

# Managing Afghanistan's Mineral Wealth: Can Afghanistan's Mineral Wealth Be Used to Rebuild the Economy?



Task Force 2015  
University of Washington  
Henry M. Jackson School of International Studies

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Printed at the University of Washington in Seattle, Washington

# Managing Afghanistan's Mineral Wealth: *Can Afghanistan's Mineral Wealth Be Used to Rebuild the Economy?*

## **Faculty Advisor**

Scott L. Montgomery  
*Affiliate Faculty, Jackson School of International Studies*  
University of Washington, Seattle

## **Evaluator**

Matthew Golden  
*Economic Team Lead*  
US State Department on Afghanistan, Washington D.C.

## **Task Force**

Thomas Caetano (*Editor*)  
Rachel Caren (*Coordinator*)

Ryan Bersentes | Patricia Denga | Adam Easter | Jessica Mellinger | Devon O'Neill  
Igor Sirotkin | Michael Lane Smith | Xiangjun Wan | Sara Wong | Sarah Yu

The Henry M. Jackson School of International Studies  
University of Washington  
Task Force Report 2015

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## **Acknowledgements**

*The authors of this Task Force Report would like to extend their gratitude and thanks to all individuals and institutions which made this report possible. Our Task Force was given great opportunities this quarter to ask questions of experts on this topic and individuals with insight on Afghanistan.*

*We would specifically like to thank Carmela Conroy, Dr. Rohullah Amin, and Dr. Anish Goel for speaking with our class and providing unique insights which helped to shape the following report.*

*Above all, we would like to thank Scott Montgomery for his exceptional guidance and unyielding support throughout this process. This Task Force would not have been possible without his feedback, patience, assistance, and expertise.*

## Introduction

*“A river is made drop by drop” – Afghan Proverb*

From 2005 to 2009, the US Geological Survey performed a series of remote sensing surveys in Afghanistan in an attempt to quantify the nation’s mineral resource potential. Their findings stand to significantly transform the future of Afghanistan’s economy and development. Afghanistan’s potential mineral wealth is valued at \$908 billion. This places Afghanistan amongst the top five nations in the world by mineral wealth. The abundant minerals are diverse in value and industry potential, with large deposits of iron, copper, and cobalt, in addition to deposits of gold, gemstones, and rare earth elements.

As one of the poorest nations in the world, Afghanistan’s newly realized mineral wealth represents a potential source of indigenous revenue and is closely tied to the nation’s future economic prospects. At present, 60% of Afghanistan’s GDP is the result of foreign aid and 30% arises from poppy cultivation and illegal opium production. Only 10% of Afghanistan’s GDP stems from domestic industry and economic activity. With a value of nearly \$1 trillion, Afghanistan’s policy makers and advisors are looking ambitiously upon its mineral endowment as a basis for a sustainable economy.

This report will call into question whether Afghanistan’s mineral potential can be utilized to catalyze a sustainable and legitimate economy. A combination of factors will dictate the success of mineral extraction in achieving these goals and must be accounted for in order to utilize mineral resources to rebuild the state and boost the economy.

Afghanistan has been plagued with nearly four decades of instability since the Soviet invasion of 1979. Years of war have disrupted the traditional lifestyle of Afghans, destroyed vital infrastructure and created a constant power struggle amongst varying interests groups. The national lack of security severely undermines any potential economic revival that the Afghan government may attempt.

Although security in Afghanistan has improved since 2001, unrest, armed insurrection, guerilla warfare, assassinations of high-ranking domestic and international public officials, car bombs, and IEDs continue to plague any budding economic growth in Afghanistan and will dramatically impact the potential mining industry. Based on the most recent Security and Defense Cooperation Agreement between the US and Afghanistan, both countries are adopting a policy of military collaboration that continues far into the future.

In addition to war and insecurity, Afghanistan’s economy faces several other impediments to development. Approximately 85% of Afghans depend on agriculture for their employment and livelihoods. However, this industry is currently inefficiently and largely susceptible to geographic and political changes. In recent years, precipitation has been scarce and the percentage of arable land is low. The lack of irrigation infrastructure and property rights laws continues to limit the potential expansion of the domestic agriculture industry.

Domestic considerations will also need to include Afghanistan's many ethnic and tribal groups. Divisions amongst ethnic groups and between rural and urban populations create a structure of authority in Afghanistan that is not centralized, but dispersed amongst local elite and tribal leaders. As demonstrated with Hamid Karzai's presidency, efforts to enforce a centralized government produced resistance and backlash. There is considerable animosity between rural populations and the central government. In order for mineral extraction to provide sustainable economic growth, it is vital for collaboration and communication to occur among local, tribal, and federal governments.

Furthermore, Afghanistan's high levels of corruption continue to hinder economic development. Corruption is rampant in nearly every dimension of governance; politicians are largely appointed on the basis of power and connections, not on qualifications or the best interests of the state.

Corruption further impedes economic growth by discouraging foreign private investment and capital opportunities. Potential investors prefer to work in transparent environments where their economic and physical assets are protected by a reliable and just legal structure. Afghanistan is ranked as 183<sup>rd</sup> out of 189 national economies on the ease of conducting business, largely due to inefficient and corrupt governance. As a result, illicit government activity will continue to hinder economic progress and inefficiently capture gains from mineral extraction.

Afghanistan occupies a unique geographic location at the crossroads of the Middle East, Central Asia, and South Asia. The

nation is landlocked and directly bordered by China, Iran, Pakistan, Tajikistan, Turkmenistan, and Uzbekistan. Due to its strategic location, Afghanistan is highly susceptible to the interests and socioeconomic climates of neighboring nations. Many of its neighbors are pursuing greater influence in the region and will seek to be economically and politically involved in the potential mineral industry. Therefore, successful mineral extraction will depend on Afghanistan's ability to independently negotiate issues regarding infrastructure, transportation, power, foreign investment, and security.

However, since 2001, economic development in Afghanistan has progressed. Despite these hampering factors, the last decade has seen rapid, albeit fluctuating, economic growth, low rates of inflation, increased infrastructure investments, improved public financial management, and gains in basic education and population inclusion within civil society. Moving forward, newly-elected President Ghani has pledged to reduce corruption, combat instability and address the needs of Afghanistan's diverse population. This attitude signifies a new beginning and the opportunity to efficiently utilize Afghanistan's mineral wealth to rebuild the state.

Maximizing the immediate potential revenue and long-term economic value of Afghanistan's mineral resources will require the implementation of various factors and policies. Policy makers will be faced with prioritizing short-term initiatives, which remain cognizant of long-term objectives. Adequate improvements to water, electric, and transportation infrastructure will be required as short-term initiatives, while increased capacities of governance and

financial institutions are a necessary long-term goal.

This report aims to identify the main challenges faced by a potential Afghan mining industry and provides recommendations on steps to take in realizing the full economic and transformational value of Afghanistan's mineral wealth.

## Executive Summary

Afghanistan has newly discovered mineral wealth that could boost its economy over the next few decades by one to three trillion US dollars. Its mineral resources have the potential to employ thousands of new workers. However, this task will be challenging given the lack of skilled work in the country.

Water is also a challenge. Afghanistan has suffered several droughts in the past few decades that have left its people in a state of peril and desperation. Although Afghanistan has water in its mountains' snowpack, the nation lacks arable land. Building dams would solve many of the issues pertaining to water, however, a few of its surrounding neighbors could be negatively affected by Afghanistan's decision to divert bodies of water that serve to irrigate its border countries.

Afghanistan lacks powerful hydroelectric power plants capable of generating high quantities of electricity. The city of Kabul is powered by a mere 600 MW of energy, which is far below what is required to power every household in its center and suburbs. Although there are plans to build hydroelectric plants, the plans often fall short either because financing negotiations stall or due to security concerns manage.

The absence of an effective road system hampers transportation of large cargo in Afghanistan. Security is one of the most debated issues in the politics of Afghanistan.

Assassinations, kidnappings, bombings, IED explosions, intimidation and the traffic of opium all contribute to a state of very low security, which discourages foreign

investors from moving in their operations into Afghanistan.

Afghanistan has many ethnic and tribal groups. Each group carries its own traditions and languages. Given the nation's weak central government, Afghanistan's tribal groups have traditionally been autonomous. Moreover, ethnic groups have fought for greater influence and power in politics.

Afghanistan's legal system is corrupt and debilitated by nepotism and preferential treatment. Furthermore, its financial system isn't taken seriously by the international community. Recently, employees from the Bank of Kabul robbed the bank and fled to Pakistan without any trace. This event further damaged the bank's credibility and reputation.

Afghanistan's human capital is largely unskilled and mostly tribal. Education will need to be redefined in Afghanistan to include education for women. The future of Afghanistan is uncertain but if the newly elected president, Ashraf Ghani, delivers on his promises of a better Afghanistan, then the country will be able to become an important global player.

President Ghani has pledged to reduce corruption, combat instability and address the needs of Afghanistan's diverse population. The new president's attitude signifies a new beginning and the opportunity to efficiently utilize Afghanistan's mineral wealth to rebuild the state.

# Extracting a Viable Economy

## *Utilizing Afghanistan's Mineral Riches as a Road to Development*

Jessica Mellinger

*"A wedding ceremony is easy but preparation is hard"*

### Introduction

The Islamic Republic of Afghanistan's ancient past and economic future are vitally tied to the nation's mineral resource potential. Long before the arrival of Islam, the Badakhshan area supplied lapis lazuli to the pharaohs of Egypt and the kings of Sumer, while other areas of the country became known for gold, silver, copper, and precious stones. Since the early 19<sup>th</sup> century, Afghanistan has undergone several large-scale surveys of its mineral resources: by the British (19<sup>th</sup> and early 20<sup>th</sup> century); the Soviets (1970s-80s); and, most recently, the US Geological Survey (USGS; 2005-2011). The combined information from these reports leave no doubt that the country's mineral wealth is at valued at nearly one trillion dollars<sup>1</sup>. While base metals, especially iron, copper, and cobalt comprise the largest portion in volume and value, Afghanistan has a considerable diversity of other deposits, ranging from niobium and rare earth elements (REEs) to lithium, graphite, and gold.

During the Soviet occupation, geoscientists from Afghanistan and the Soviet Union collaborated in identifying 21 metallogenic zones, which were subdivided into 37 ore districts containing 1,428 mineral deposits, occurrences, and showings<sup>2</sup>. It was not until

the first USGS study in 2007 that the global community became aware of Afghanistan's vast mineral deposits.

In 2007, the USGS reported estimates for undiscovered deposits of copper, mercury, rare-earth elements (REEs), sulfur, chromite, asbestos, potash, graphite, sand and gravel<sup>3</sup>. Of the 27 total mineral commodities identified in the report, USGS-AGS jointly assessed that 22 required further study<sup>4</sup> in order to accurately determine expected values beyond known estimates<sup>5</sup>.

