almost 70 years ago, Syracuse University development scholar Professor Peter G. Franck stated the point plainly: "If Afghanistan is to raise its economic life to a higher plane and maintain it there, it must work out a development program which provides for simultaneous advance on several fronts [e.g., industry, agriculture, power, transportation, fuel].... Effort expended on one front atrophies if not matched by complementary efforts on others." 80

The passing years have done nothing to undercut the professor's exhortation. Part of the problem is ministerial capacity to oversee mining. Replying to a SIGAR inquiry, the U.S. Department of Commerce said, "At least since we have been involved with the Ministry of Mines and Petroleum for about five years, MOMP has lacked effective top leadership



Copper's greenish presence in rock. (National Institute of Standards and Technology photo by Milo Inman)

and competent mid-level officials. Added to that is the lack of transparency and accountability but plenty of inefficient bureaucracy within the ministry." But there is an even broader concern. Commerce added, "In addition to [improving] security, Afghanistan needs to reduce corruption, promote transparency, employ an efficient commercial dispute resolution mechanism, and pass laws which make it easier for business to invest and take risks." In the same vein, the State Department answered a SIGAR data call question on the Afghan minerals issue:

The security situation deters investment in extractives development and other sectors. Moreover, investment is also discouraged by Afghanistan's poor business environment, including weaknesses in institutional capacity, rule of law, human capacity, access to power, access to finance, and arbitrary enforcement of policies and regulations affecting the private sector.⁸³

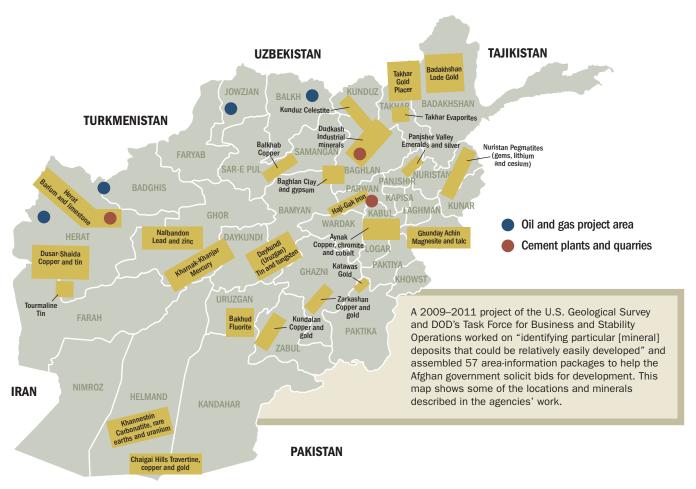
As SIGAR has often observed in its reports, U.S. reconstruction efforts in a country with as many challenges as Afghanistan faces require a strategically conceived, whole-of-government effort with close cooperation and coordination among U.S. agencies and between them and their Afghan partners. No ministry or sector, including mining, can be targeted for aid in isolation.

Recognize That Strategy, Objectives, and Metrics Are Necessary but Not Sufficient to Ensure Success

In its TFBSO performance audit, SIGAR found that TFBSO did not clearly articulate its intended mission, objectives, and strategy until more than two years after it entered Afghanistan. According to a 2016 RAND Corporation report for the Department of Defense, TFBSO relied on ad hoc, impressionistic, and ex-post approaches to measure and report on its effectiveness in its early years in Afghanistan. This had significant and deleterious repercussions: SIGAR concluded that TFBSO's lack of a strategy, coupled with the confrontational style of TFBSO's early leadership and a lack of policy direction from State and USFOR-A, brought it into almost immediate conflict with USAID and State, and strained TFBSO's early relationship with the USFOR-A commander. According to TFBSO contractors, this tension resulted in State Department obstruction of TFBSO's fiscal year (FY) 2010 funding, and the discontinuation of an early extractives project.

But even a realistic and lucidly articulated strategy, coupled with clearly defined objectives and metrics, is no panacea. SIGAR found that, despite the existence of detailed performance management plans, USAID's MIDAS program failed to meet multiple key performance indicators and that SGGA completed only seven of its 24 program objectives for FY 2014.⁸⁷ If the objectives are unreasonable at the outset, simply documenting them does not make them more achievable.

IDENTIFYING MINERAL DEPOSITS FOR DEVELOPMENT



USGS-TFBSO "areas of interest" mineral map. (Based on USGS map)

Further, metrics can invite deliberate gaming or at least influence allocation of effort. The evaluators of the MIDAS program, for example, reported that program implementers placed greater emphasis on training quantity rather than on quality to "create the impression that an abundance of training was being delivered." The MIDAS evaluators also noted that USAID focused more attention on "headline-grabbing wins" than on "mundane" successes essential to implementation. If programmers are not honest with themselves and others about what they achieve, metrics may quickly become meaningless and irrelevant to actual outcomes.

DON'T COUNT YOUR ROCKS BEFORE THEY'RE MINED

Ultimately, all the concerns about Afghan security, governance, infrastructure, and business climate affecting development of the mineral sector must reckon with a stark reality: finding and measuring a resource is not the same thing as endowing it with economic value. If it would cost \$1 million to extract, process, and market \$100,000 worth of resources, those resources are of no current economic value.

The point is well illustrated by the use of the concept "proved reserves" in connection with oil and natural-gas resources. A number for proven reserves is *not* a measure of how much of the resource exists. As the U.S. Energy Information Administration explains that proven reserves are:

estimated volumes of hydrocarbon resources that analysis of geologic and engineering data demonstrates with reasonable certainty are recoverable *under existing economic and operating conditions*. Reserves estimates change from year to year as new discoveries are made, as existing fields are more thoroughly appraised, as existing reserves are produced, and as prices and technologies evolve.⁹⁰ [Emphasis added.]