Although preliminary, the 2007 report revealed Afghanistan to foster abundant non-fuel mineral resources including minerals suitable for building and industry. Following the 2007 assessment, two dozen mineralized Areas of Interest (AOIs) were selected for further study. From 2009 through 2011, geologists with USGS and the Department of Defense Task Force for Stability Operations (TFBSO) collaborated with AGS to compile detailed digital data about AOI mineral deposits<sup>6</sup>. These areas are Badakhshan gold, Balkhab copper, Haji-Gak iron, Northern Aynak copper and cobalt (and chromite), Zarkashan copper and gold, Kundalan copper and gold, Khanneshin carbonatite, and Dushan-Shaida copper and tin. Certain characteristics, including outcropped minerals, make for easy extraction and may translate into lower capital costs, short lead times, and short

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<sup>1</sup> Stephen G. Peters et al., "Summaries of Important Areas for Mineral Investment and Production Opportunities of Nonfuel Minerals in Afghanistan"; Choi, "\$1 Trillion Trove of Rare Minerals Revealed Under Afghanistan."

<sup>2</sup> United Nations and Economic and Social Commission for Asia and the Pacific, *Atlas of Mineral Resources of the ESCAP Region*. Vol. 11, Vol. 11,.

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<sup>3</sup> Stephen G. Peters, "Preliminary Assessment of Non-Fuel Mineral Resources of Afghanistan, 2007."

<sup>4</sup> Ibid

<sup>5</sup> Abdullah et al., *Mineral Resources in Afghanistan*.

<sup>6</sup> USGS, "Projects: Minerals."

payback periods. According to the report, many of these AOIs may contain ore deposits that are medium to world-class in size.

### *Government-Prioritized Mineral Deposits*

Mes Aynak, is one of two mineral deposits prioritized by the Afghan Government for demineralization. This deposit site is estimated to host 240 million metric tons of ore at 2.3% copper<sup>7</sup>. Mes Aynak also contains copper-cobalt, chromium, talc-magnesite, and asbestos.

Copper deposits are generally large and relatively low-grade. They may also contain significant amounts of cobalt, silver, uranium and less commonly, gold and platinum. Extraction would require several hundred million dollars in capital<sup>8</sup>, operational power and transportation infrastructure. Development from discovery to production may take up to 10 or more years, meaning that demineralization of the Mes Aynak AOI will not transpire until 2019<sup>9</sup>, at the very earliest. The deposits are commonly mined in large open-pits and often detrimental to surrounding infrastructure and the environment.

According to the USGS, the likelihood of discovering additional copper-cobalt deposits in the Mes Aynak area is quite high. Although the USGS considers the potential for additional discovery and major exploitation of chromite deposits to be low, chromite deposits may be suitable for artisanal mining and the direct transport of chromite ore to smelters.

In 2008, two of China's extractive companies; the Metallurgical Corporation of

China (MCC) and Jiangxi Copper. MCC signed a \$3.5 billion contract to develop the Mes Aynak copper field and granted a 75% share of the projected returns and Jiangxi Copper with a 25% share<sup>10</sup>. This contract promised the biggest foreign direct investment in Afghan history. The 28-km<sup>2</sup> fields have been estimated to contain up to \$88 billion. In order to implement the necessary infrastructure, operators promised to build a 400 MW power plant and a freight railway from western China through Afghanistan to Pakistan<sup>11</sup>. However, concerns over the preservation of an ancient Buddhist temple in the Mes Aynak copper field have placed a barrier to mining the deposits. Because of this considerable blockade, China has made no progress towards constructing the promised rail infrastructure<sup>12</sup>.

The Haji-Gak is the second major mineral deposit prioritized by the Afghan Government for demineralization. The AOI is located in the Bamyan, Parwan, and Wardak Provinces. This deposit is best known as the largest iron oxide deposit in Afghanistan. The Haji-Gak ore deposit is more than 12 km long, three kilometers wide and contains 16 separate zones, some of which are as much as five kilometers in length, 380 m wide and extend 550 m down dip. Soviet studies from the 1960's demonstrate the mineral potential of the region and estimate the Haji-Gak deposit to contain roughly 1.8 billion tons of iron ore. Furthermore, the Haji-Gak iron AOI also contains barite deposits and mineralization in Farenjal, the northeastern region of the AOI. Manganese, iron, copper, talc, and asbestos represent the subordinate mineralization at these locations.

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<sup>7</sup> Cliff Taylor, Stephen Peters, and David Sutphin, "Summary of the Aynak Copper, Cobalt, and Chromium Area of Interest."

<sup>8</sup> "Copper in Afghanistan."

<sup>9</sup> Ibid.

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<sup>10</sup> Cliff Taylor, Stephen Peters, and David Sutphin, "Summary of the Aynak Copper, Cobalt, and Chromium Area of Interest."

<sup>11</sup> Ibid.

<sup>12</sup> "Copper in Afghanistan."

### *Other Important Metals*

The USGS reports of 2007 and 2011 have identified copious amounts of niobium, molybdenum, cobalt, mercury, strontium, lead, zinc, and several rare earth elements (REEs) including lanthanum, cerium, and neodymium.

### *Rare-Earth Elements*

REEs are essential to the global economy and to manufacturing modern technologies including cell phones, televisions, hybrid engines, computer components, lasers, batteries, fiber optics, and superconductors. Congressional findings have called rare earth elements “critical to national security,”<sup>13</sup> given that REEs are key to the production of tank navigation systems, missile guidance systems, jet engines, missile defense components, satellites, and military-grade communications technologies.

Afghanistan is estimated to be home to 1.4 million metric tons of REEs<sup>14</sup>. The Helmand province in south Afghanistan alone is suspected to contain light rare earth elements (LREEs) including, but not limited to, lanthanum, cerium, and neodymium<sup>15</sup>. Lanthanum, a soft, ductile, silvery-white REE and is heavily used in production of high-refractive index and alkali-resistant glass, flint, hydrogen storage, battery-electrodes, camera lenses, and fluid catalytic cracking catalyst for oil refineries.

Similar to lanthanum, cerium serves as a chemical oxidizing agent, polishing powder, yellow color in glass and ceramics, a catalyst for self-cleaning ovens, fluid

catalytic cracking catalyst for oil refineries, and Ferro cerium flints for lighters. Neodymium is commonly applied in the production of rare-earth magnets – the strongest permanent magnets made, laser technology, radiation filtration, violet colors in glass and ceramics, didymium glass found in safety eyewear, including those for glassblowing and blacksmithing, and ceramic capacitors used in electronics<sup>16</sup>. China controls 97% of the world’s known REE deposits<sup>17</sup>. In the past, China has used this monopoly to manipulate the market in its favor<sup>18</sup>. Afghanistan’s supply of REE resources offers an alternative for organizations impacted by China’s altered prices.

### *Precious Metals*

There have been 93 precious metal deposits discovered thus far in Afghanistan. These sites consist mostly of gold, silver and base metals<sup>19</sup>. Only one silver deposit has been identified, and no platinum mineralization deposits have been uncovered. However, prospective platinum-hosting geological terrains exist in certain parts of the country<sup>20</sup>.

The USGS estimates 20,927 kg of gold for the Samti placer; 7,626 kg for Nooraba-Khasar-Anjir; 160 kg for the mouth of the Kocha; 1,047 kg for the lower Kocha; 113 kg for the middle Kocha; and 168 kg for the upper Kocha.

The second mineralized area investigated by the USGS is the placer gold deposit of the Zarkashan AOI, located in Ghazni Province in southeastern Afghanistan. The AOI is separated into three subareas consisting of

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<sup>13</sup> “Afghanistan’s Rare Earth Element Bonanza.”

<sup>14</sup> *Ibid.*

<sup>15</sup> Ayuso et al., “Preliminary Radiogenic Isotope Study on the Origin of the Khanneshin Carbonatite Complex, Helmand Province, Afghanistan.”

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<sup>16</sup> Tucker et al., “Rare Earth Element Mineralogy, Geochemistry, and Preliminary Resource Assessment of the Khanneshin Carbonatite Complex, Helmand Province, Afghanistan.”

<sup>17</sup> “Afghanistan’s Rare Earth Element Bonanza.”

<sup>18</sup> *Ibid.*

<sup>19</sup> “Precious Metals.”

<sup>20</sup> *Ibid.*

the Luman-Tamaki gold subarea, the Bolo gold subarea, and the Zarkashan mine subarea, each of which had been previously prospected to contain commercial mineralized rock. The Zarkashan AOI also has primary copper deposits, including large porphyry copper-gold, medium-size copper-gold skarn, polymetallic vein, iron skarn, and lead-zinc skarn deposits<sup>21</sup>. The USGS concluded that these alluvial deposit zones have the highest potential for containing gold.

### *Industrial Minerals*

Industrial minerals in Afghanistan are addressed in several of the AOIs outlined in the 2011 USGS report, specifically the Baghlan Clay-Gypsum, Bakhud Fluorite, Dudkash Industrial Minerals, Ghunday-Achin-Magnesite-Talc, Khanneshin Carbonatite, Kunduz Celestite, North Herat Barium-Limestone, Nuristan Pegmatites, South Helmand Travertine, and Takhar Evaporite AOIs.

The following industrial minerals are required to manufacture construction materials: clays of various types, bauxite, gypsum, cement-grade limestone, aggregate (sand and gravel), and dimension stone (sandstone, quartzite, granite, slate, limestone, travertine, marble)<sup>22</sup>. Evidence suggests that producers of construction materials at the lower end of the value chain (adobe brick, aggregate, low-end marble products) can successfully compete in local markets and turn a profit. In the short-term, producers of energy-intensive products, such as cement, will continue to face intense competition from imports. In the long-term, as infrastructure issues are resolved and as business conditions in Afghanistan improve,

domestic producers will have a locational advantage in establishing a solid niche in their respective home markets.

Marble and cement are notable examples of the comparative advantage enjoyed by Afghanistan's neighbors at the mid-to-upper end of the construction materials value chain. Marble is celebrated to have the greatest potential for international trade, as barriers to entry for new marble extraction and finishing firms are relatively low for the mining industry<sup>23</sup>. Nevertheless, a large portion of high-quality finished marble used for reconstruction is still imported. The current domestic production capacity for cement production insufficiently meets the demands for new concrete construction; the demand-gap for the past decade has been filled by imported cement<sup>24</sup>. The technical facts of the long-term prospects for domestic cement production in Afghanistan are favorable, even in a competitive environment.

Policies instilled by the domestic government and by neighboring countries, including laws controlling mining, resource beneficiation, and international trade, may be the overriding determinants of long-term prospects for domestic cement production. Capacity building in the cement sector crucially depends on the availability of electrical and thermal energy. Unless Afghanistan's energy sources are ramped up, or an alternative energy system is adopted, growth in the Afghan cement-manufacturing sector will remain stagnant<sup>25</sup>.

### *Gemstones*

Afghanistan is rich in precious and semiprecious gemstone deposits. Precious gems including emeralds, rubies and

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<sup>21</sup> Stephen G. Peters et al., "Summaries of Important Areas for Mineral Investment and Production Opportunities of Nonfuel Minerals in Afghanistan."

<sup>22</sup> Victor G. Mossotti, *Introduction to Industrial Materials*.

<sup>23</sup> Rassin, "A Comprehensive Study of Marble Industry in Afghanistan."

<sup>24</sup> Victor G. Mossotti, "Heuristic Economic Assessment of the Afghanistan Construction Materials Sector—Cement and Dimension Stone Production."

<sup>25</sup> Ibid.

sapphires are mined in Afghanistan, and semi-precious lapis lazuli, tourmaline, aquamarine, kunzite, topaz, garnets, fluorite and varieties of quartz are mined as well<sup>26</sup>. Afghanistan is a source of high quality mineral specimens sought by collectors. Gemstone mining in Afghanistan is typically an artisanal activity, carried out by people living in villages surrounding the mines. Tunnels are excavated and gems are extracted by hand, drills, dynamite and often high explosives recycled from ordnances. These techniques lead to great waste, damage the gems, and result in low yields<sup>27</sup>. Most of the gemstones mined in Afghanistan leave the country illicitly, 90 to 95% of them going to Peshawar in Pakistan where they are sorted for quality<sup>28</sup>.

Lapis is mined in an area known as the 'Blue Mountain' on the right bank of the Kokcha River in Badakhshan. There were formerly seven mines extracting lapis lazuli but today there is only one, the Sary-Sang deposit. The mine lies at an elevation of around 3,500 m and is worked on between June and September. Accurate production figures are not available but an estimate is 9,000 kg per year. The Afghanistan Ministry of Mines (MoM) estimates the reserves to contain 1,300 tons of Lapis<sup>29</sup>.

The World Bank has valued Afghanistan's gemstone capacity at \$2.75 million<sup>30</sup>, and other estimates suggest a much higher figure<sup>31</sup>. It has been suggested that the potential annual value is \$160 million<sup>32</sup>. This estimate could be realized if efficient extraction techniques were instituted and if all known deposits are regularly extracted.

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<sup>26</sup> Ibid.

<sup>27</sup> Bowersox and PhD, *Gemstones of Afghanistan*.

<sup>28</sup> Ibid.

<sup>29</sup> McIntosh and Benham, "Minerals in Afghanistan."

<sup>30</sup> The World Bank, *Afghanistan - Mining as a Source of Growth*.

<sup>31</sup> UNDP, "Market Sector Assessments SME Development."

<sup>32</sup> Ibid.

World trade of uncut colored gemstones is estimated to be \$320 million<sup>33</sup>. Afghanistan has a great opportunity to increase its share of this market, particularly because of the proximity to India; the world's largest colored gemstones import market. Additionally, demand for higher-quality gems has expanded in North America, Europe, East Asia and the Middle East.

### *Minerals and the Economy*

Afghanistan's vast mineral deposits present an opportunity to greatly develop the economy, increase involvement in the international market, and reduce chronic dependence on foreign financial aid. However, efficient mineral extraction will take decades even after adequate infrastructure is put into place. Therefore, it is crucial to note that different development scales of mining have differing timeframes and social and economic impacts.

Artisanal mining is small scale and commonly used for minerals of high unit value, including gemstones, precious stones, and gold. These activities usually involve operations valued at less than \$500,000 and may involve single family-size groups or hundreds and thousands of individuals in a specific mining district.

Small to medium scale mining might involve deposits with gross values ranging from \$500,000 to \$9,000,000 and would be financed by local or regional companies or individuals. Examples might be a 1.875-ton gold mine, a cement plant, or limestone or marble quarry. These operations would have short lead times of less than five years and employ hundreds of individuals.

Large-scale, world class deposits would likely involve international investors, have

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<sup>33</sup> Ibid.

longer lead times of greater than five years, gross values of over one billion dollars, and contribute to decades of exporting and economic growth. Examples of these larger deposits are the Mes Aynak copper-cobalt and Haji-Gak iron deposits, both of which the Government of Afghanistan (GoA) has prioritized with regards to mining. Other large deposits worth discussing includes the Khanneshin carbonatite, and the porphyry copper-gold prospects, including those in the Kundalan and Zarkashan AOIs. Extractive operations of these large deposits have not only the capacity to employ several hundreds of highly trained individuals, but also thousands of individuals in the supply and service industries.

## Conclusion

Resource extraction has a tortured history in Afghanistan and continues to be a source of concern in terms of physical security, environmental and social impacts and their contribution to socioeconomic development<sup>34</sup>.

However, Afghanistan's recent discovery of vast mineral wealth signifies the opportunity for momentous economic development. Afghanistan contains large deposits of base metals, especially iron, copper, and cobalt. The nation also holds a diverse range of other mineral deposits including REEs, precious metals, industrial minerals, and gemstones.

Mining activities depend upon commodity prices, markets, and technologies. The high risk and cost of exploration without immediate payback may cause many companies to stop exploration or to sell their data and property. It is common for mining districts to open and then close after only a few years of operations. Most mining

districts are operated by multiple mining companies throughout their lifecycles. Afghanistan's mineral commodities may require different exploration approaches, differing mining methods, and different metallurgical techniques. For example, metal deposits, including copper or iron, have somewhat uniform and predictable exploration, mining, and metallurgical approaches. Many industrial minerals, by contrast, are used in local industries and may be produced according to standards and specifications required by local markets.

The Afghan government has been particularly interested in pursuing economic activity tied to the mineral deposits at the Mes Aynak and the Haji-Gak sites. Both sites have huge extraction potential and will create hundreds of jobs. However, several crucial steps must take place before extraction can efficiently occur. Mining processes will require large capital investment operational power and transportation infrastructure.

Further analytical work is required to better understand the political economy and conflict ramifications of mining in Afghanistan. If concentrated efforts are taken by both the US and the Afghan government towards of a secure, transparent, and inclusive extractive industry, it is possible to reshape Afghanistan from a country devastated by war, into a stable and sustainable leader in the global mineral market.

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<sup>34</sup> Shroder and Ali, "Afghanistan's Mineral Fortune: Multinational Influence and Development in a Post-War Economy."

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# **Water Infrastructure**

## ***Understanding and Utilizing Water in Afghanistan for Mineral Development***

Sara Wong

*“May Kabul be without gold rather than snow”*

### **Introduction**

Water is a crucial factor in Afghanistan’s development. Water is essential to agriculture, daily life, businesses and industries, mining, or oil and gas extraction. Climate and geography limit the abundance and availability of water resources in the country, making water availability a concern, both domestically and in terms of Afghanistan’s relations with its neighbors. This concern needs to be addressed before the exploration and extraction of natural resources can occur on a major scale.

The supply of water includes many important issues, such as water quality and management, social, political, and the environmental dimensions of water availability. Overall, these realities make water in Afghanistan a multifaceted and complex issue.

This chapter addresses the water situation in Afghanistan. The first section will give an overview of the geological, climatic, and political landscapes that have shaped and are shaping the water supply in Afghanistan today. The second section focuses on hydrology and the specific sources of water in Afghanistan that could potentially be utilized to support mineral development.

The final section will discuss the managerial aspects of water, including environmental considerations, irrigation practices, and international.

### **Afghanistan’s Landscape**

#### *Geological*

Afghanistan is a landlocked country with a landscape comprising desert plains, mountain ranges, and fertile valleys<sup>1</sup>. Given its landlocked status, its major water sources do not include any open bodies of water, making desalination an unfeasible option as a water source. In Kabul, desalination of groundwater has been explored, however, groundwater is still not ideal for the desalination process—ocean water is more plentiful and more easily accessible. Afghanistan is reliant upon snowmelt, rainfall, and groundwater to subsist.

Ironically, although Afghanistan suffers from a lack of sufficient water, it does not lack water itself. In fact, its annual water per capita rate is 2,500 m<sup>3</sup>, higher than that of its neighbors, Iran and Pakistan<sup>2</sup>. With over three-quarters of Afghanistan’s terrain characterized as mountainous, the majority of the country’s primary water resources is not on the ground but located at the higher elevations. Situated at the top of watersheds, the Kohi Baba, Hindu Kush, and Afghan Pamir are mountain ranges that provide a relative abundance of water in the form of snowmelt. The problem with accessing this water is the fact that Afghanistan shares four out of its five water basins with neighboring countries; approximately 70% of

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<sup>1</sup> Uhl, “Afghanistan; an Overview of Ground Water Resources and Challenges.” Page 4.

<sup>2</sup> Qureshi, *Water Resources Management in Afghanistan*. Page 7.

Afghanistan's water flows out of the country<sup>3</sup>.

### *Climatic*

Afghanistan's climate is another limiting factor regarding the water supply. Characterized by an arid to semi-arid climate, Afghanistan has an annual precipitation rate of 327 mm, with the majority falling as snow and occurring between the winter and early-spring months<sup>4</sup>. However, precipitation rates vary according to altitude, largely determined by the Hindu Kush. Altitude gradually decreases from northeast to southwest of the country, giving the southern, northern, and western regions less precipitation than the northeast. Glaciers in the Pamir Mountains also contribute to precipitation, but not significantly. Most of the contributions to water supply take the form of snow melt, given that glaciers in this areas have some of the lowest annual precipitation rates of the high mountains<sup>5</sup>.

In addition to having a low average annual precipitation rate, Afghanistan is a drought prone country. Since the start of the 20<sup>th</sup> century, it has experienced five droughts and as a result, over 2.5 million people in the country are directly affected by water shortages. The most recent drought occurred from the mid-1990s to the mid-2000s<sup>6</sup>. The decrease in water availability due to this event led many Afghans to move from more severely affected areas to places like Kabul, where water is relatively more abundant.

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<sup>3</sup> Mashal, "What Iran and Pakistan Want from the Afghans."

<sup>4</sup> The World Bank. "Average Precipitation in Depth (mm per Year)."

<sup>5</sup> John F. Shroder, Jr. and Michael P. Bishop, "Glaciers of Afghanistan." Page 183.

<sup>6</sup> Mack et al., "Availability of Water in the Kabul Basin, Afghanistan." *The dates of this drought vary from source to source.* Page 3.