The UN Statistics Division makes the same point about subsoil assets in general: they are "proven reserves of mineral deposits located on or below the earth's surface that are *economically exploitable*, given current technology and relative prices." The World Bank said specifically of Afghanistan in 2013, "These 'projections' [of very high mineral values] have some element of truth but refer mainly to the value of minerals in the ground: they assume that the minerals are in large enough concentrations to be mined profitably and that the necessary infrastructure either will be available or can be built profitably to extract and sell them."

More recently, and more colloquially, the British economic writer Tim Worstall commented on the U.S. government's view of Afghanistan's large deposits of iron, copper, and lithium: "The problem with all of this is that those minerals are worth nothing. Just bupkis." The reason for his assertion: "The value of a mineral deposit is not the value of the metal once it has been extracted. It's the value of the metal extracted minus the costs of doing the extraction. And as a good-enough rough guess the costs of extracting those minerals in Afghanistan will be higher than the value of the metals once extracted. That is, the deposits have no economic value"—"As we can tell," he adds, "from the fact that no one is lining up to pay for them."

The economics of mining involve more than resource-extraction costs and market prices, however. The Afghanistan Investment Support Agency observes that "Mining is considered a 'high-risk' industry and has a finite life, which means that companies will only have a limited number of years to explore and develop mineral reserves, as well as ensure a competitive return on their investment." From the Afghan government's point of view,



Sulfur embedded in other minerals. (Didier Descouens photo via Wikimedia)

even a series of successful mineral contracts could entail other risks with economic impacts.

One risk, as the *New York Times* account of the 2010 announcement of new mineral discoveries cautioned, is that "The newfound mineral wealth could lead the Taliban to battle even more fiercely to regain control of the country. [And] The corruption that is already rampant ... could also be amplified by the new wealth, particularly if a handful of well-connected oligarchs, some with personal ties to the president, gain control of the resources." Another risk is that a surge in mineral exports could trigger the "Dutch disease"—observed in the 1960s when the Netherlands began exporting large amounts of natural gas from deposits under the North Sea—whereby an appreciating currency make non-mineral exports more costly and stimulates demand for suddenly cheaper imports, disrupting both industrial and commercial sectors of the domestic economy. 96

Yet another risk is that mining could inflict long-lasting damage on the land and people of Afghanistan. "Unless regulated," USAID cautions, "the environmental impact of mining includes erosion, formation of sinkholes, loss of biodiversity, and contamination of soil, groundwater and surface water by chemicals from mining processes." Whether effective regulation is likely to be crafted and enforced in Afghanistan is, experience suggests, another question.

Finally, even if insurgents, warlords, and terrorists could be prevented from controlling or "taxing" mining operations, they could take other steps that would negate the mining and security investments. For example, the Taliban could hinder or halt mining operations by using a tactic they have employed against health clinics built in Afghanistan. They forced a shutdown of the main hospital in Uruzgan Province in September by making threats against doctors and medical staff. If insurgents were kept away from mining sites by Afghan government or private security forces, they could still impede operations by blocking access roads to prevent workers and shipments from moving. Rebels in the Democratic Republic of Congo recently forced a temporary shutdown of a Canadian company's gold mine there by such tactics. Both business and government revenues would suffer if Afghan insurgents targeted mining operations.

HOW CAN THE USA BEST HELP?

The meager results of several hundred million U.S. dollars committed to developing Afghan minerals should suggest to American officials that polite skepticism, caution, risk management, and vigilance for unintended consequences should attend future efforts. That is not to say further efforts are not worth making. As a research report prepared for USAID recently concluded, "Development of Afghanistan's extractives sector is the country's best, and perhaps only, option to achieve the degree of economic

growth that supports the level of job creation needed to reduce economic inequality and, therefore, reduce support for insurgents." USAID is to be commended for its efforts to improve Afghan policy and regulations on mining, and to raise the administrative capacity of the Ministry of Mines and Petroleum. But expecting better results than have been achieved in earlier programs requires a searching examination of interlinked weaknesses and threats—many already identified—and a coordinated, whole-of-government drive to counter them.

Whatever specific programs may emerge from the continued U.S. interest in developing the Afghan minerals sector, SIGAR suggests that they be framed and launched only after agencies:

- 1. Develop conservative, probabilistic, medium- and longer-term forecasts of market prices for the minerals at issue.
- 2. Identify the proposed initiative's sensitivity to considerations like electric power, transport, technical services, suitable labor, consistent and non-arbitrary regulation, and other operational issues and judge their relative weights and interdependencies.
- 3. Determine whether the aggregate weight of operational weaknesses and threats can be effectively neutralized or adequately mitigated. If not, cancel or postpone the proposed activity.
- 4. If consideration of item 3 is satisfactory, determine whether the current and projected security situation, as well as levels of capacity and corruption at ministries pose critical threats to project launch, operation, and success. If so, cancel or postpone the proposed activity.
- 5. Throughout the process, emphasize a whole-of-government approach and ensure that adequate coordination and information sharing exists and continues within and between the U.S. and Afghan governments and among their involved agencies.

Scrupulous vetting and continuing attention to interdependent risks—not to mention tamping down rosy expectations of quick and easy results—are vital to increasing prospects for success and avoiding costly missteps.

As Secretary of Commerce Wilbur Ross told the journal *Foreign Policy*, "I used to be in the mining business—in iron ore and coal—and it's not an easy activity. You can burn through a lot of money with not a lot to show for it." History has shown that warning to be true in Afghanistan for U.S. taxpayers as well as for investors in mining companies.



A chunk of iron ore. (Mervate Salman photo via Wikimedia)

"Effective oversight and reporting is critical not only for judging particular programs, but also for providing evidence that can feed into policy refinements, best practices, and program outcomes."

—Inspector General John Sopko