### *Political*

The various political instabilities that have plagued Afghanistan from the late 70s to September 11, 2001, had destructive effects on water infrastructure. Military operations have destroyed irrigation systems and dams. The increased theft of mechanical parts for irrigation has deterred people with expertise in the water industry from surveying, studying, and maintaining Afghanistan's water resources. For example, since 1980, all 18 of Afghanistan's meteorological and hydrological stations have been destroyed due to warfare.

Another adverse effect of conflict is its impact on irrigation systems. Due to political instability and lack of security in Afghanistan, many farmers have migrated to other countries and have left irrigation schemes unattended. Approximately 40% of the land has been abandoned and 10% destroyed as a result of war, while one half of all irrigation arrangements require rehabilitation<sup>7</sup>.

## **Water Requirements**

### *Climate Change*

In line with the predicted warming trends for the southwestern region of Asia, Afghanistan is anticipated to experience a 10% decrease in precipitation within the next 50 years. This decline would result from warmer temperatures in the mountainous regions of Afghanistan, which would decrease the snowpack and cause the snowmelt to occur earlier in the spring rather than in the summer. This poses two potential major problems.

The first would evidently be the decrease in water supply as a result of the reduction of

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<sup>7</sup> Qureshi, *Water Resources Management in Afghanistan.* Page 17.

glaciers. In fact, the US Geological Survey's (USGS) findings conclude that Afghanistan's glaciers convey information about some mountainous areas already affected by rising temperatures. For example, at low elevations, the USGS has already determined the disappearance of many glaciers<sup>8</sup>. The American Geophysical Union also noted the retreat of glaciers when they did a study on 30 randomly chosen glaciers in the northeastern region of the Great Pamir. The AGU found that 28 of the 30 glaciers had retreated, the highest rate of retreat being 36 m per year<sup>9</sup>. At mid-range elevations, debris coverage, transient water storage, and stagnation have also been occurring<sup>10</sup>.

Glaciers in Tien Shan, Gissaro-Alai, Pamirs and Dzhungarskiy and Zailiyskiy Alatau have also been decreasing at an average rate of one percent every year<sup>11</sup>. Moreover, aerial photography has revealed the separation of tributary glaciers from main glaciers, the formation of high-altitude lakes, and the increased size and frequency of pro-glacial lakes (which are formed as a result of glacial retreat).

The second issue is related to the earlier timing of snowmelt flows, which would supply less water to the population and to the agricultural industry when needed the most—during the summer. Flooding would also be a possible consequence of heavy glacial runoff in the future.

The current and future effects of climate change are realities that must be considered

in the discussion of Afghanistan and the development of its mineral resources.

### *Agriculture*

Afghanistan's economy is agrarian in nature, with agriculture comprising two thirds of the national income<sup>12</sup>. Eighty percent of its population lives in rural areas and the total arable land is eight million hectares, which is equivalent to approximately 12% of the country's total area. Agriculture has been an extremely important industry for Afghanistan, especially before the current period of war and instability. Production of fruits including grapes, apricots, and pomegranates was particularly popular. In fact, reviving production and trade of pomegranates has been proposed as a possible alternative that challenges the poppy industry.

Embedded within agriculture is, of course, the issue of water. According to 2002 statistics, roughly 99% of Afghanistan's water is utilized for irrigation, making agriculture the primary use of water in the country<sup>13</sup>. Due to Afghanistan's climate, heavy dependence on irrigated water stems from the fact that rainfall is unreliable and erratic.

The geographical regions in Afghanistan with the highest proportion of arable land are the northern and western regions, which are supplied with water from river basins in the north, west, and southwest of the country<sup>14</sup>. An important basin for agricultural production is the Amu Darya Basin. As of 2012, 95% of water from this basin was used for agriculture<sup>15</sup>. The Kabul

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<sup>8</sup> National Research Council (U.S.) et al., *Himalayan Glaciers*. Page 143.

<sup>9</sup> Williams, "Finding Water in the Heart of Darkness; Afghanistan's Ongoing Water Challenges."

<sup>10</sup> National Research Council (U.S.) et al., *Himalayan Glaciers*. Page 143.

<sup>11</sup> Joelle Rizk and Berdakh Utemuratov, "Balancing the Use of Water Resources in the Amu Darya Basin." Page 15.

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<sup>12</sup> Lashkaripour and Hussaini, "Water Resource Management in Kabul River Basin, Eastern Afghanistan." Page 253.

<sup>13</sup> Qureshi, *Water Resources Management in Afghanistan*. Page 16.

<sup>14</sup> *Ibid.* Page 4.

<sup>15</sup> Shira Babow, "The Water-Energy Nexus in the Amu Darya River Basin: The Need for Sustainable Solutions to a Regional Problem." Page 14.

Basin is also crucial to agricultural production. Specialized production of apples, potatoes, vegetables, maize, millet, and raisins takes place in the regions surrounding this basin. Furthermore, the Kabul Basin supplies water to the Nangarhar and the lower Kunar Valley regions, which have the highest proportion of intensively irrigated, high-yield land in the country<sup>16</sup>.

*Industrial*

In order to develop Afghanistan’s mining industry, a consistent and plentiful supply of water is necessary. Several mineral extraction processes that require large amounts of water include, processing of ore, discharging mine effluent, and addressing seepage from tailings, and waste rock impoundments.

*Domestic use*

Currently, only 39.4% of the rural population and 70.9% of the urban population have access to safe drinking water in Afghanistan<sup>17</sup>. Although these numbers have shown significant improvement since the 1990s, there is still a need to provide more households with high-quality drinking water. In fact, this need will only grow as Afghanistan’s population grows from its estimated 31 million to 56 million by 2050<sup>18</sup>. *Figure 1*, shows a breakdown of population by river basin.

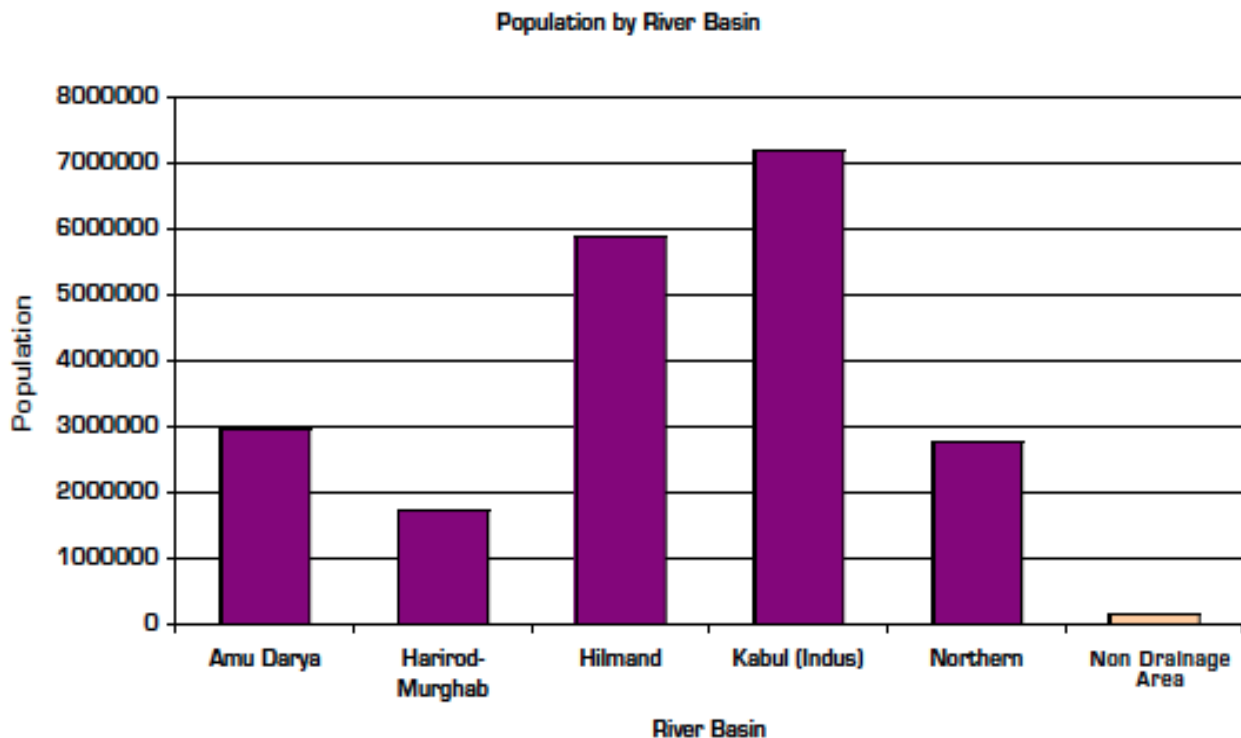


Figure 1. Graph of population by river basin in Afghanistan (Favre and Kamal, 2004).

<sup>16</sup> Favre and Kamal, “Watershed Atlas of Afghanistan First Edition - Working Document for Planners.” Page 96.

<sup>17</sup> Campbell, “A Dry and Ravaged Land: Investigating Water Resources in Afghanistan.”

<sup>18</sup> Ibid.

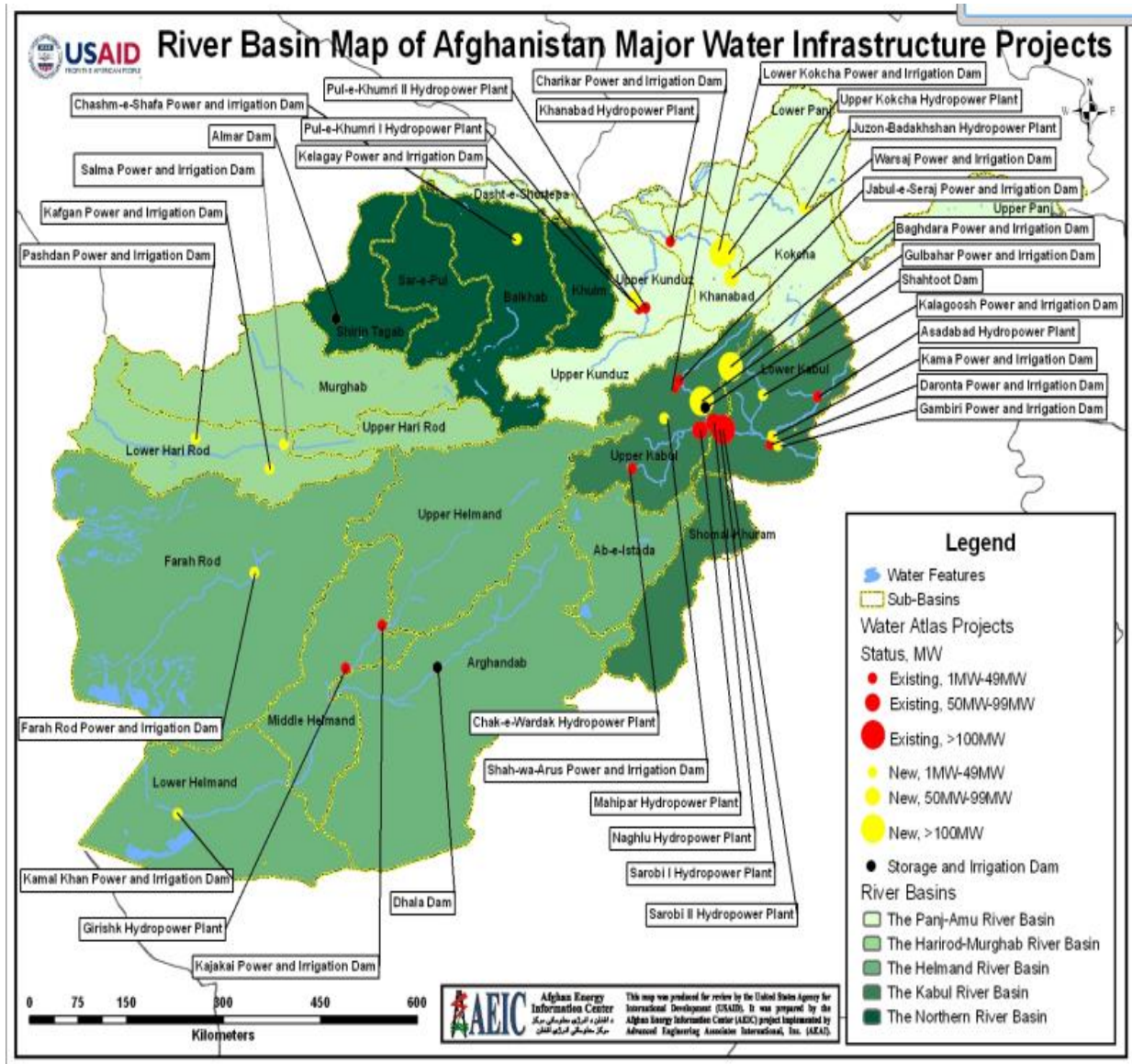


Figure 2. Map of major water infrastructure projects in Afghanistan (USAID, 2010).

### Hydropower

Since 2003, in an attempt to bridge the huge gap between demand and production of electricity, Afghanistan has planned to build 12 hydropower projects. An updated map from 2010 detailing the existing and new hydropower projects is shown in *Figure 2*.

Currently, Afghanistan needs 3,571 MW but is only producing 670 MW<sup>19</sup>. The purported hydropower projects will collectively produce 1,890 MW, while increasing water storage capacity from three percent to 24% of Afghanistan's annual water surface availability<sup>20</sup>.

<sup>19</sup> "Afghanistan and Pakistan: A Decade of Unproductive Interactions over the Kabul-Indus Basin."

<sup>20</sup> *Ibid.*

## Water Sources

### *Groundwater*

Groundwater in Afghanistan is an abundant and relatively underdeveloped source that could contribute to the national water supply. At the moment, groundwater makes up only 10 to 15% of total water consumed in Afghanistan while 85 to 90% is being acquired from surface water sources<sup>21</sup>. The demand for groundwater usage is high, with the potential annual requirements for groundwater being 20 billion m<sup>3</sup>, with only 3 billion m<sup>3</sup> being used in 2002<sup>22</sup>. While more recent estimates of groundwater and recharge for basins suggest that groundwater withdrawals have grown since the early 2000s, especially in the Kabul Basin, these remain well below total potential supply<sup>23</sup>. Increases in withdrawals suggest limitations to long-term groundwater use. It will be important to consistently monitor recharge in all basins and respond to data that suggests the optimal quantity of groundwater that should be extracted, as well which best extraction practices should be implemented.

In terms of how groundwater is extracted, traditional systems including karezes (or qanats), shallow wells, and springs are used. Karezes are underground irrigation channels that use gravity to tap groundwater from aquifers. Water from karezes serve domestic and irrigation purposes. While these systems supply water to more than 15% of irrigated land, over time they become unusable, as they dry up. Approximately 60 to 70% of karezes are no longer in use, while as much as 85% of shallow wells have gone dry<sup>24</sup>.

Lastly, there are economic considerations. Groundwater extraction is significantly more expensive than that of surface water<sup>25</sup>. Manually operated hand pumps cost about \$100 each, while boreholes for groundwater cost between \$500 and \$2000<sup>26</sup>. Thus, during periods of surface water scarcity, such as the drought that peaked in 2003, increased reliance on groundwater leads to a major increase in costs to farmers. That year, 27,000 boreholes were drilled to support irrigation.

Given the above realities, new efforts to acquire data related to groundwater use have been underway. From 2004 to 2013, the Afghanistan Geological Survey (with technical assistance from the USGS) monitored groundwater levels in 71 wells in the Kabul Basin. The Danish Committee for Aid to Afghan Refugees has been doing the same for 10 additional wells.

### *Surface Water*

The vast majority of Afghanistan's water comes from surface sources, namely mountain runoff. Roughly 80% of the country's current water originates from the Hindu Kush mountain range, which serves as a natural storage of water in the winter in the form of snow that supplies water in the form of snowmelt during late spring and summer<sup>27</sup>. There are five major water basins in Afghanistan with potential capacity to supply water for industrial use, including the mining and exploration industry. These include the Amu Darya Basin, the Kabul Basin, the Helmand River Basin, the Northern Basin, and the Harirod-Murghab Basin, as shown in *Figure 3*.

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<sup>21</sup> Shroder, "Afghanistan: Rich Resource Base and Existing Environmental Despoliation." Page 15.

<sup>22</sup> Qureshi, *Water Resources Management in Afghanistan*. Page 8.

<sup>23</sup> Rakhmatullaev et al., "Groundwater Resources Use and Management in the Amu Darya River Basin (Central Asia)." Page 14.

<sup>24</sup> Qureshi, *Water Resources Management in Afghanistan*. Page 8.

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<sup>25</sup> Rakhmatullaev et al., "Groundwater Resources Use and Management in the Amu Darya River Basin (Central Asia)." Page 13.

<sup>26</sup> *Ibid.* Page 13.

<sup>27</sup> *Ibid.* Page 6.

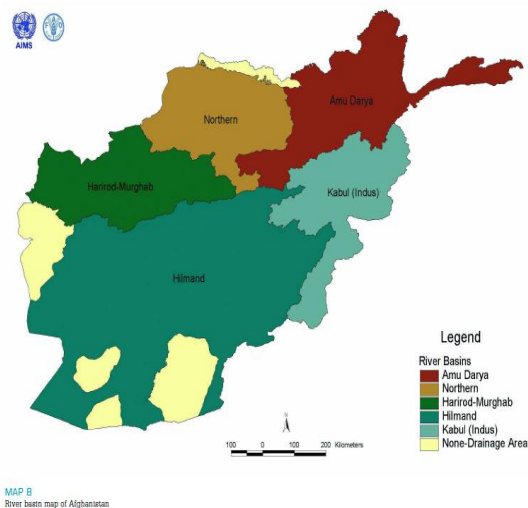


Figure 3. Map of Afghanistan's river basins (Favre and Kamal, 2004).

## The Importance of Basins

### *Amu Darya Basin*

The Amu Darya Basin contains one of two principal rivers in Central Asia. This is particularly significant as it is the only major river feeding into the southern central Asian republics. The basin supplies drinking water to approximately 50 million people and is crucial for the population residing within its radius<sup>28</sup>. This basin is situated in a mountainous region in northeastern Afghanistan and covers about 14% of the country's land area.

It is also a primary water source for Afghanistan as it supplies approximately 57% of the country's total annual flow, mostly in the form of snowmelt<sup>29</sup>. The Amu Darya Basin is covered in snow over an average area of 10,385 km<sup>2</sup>, which is at least double the area of any other drainage basins in Afghanistan. Snowmelt is particularly important, as the basin is characterized by

<sup>28</sup> Shira Babow, "The Water-Energy Nexus in the Amu Darya River Basin: The Need for Sustainable Solutions to a Regional Problem." Page 7.

<sup>29</sup> Favre and Kamal, "Watershed Atlas of Afghanistan First Edition - Working Document for Planners." Page 72.

uneven distribution and quantity of precipitation<sup>30</sup>.

The river system in the north of this basin originates from tributaries shared between Tajikistan and Afghanistan, while the southern branch forms the boundary between these two nations. Due to heavy withdrawals for irrigation in Turkmenistan and Uzbekistan, the Amu Darya River itself dries up before reaching the Aral Sea. Before the Soviet era, when the irrigation of cotton was implemented, the Amu Darya was a key source that kept the Aral Sea in the northern part of Uzbekistan filled. Today, however, the sea has all but disappeared<sup>31</sup>.

During the Soviet era, the upstream and downstream regions of the Amu Darya each served their own separate purpose. The upstream region was developed for hydropower and controlled water flow, while the downstream region was irrigated to support cotton production, oil and gas extraction<sup>32</sup>. To facilitate the management of the Amu Darya, the USSR created the River Basin Organization (BVO) in 1987, to manage water usage for each Soviet Socialist Republic<sup>33</sup>.

While the BVO endured past the collapse of the USSR, the quotas set are not adhered to as strictly as they were in the past. This is due to recent independent national programs focused on self-sufficiency and energy security. Overall, achieving the balance between the Amu Darya's role as a water source for agriculture and energy production

<sup>30</sup> Rakhmatullaev et al., "Groundwater Resources Use and Management in the Amu Darya River Basin (Central Asia)." 7.

<sup>31</sup> Favre and Kamal, "Watershed Atlas of Afghanistan First Edition - Working Document for Planners." Page 72.

<sup>32</sup> Shira Babow, "The Water-Energy Nexus in the Amu Darya River Basin: The Need for Sustainable Solutions to a Regional Problem." Page 10.

<sup>33</sup> Ibid. Page 11.

for all the Central Asian Republics that rely on it is crucial.

#### *Amu Darya Basin - Hydroelectricity*

As of 2012, only eight percent of the Amu Darya Basin's total hydropower potential had been developed. The issue with developing hydropower in this basin is related to the fact that numerous water demands need to be met and balanced. Embedded within this issue of balance is the need for cross-border cooperation between neighboring countries including Tajikistan, Turkmenistan, and Kyrgyzstan. If a regional energy market were created between the Central Asian Republics, it would be possible to meet more than 71% of the region's energy needs using hydropower<sup>34</sup>.

#### *Amu Darya Basin - Groundwater*

Groundwater makes up roughly 58% of the Amu Darya Basin's reserves<sup>35</sup>. The considerable amount of groundwater that lies in the Amu Darya Basin can be attributed to the presence of both mountains and deserts in the area, which favor the formation of groundwater in arid regions.

During the Soviet occupation, the Central Asian Republics did not utilize the Amu Darya's groundwater resources for irrigated agriculture as much as they do now given that there was a sufficient amount being attained from surface water resources. Today, the situation in this basin is different with the rapidly increasing rate of groundwater extraction via pumping from wells and boreholes. Specifically, private farmers have been drilling new wells and boreholes, which contribute to groundwater

overdraw in certain areas of the Amu Darya<sup>36</sup>. The increase can also be attributed to the recent drought lasting from the late 1990s to the early 2000s, which naturally resulted in a higher demand for water.

#### *Kabul River Basin*

##### Surface Water

The Kabul River Basin is a major tributary of the Indus River in Pakistan and is the only river system originating in Afghanistan that ultimately reaches the ocean (via the Indus to the Arabian Sea). The basin has an area of 54,000 km<sup>2</sup> and covers 12% of the national territory but only supplies 26% of Afghanistan's annual water flow<sup>37</sup>. As opposed to draining into large open plains, the rivers and tributaries of the Kabul Basin run along narrow, gorge-like valleys segregated by intervening mountains.

The Kabul area has become the most populous region of Afghanistan, which makes it large source of non-irrigation water demand. It is estimated that population growth in Kabul will be sustained for at least the next decade so water supply from the Kabul River Basin will continue to be crucial in terms of meeting human needs.

#### *Kabul River Basin - Hydroelectricity*

Developing the capacity for hydropower in the Kabul Basin is not a new concept. At various points between 1911 and 1967, five hydropower projects have been started and some completed. Between 1911 and 1918, American engineers in Jabul Serai built the first hydroelectric power plant<sup>38</sup>. In 1953, the second project was built in Sarobi with assistance from the German firm Siemens-

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<sup>34</sup> Joelle Rizk and Berdakh Utemuratov, "Balancing the Use of Water Resources in the Amu Darya Basin." Page 5.

<sup>35</sup> Rakhmatullaev et al., "Groundwater Resources Use and Management in the Amu Darya River Basin (Central Asia)." Page 8.

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<sup>36</sup> Ibid. Page 4.

<sup>37</sup> Favre and Kamal, "Watershed Atlas of Afghanistan First Edition - Working Document for Planners." Page 92.

<sup>38</sup> Ibid. Page 92.

Schukert<sup>39</sup>. The third, called the Mahipar hydroelectric project, was completed in 1966, again with West German assistance<sup>40</sup>.

The next project was the Naghlu hydroelectric power plant, completed in 1967 as an Afghan-Soviet hydroelectric project and is the major hydropower project for the Kabul Basin. Lastly, the fifth project is the Darunta plant, which was commissioned in 1967 and constructed by the former Soviet Union<sup>41</sup>. Collectively, the mentioned hydropower projects supply the city of Kabul with the majority of its public electricity.

#### *Kabul River Basin - Groundwater*

Between 2004 and 2013, the Afghanistan Geological Survey (AGS) in conjunction with the USGS measured and monitored groundwater levels for 71 wells in the Kabul Basin. These wells are divided between six sub basins; the Central Kabul, Logar, Deh Sabz, Paghman, Shomali and Upper Kabul sub basins<sup>42</sup>.

The Central Kabul sub basin has an area of 419 km<sup>2</sup> and encompasses the city of Kabul itself to the west, and more rural areas to the east<sup>43</sup>. Twenty-three wells were monitored in this sub basin. The data showed that water levels in most of the wells actually decreased during the monitored period. Some of the drawdowns were attributed to the pumping of wells, however recoveries ranging from 10 to 25 m were also documented<sup>44</sup>.

The Logar sub basin has an area of 190 km<sup>2</sup> and encompasses both urban and rural lands<sup>45</sup>. The results for the eight wells monitored in this basin generally show an increase in water levels from 2004 until the seasonal highs, in 2009 and 2010. However, after 2010, water levels decreased once again. A water level difference of nearly four to five meters existed between pumped and non-pumped wells, however, water levels in pumped wells appeared to recover fairly quickly after pumping was halted<sup>46</sup>.

Although the survey of these two sub basins concluded that the pumping of wells may induce a degree of water drawdown, recharge does occur and sometimes quite rapidly. Recharge for the Kabul Basin comes largely from the surface water of rivers and irrigation, which is tied to snow melt runoff. As long as surface water continues to be abundant, groundwater for exploration and extraction of minerals could be abundant in the Kabul Basin.

#### *Helmand River Basin*

The Helmand River Basin originates in the Paghman Mountains northwest of Afghanistan and extends into northeastern Iran. While it is the largest water basin in Afghanistan, covering about 45% of the country's land area, it only contributes 10 to 11% of the country's water in the form of snow melt and spring storms<sup>47</sup>. Most of the water from this basin is diverted to domestic and agricultural needs. This basin supplies Kandahar, the second largest city in Afghanistan, but also the irrigated fields along the Helmand and Arghandab Rivers. Precipitation levels in this basin fluctuate a good deal. Fluctuation is characteristic of streams and rivers in arid regions. This

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<sup>39</sup> Michel, "The Kabul, Kunduz, and Hebnand Valleys and." Page 25.

<sup>40</sup> Favre and Kamal, "Watershed Atlas of Afghanistan First Edition - Working Document for Planners." Page 92.

<sup>41</sup> Ibid. Page 92.

<sup>42</sup> Taher, Chornack, and Mack, *Groundwater Levels in the Kabul Basin, Afghanistan, 2004-2013*. Page 1.

<sup>43</sup> Ibid. Page 5.

<sup>44</sup> Ibid. Page 5.

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<sup>45</sup> Ibid. Page 19.

<sup>46</sup> Ibid. Page 19.

<sup>47</sup> Paul Hanasz, "The Politics of Water Security between Afghanistan and Iran." Page 2.

unfortunately renders the water supply from this basin unreliable from year to year.

#### *Helmand River Basin- Hydroelectricity*

Hydropower in the Helmand Basin has been largely developed by US foreign aid. The Helmand-Arghandab Valley Authority (HAVA) was set up by foreign aid to build dams along the Arghandab River during the 1950s<sup>48</sup>. The Arghandab Dam was completed in 1952 and has a storage capacity of 478.6 Mm<sup>3</sup> (million cubic meters).

In the 1970s, the US Agency for International Development funded hydropower plant construction for the Kajaki dam. The funding helped establish two 16.5 MW generators and gave the reservoir a capacity of 1.2 km<sup>3</sup>. However, due to a lack of maintenance, the dam's ability to generate power and irrigation has failed to deliver as expected. Work on these areas is currently in progress. In addition to these two dams, several major canals were also built. Currently there are 750 km of irrigation canals in the Helmand Basin that are being maintained<sup>49</sup>.

#### *Helmand River Basin - Groundwater*

The Western Helmand River's estimated annual groundwater recharge rate supersedes its groundwater usage rate, the former being 1,310 Mm<sup>3</sup> per year and the latter being 750 Mm<sup>3</sup> per year<sup>50</sup>. Based on this assessment, further development of groundwater in the basin, especially in the middle to upper areas of the basin, is a strong and justifiable possibility.

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<sup>48</sup> Whitney, *Geology, Water, and Wind in the Lower Helmand Basin, Southern Afghanistan*. Page 2.

<sup>49</sup> Whitney, *Geology, Water, and Wind in the Lower Helmand Basin, Southern Afghanistan*. Page 22.

<sup>50</sup> Uhl, "Afghanistan; an Overview of Ground Water Resources and Challenges." Page 2.

The Eastern Helmand River's estimated that the annual groundwater recharge rate is a little lower at 1,170 Mm<sup>3</sup> per year<sup>51</sup>. However, this recharge rate still exceeds groundwater usage rate of 750 Mm<sup>3</sup> per year. On the other hand, unlike its Western counterpart, the Eastern part of the river derives a lot of its irrigation from unconsolidated aquifer systems and for these systems in particular, the estimated usage may exceed the estimated recharge.

#### *Harirod-Murghab Basin*

This basin's major rivers are the Harirod River and the Murghab River, which both end in Turkmenistan. The Harirod River originates from the western slopes of the Koh-I Baba Mountains and has a drainage area of 40,000 km<sup>2</sup>, which is about six percent of Afghanistan's total area<sup>52</sup>. The Murghab River comes from the Tir Bandi-Mountains in Turkistan and also has a drainage area of 40,000 square km<sup>53</sup>. Collectively, this basin contributes a mere four percent to Afghanistan's total annual water flow<sup>54</sup>.

#### *Harirod-Murghab Basin- Hydroelectricity and Groundwater*

The major hydroelectric dam under construction in the Harirod-Murghab basin is the Salma Dam. Although construction on this dam began in 1976 and was restarted in 1988, it remains incomplete due to civil war<sup>55</sup>. In 2006, India pledged to invest \$300 million towards the completion of this hydroelectric project, which would produce 42 MW of energy and provide 75,000 ha for

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<sup>51</sup> Ibid. Page 3.

<sup>52</sup> Frenken and Food and Agriculture Organization of the United Nations, *Irrigation in Central Asia in Figures*. Page 88.

<sup>53</sup> Ibid. Page 88.

<sup>54</sup> Favre and Kamal, "Watershed Atlas of Afghanistan First Edition - Working Document for Planners." Page 82.

<sup>55</sup> Frenken and Food and Agriculture Organization of the United Nations, *Irrigation in Central Asia in Figures*. Page 91.

irrigation in Afghanistan<sup>56</sup>. The difference between the estimated annual groundwater recharge and usage in the Harirod-Murghab basin is approximately 480 Mm<sup>3</sup> per year, which gives grounds for further exploration into groundwater development<sup>57</sup>.

### *Northern River Basin*

Water in the Northern Basin begins in the northern slopes of the Hindu Kush and flows towards the Amu Darya. It is one of the only water basins in Afghanistan completely contained within national boundaries. However, it only contributes to two percent of Afghanistan's total annual flow<sup>58</sup>. The basin's total area is approximately 115,000 km<sup>2</sup>, which is equivalent to about 20% of Afghanistan's land area. Its major rivers are the Shirin Tagab, the Sarepul, the Balkh, and the Khulm<sup>59</sup>.

### *Northern River Basin – Hydroelectricity*

The two major water infrastructure projects in the Northern River Basin are the Almar Dam and the Chashm-e-Shafa Power and Irrigation dams. The Almar Dam project is funded by the Ministry of Energy and Water and has the potential to irrigate more than 30,000 ha of land. However, work on this dam was halted in 2013 due to a disagreement over the division of labor between Afghanistan and a Tajik firm<sup>60</sup>.

### *Northern River Basin - Groundwater*

Although estimates for Northern River groundwater recharge vary between approximately 2,000 and 3,000 Mm<sup>3</sup> per

year, it is evident that there is a significant gap between the amount of water available and the amount actually being used. This significant gap highlights the need for groundwater extraction.

## **Water Management**

### *Institutions*

Afghanistan has five governmental ministries responsible for water management. These are, the Ministry of Rural Development and Reconstruction; the Ministry of Irrigation; the Ministry of Mining; the Ministry of Agriculture; the Ministry of Public Works; and the Ministry of Power. The Ministry of Rural Development is responsible for small-scale irrigation, water supply, and sanitation projects in rural areas. The Ministry of Irrigation is in charge of major irrigation infrastructure, including the planning, building, and maintenance of major water storage and water conveyance facilities. The Ministry of Mining is responsible for groundwater resources and the Ministry of Public Works is responsible for supplying water to Afghanistan's major cities<sup>61</sup>.

Established in 2005, the National Environmental Protection Agency (NEPA) is another body that serves as a policy-making and regulatory institution for national water resources. NEPA also works with the environmental and social unit of the Ministry of Mines to specifically monitor and evaluate mining operations. Afghanistan is also currently a participant to various international conventions relating to the environment, and passed its first national Environmental Law in 2007<sup>62</sup>.

Lastly, it should be noted that nearly 90% of all irrigation systems in Afghanistan are

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<sup>56</sup> Ibid. Page 91.

<sup>57</sup> Uhl, "Afghanistan; an Overview of Ground Water Resources and Challenges." Page 3.

<sup>58</sup> Favre and Kamal, "Watershed Atlas of Afghanistan First Edition - Working Document for Planners." Page 76.

<sup>59</sup> Uhl, "Afghanistan; an Overview of Ground Water Resources and Challenges." Page 6.

<sup>60</sup> Wadsam, "Conflict between Two Firms Has Stopped Work on Almar Dam."

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<sup>61</sup> Qureshi, *Water Resources Management in Afghanistan*. Page 18.

<sup>62</sup> Hook, "The Future of Afghanistan's Natural Resources."

traditional, in the sense that they have been developed, built, and maintained by farmers<sup>63</sup>. Afghan farmers abide by a system of “individual” governance, which is common to agrarian communities.

### *Irrigation*

Currently, Afghanistan is not conducting efficient irrigation practices, which coupled with the periodic droughts it experiences, only exacerbates the issue of water shortages. The inefficiencies extend from traditional irrigation systems to modern systems; the collective efficiency of both systems varies from 25 to 30%<sup>64</sup>. Other problems that must be addressed include, evapotranspiration, leakage, and overwatering of crops. The latter occurs due to ignorance concerning crop water requirements.<sup>65</sup> For example, many Afghan farmers still use oxen and do not know the exact water requirements for their crops. The lack of knowledge in this area leads to water and time inefficiencies. Increasing knowledge of new irrigation technologies and more efficient practices through local programs would ameliorate these problems.

Lastly, given that Afghanistan is a drought-prone country, it would be in its best interest to adopt a more flexible water allocation system that accounts for fluctuating water levels. Unlike upstream priority systems, proportional water allocation systems typically provide a more efficient and a fairer alternative<sup>66</sup>. As its name indicates, water in this system is shared proportionally between downstream and upstream users. This system is particularly beneficial during seasons of drought, as water shortages in rivers are shared proportionally. A flexible

water allocation system helps decrease losses in food security within regions that would not otherwise receive water during times of shortages.

### *Environment*

The mining industry as a whole has a significant impact on the environment. Extraction of minerals can generate large craters, extensive debris piles, dust, chemical leaching, and if not carefully controlled, pollution of the soil, water, and air. To give an example of the possible effects of just one single mining operation, at full production from the open pit, it is estimated that the Mes Aynak copper mine will generate 66.1 million tons of waste rock and 10.7 million tons of tailings per year<sup>67</sup>.

### *Water Quality*

Water quality varies between the upper and lower basins. Surface quality is excellent in the upper basins and good in the lower basins despite the prevalence of significant irrigated areas<sup>68</sup>. On the other hand, the absence of clean drinking water is a concerning issue. Approximately 27% of the rural population does not have access to safe drinking water.

## **The Politics of Water Security**

### *Iran*

Water disputes between Iran and Afghanistan are centered on the shared Harirod-Murghab and Helmand River basins. Disagreements about the latter have been taking place as early as the 19<sup>th</sup> century, when the British demarcated the border between these neighboring countries. In an attempt to settle disputes surrounding

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<sup>63</sup> Qureshi, *Water Resources Management in Afghanistan*. Page 16.

<sup>64</sup> *Ibid.* Page 14.

<sup>65</sup> Williams, “Finding Water in the Heart of Darkness; Afghanistan’s Ongoing Water Challenges.”

<sup>66</sup> Ward, Amer, and Ziaee, “Water Allocation Rules in Afghanistan for Improved Food Security.” Page 13.

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<sup>67</sup> Saeeda Gouhari, “Mining in Afghanistan.”

<sup>68</sup> Qureshi, *Water Resources Management in Afghanistan*. Page 8.

the Helmand River, the Helmand River Treaty was created on March 13, 1973, and was later ratified in 1977<sup>69</sup>. This treaty contains 10 articles including a clause restricting Iran from drawing more than 22 m<sup>3</sup> per second from the Helmand River on an annual basis. However, the clauses of this treaty have not been observed by Iran who has been consuming up to 70% more water than was agreed upon<sup>70</sup>.

Iran has also been suspicious and wary of the construction of the Salma Dam, which it views as a threat to its own water security. Specifically, Iran is concerned about how this dam will affect its national water storage and supply. However, at the moment, Iran continues to build water storage and diversion facilities along the lower part of the Harirod River and largely without consent from or consultation with Afghanistan<sup>71</sup>.

### *Pakistan*

Water disputes between Pakistan and Afghanistan have been on going since 1947, when Pakistan officially became a country. Every year, approximately 21 trillion square meters of water enter Pakistan from the Kabul River<sup>72</sup>. However, this number would be reduced if the planned hydroelectric projects were completed. For example, if 13 dams were built along the Kabul River, 16 to 17% of Pakistan's supply of water from Afghanistan would be lost<sup>73</sup>.

At the moment, no bilateral agreement regarding water exists between Pakistan and Afghanistan. Although treaties have been

proposed in the past, none have been ratified. Some reasons for the failure to create official terms in the past include the World Bank's refusal to guarantee a bilateral treaty between these two countries, and the Afghan government's decision to focus on a national water policy instead of a transnational one<sup>74</sup>.

Moreover, it is crucial to salient that Pakistan will face severe water shortages within the next six to seven years due to both climate change and mismanagement of water<sup>75</sup>. Pakistan is classified as one of the most water-deprived countries in the world having had a five-fold drop in water availability since 1947<sup>76</sup>. Currently, Pakistan's water supply will undoubtedly have a significant impact and influence on any hydroelectric developments or water treaties negotiations that Afghanistan may chose to undertake.

### *Turkmenistan*

Turkmenistan shares the Amu Darya Basin and the Harirod-Murghab Basin with Afghanistan but has never entered into a bilateral water agreement with Afghanistan before. There have been several international water sharing agreements involving the Amu Darya that have been ratified throughout the 20<sup>th</sup> century that include both Turkmenistan and Afghanistan.

Since the Central Asian Republics' independence, Turkmenistan has been increasing its cotton production, which has subsequently resulted in a higher demand for water. In fact, Turkmenistan is the largest per capita consumer of water from the Amu Darya. However, it should be noted that Turkmenistan does not currently have

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<sup>69</sup> Paul Hanasz, "The Politics of Water Security between Afghanistan and Iran." Page 3.

<sup>70</sup> Mashal, "What Iran and Pakistan Want from the Afghans."

<sup>71</sup> Paul Hanasz, "The Politics of Water Security between Afghanistan and Iran."

<sup>72</sup> "Afghan Water Infrastructure Threatens Iran, Regional Stability - Al-Monitor."

<sup>73</sup> Ibid.

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<sup>74</sup> "Sharing Water Resources with Afghanistan."

<sup>75</sup> Masood, "Starved for Energy, Pakistan Braces for a Water Crisis."

<sup>76</sup> Ibid.

efficient water management systems or practices. For example, simple and inexpensive farm management practices such as land leveling would reduce water usage significantly<sup>77</sup>.

### *Tajikistan*

In recent years, a number of steps have been taken on behalf of Tajikistan and Afghanistan to strengthen water-sharing agreements between the two countries. In 2013, a document outlining possible paths of cooperation between Afghanistan and Tajikistan in terms of environmental and hydrological issues in the Upper Amu Darya Basin was published online. The publication titled “Visual Atlas of Cooperation” recommended establishing more points of contact, data exchanges, and joint monitoring and surveying projects between the two countries.

Currently the main project being undertaken by Tajikistan is the Dash-i-Jun hydropower project on the Panj River, but there is certainly opportunity for the creation of more Afghan-Tajik hydrological projects within the shared Panj-Amu Darya Basin vicinity.

### *India*

Indo-Afghan relations have been centered on the construction of the Salma Dam. Although India has committed to completing the dam, security issues have prevented this project from being finished. As of 2015, there have been at least seven attacks around the dam’s area. India has also delayed the completion of the dam when it delayed approving the revised cost of the dam from an initial \$56.2 million to \$128.6 million. The instability has stifled progress and the original estimated date of completion for the

dam by the end of 2014 has since been extended to mid-2015. Afghanistan invited Indian companies to invest in water infrastructure, provide expertise in water management or irrigation, and provide technical training for Afghanistan’s water sector<sup>78</sup>.

In order to peacefully and effectively develop water infrastructure in Afghanistan, it will be important to resolve the plethora of geopolitical issues between Afghanistan and its neighboring countries. Other geopolitical actors and their connections to Afghanistan’s water basins not discussed in this section are listed on the following page in *Figure 4*.

## **Conclusions**

Afghanistan’s water policies emphasize several key issues:

### 1) Balancing domestic water needs

While building and improving the mining industry in Afghanistan, it will be crucial to take into consideration the importance of rebuilding and maintaining Afghanistan’s agricultural sector and providing its growing population with access to clean drinking water. Refocusing on the agricultural sector will be essential as it may help Afghanistan avoid the resource curse and it will also allow for a more gradual transition towards a modern, industrial economy.

### 2) Improving Irrigation

Given that over 90% of Afghanistan’s water is used for irrigation, efforts to modernize and improve the efficiency of current systems would go a long way toward water conservation. Presently, the country has a fixed set of rules for allocating irrigation

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<sup>77</sup> Ahmad and Wasig, *Water Resource Development in Northern Afghanistan and Its Implications for Amu Darya Basin*. Page 4.

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<sup>78</sup> “Afghanistan Asks India to Build Water, Irrigation Projects.”

water when shortages occur. Instituting a flexible allocation scheme, such as a proportional allocation system, and involving input from local communities in the process might make sense in light of possible water needs by future industry.

### 3) Sustainable development

Further exploration and development of Afghanistan's groundwater resources serves as an opportunity to support mining operations. However, long-term environment impacts and issues must be

addressed alongside any proposed water projects for the future. This will ensure a more sustainable industry and economy for Afghanistan and a better quality of life for its citizens in the long run.

### 4) Cross-border water cooperation

Given that Afghanistan is a landlocked country that shares borders and rivers with various countries, regional cooperation and negotiation regarding the shared use of water will be crucial to avoid conflict and impasses. Making unilateral decisions about water resources will likely not work and

Figure 4. Table of Afghanistan's river basins and their corresponding treaties (Favre and Kamal, 2004).

RIVER BASINS	RIPARIAN COUNTRIES	Area '000 (sq km)	TREATIES with AFGHANISTAN	COMMENTS
<b>Aral Sea</b>  (includes both Amu Darya and Northern river basins)	Kazakhstan	424	Frontier Agreement between Afghanistan and the USSR, 13 June 1946. Treaty concerning the regime to the Soviet-Afghan frontier, 18 January 1958. Protocol between the USSR and Afghanistan concerning the joint execution of works for the integrated utilization of the water resources in the frontier section of the Amu Darya, 25 June 1958	Countries : Afghanistan, Iran
	Uzbekistan	383		The 1946 Agreement subjects all matters associated with water use to specific agreements between the two countries and provides for the establishment of a joint commission. Under it, Afghanistan is entitled to use up to 9 km <sup>3</sup> of water from the Pyandj River. Under the Treaty of 18 January 1958, the two countries commit themselves to take joint measures to prevent changes in the course of frontier rivers, streams or canals and to correct the effects of such changes and share the costs equally. Furthermore, they commit themselves to prevent water pollution, to exchange regular information on the level and volume of water and meteorological data and to adopt a flood warning system. Finally, the 1958 Protocol envisages the joint integrated utilization of the frontier sections of the Amu Darya <sup>2</sup> .
	Tajikistan	136		
	Kyrgyzstan	112		
	Afghanistan	105		
	Turkmenistan	70		
	China	2		
	Pakistan	(0.2)		
<b>Hilmand</b>	Afghanistan	288	Terms of reference of the Hilmand River Delta Commission and an interpretive statement relative thereto, agreed by Afghanistan and Iran, 7 September 1950	Countries : Iran, Afghanistan
	Iran	55		Principal issue : Water Quantity
	Pakistan	10		The Hilmand River Delta Commission was created and given the task to measure and divide the river flows between the two signatories .
<b>Indus (Kabul river basin)</b>	Pakistan	598	Treaty between the government of Afghanistan and His Britannic Majesty's Government for the establishment of neighbouring relations, 22 November 1921.	Countries: Afghanistan, Great Britain
	India	382		Principal issue : Water Quantity
	China	76		Allocation : None
	Afghanistan	72		Britain agreed to permit Afghanistan to draw water from a pipe for use of the residents of Tor Kham. Afghanistan agreed to permit British officers and tribesmen on British side of boundary to use Kabul River for navigation and to maintain existing rights of irrigation.
	Chinese control*	10		
	Indian control**	2		
	Nepal	(0.01)		
<b>Harirod wa Murghab</b>	Afghanistan		No	Some treaties on the Amu Darya basin may cover the Harirod-Murghab basin.
	Turkmenistan			
	Iran			
<b>Namaksar</b>	Afghanistan		No	Non-drainage area. Salt lake in the border area between Afghanistan and Iran.
	Iran			

\* Claimed by India

\*\* Claimed by China

may be detrimental to Afghanistan. Being aware of the diverse water needs of each bordering country and working towards agreements that consider and solve these needs is a more viable solution.

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# **Electrical Supply**

## ***A Critical Need For Afghanistan's Development***

Igor Sirotkin

*"A tree does not move unless there is wind"*

### **Introduction**

Afghanistan ranks among the lowest nations in the world insofar as the supply of electricity. No more than 40% of the population has access to electric power, and much of this is only for a few hours a day. To some degree, this figure is encouraging: in 2001, when the Taliban was overthrown, less than 10% of Afghans had electric power.<sup>1</sup> Yet today's electricity levels remain far from sufficient. Because of the poor quality of current infrastructure, energy consumers cannot rely on the unstable flow of electricity in their homes, shops, businesses, or industries. Due to continuous political instability, a great number of potential energy sources have not been tapped into at this time.

The majority of Afghanistan's electricity, roughly 75%, is imported from neighboring countries, especially Uzbekistan and Tajikistan. Given that an ample and reliable supply of power is a prerequisite to any modern economy, especially one that hopes to develop energy-intensive industries like mining, this situation must be improved. A key question therefore concerns what is needed to significantly advance the country's electricity situation.

Increasing the amount of imported power, while helpful in the short-term, is not a preferred long-term solution for three

reasons. First, it is relatively expensive and draws money out of the country. Second, Uzbekistan and Tajikistan, as well as Iran and Turkmenistan, mainly provide surplus power; thus, if there is no surplus, there is no supply. Furthermore, political instability and limited enforceability of contracts related to these nations add another degree of insecurity, making imports unreliable. Third, and most importantly, Afghanistan has more than enough resources to be self-sufficient in power generation - even enough to possibly become an exporter of electricity.

Many negative comments are routinely made about the state of Afghanistan's electricity infrastructure. Yet substantial progress has been made over the past seven years. Having suffered more than 30 years of war and in the midst of the insurgency today, the country is in the middle of both a recovery and a new stage of development. It is important to keep in mind that Afghanistan does have the natural resources to develop a full-scale and reliable supply of power to all its provinces. It is a goal of the Ministry of Energy and Water's Power Sector Plan for the country to even become a net exporter of power starting in 2022.

### **Brief Historical Background**

Historical background aids understanding of the current energy situation in the country, especially in regards to power generation. The beginnings of a grid system were constructed in the 1950s and 1970s, when related projects were pursued by both

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<sup>1</sup> Da Afghanistan Breshna Sherkaat presentation <http://eneken.ieej.or.jp/data/5015.pdf> and Flak, "Electricity only reaches one in three Afghans".

Western and Soviet efforts. Such efforts focused on hydropower resources along several major rivers. Examples include the Kabul River, where the Sairobi power facility was built in the late 1950s, and the Helmand River, whose Kajaki Dam and power plant were completed in 1953.

Though natural gas was discovered only a few years later, with production beginning in 1967, the Soviets had the great majority exported into their own pipeline system in what is today Uzbekistan. Thus, no gas-fired power plant was ever built. A number of moderate-sized ( $\geq 40$  MW) and small-scale ( $< 10$  MW) hydro plants were erected in different parts of the country, predominantly near the cities of Kabul, Kandahar, Lashkar Gah, Herat, Mazar-e-Sharif, Kunduz, and Jalalabad. Additions to this network during the Soviet occupation rose the total net generation to a maximum of 1.2 billion kilowatt-hours (kWh) in 1987. This fell to 0.5 billion kWh in 2000, but was raised to 0.9 kWh during the 2000s.<sup>2</sup>

This early infrastructure suffered heavily during Afghanistan's four decades of invasions and wars. Though significant improvements have been made since 2002, there remain many repairs and upgrades that need to be achieved. The largest additions to power generation in rural areas have been diesel generators. Coalition forces provided many of these generators in order to quickly establish power. Unfortunately, they have proven to be polluting and unreliable. Fuel costs are high, though prices have come down since late 2014. Many of these generators, however, may well be abandoned now that NATO forces have withdrawn. Interrupted fuel supplies and lack of maintenance have already caused some generators to no longer operate. These factors, as well as air pollution, have not

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<sup>2</sup> Ashraf, Abdul, "Energy Sector Afghanistan"

contributed to improving the nation's power situation.<sup>3</sup>

Since the ousting of the Taliban in 2001, significant progress has been made in increasing the availability of electricity. In 2001, less than 15% of Kabul's residents had access to electricity. By 2015, this number increased to 70% as Kabul's population grew to nearly five million people. Demand was on the order of 530 MW, while supply did not exceed 375 MW, of which 260 MW was imported.<sup>4</sup>

### Current Production

In 2012, Afghanistan consumed a total of 3.9 billion kWh, of which 23% was generated domestically. The total represents more than a doubling of consumption in only five years since 2008, when the figure was 1.49 billion kWh. Despite this tremendous rate of growth, domestic power generation has remained relatively static at around 0.9 billion kWh since 2004. Total supply, from domestic and imported sources, is able to provide electricity to a significant portion of the public for a certain number of days per week and a limited number of hours per day.<sup>5</sup>

According to Abdul Razique Samadi, Chief Executive Officer (CEO) of Afghanistan's national power utility, Da Afghanistan Breshna Sherkat (DABS), in 2012 the country produced a total of 600 Megawatts (MW).<sup>6</sup> This was 71% of total installed capacity (840 MW), as recorded in a 2013 United Nations Industrial Development Organization report.<sup>7</sup> These figures place Afghanistan among the lowest ranking countries worldwide in domestic power

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<sup>3</sup> Zorpette, "Re-engineering Afghanistan"

<sup>4</sup> Mohsin, "Power to the People"

<sup>5</sup> Energy Information Administration, "Afghanistan"

<sup>6</sup> DABS, "Afghan Energy Sector Overview"

<sup>7</sup> Liu, Masera, and Essler, *World Small Hydropower Development Report 2013: Afghanistan*

generation. For comparison, the total generating capacity of the Grand Coulee Dam on Washington State's Columbia River is 6,809 MW.

DABS estimates that demand will reach 3,000 MW by 2020. In a presentation to the 2013 Asia Energy Security Summit held in Bangkok, Thailand, Khondkar Abdus Saleque, a representative of Afghanistan's Ministry of Mines, stated that "National production is set to increase to 1,200 MW over the next five years," and that the goal is to "increase energy supply to 1,800 MW over the next 5 years."<sup>8</sup>

Historically, the largest portion of Afghanistan's domestic power generation comes from moderate and small-scale hydropower sources. Aside from diesel generators, the country also uses off-grid mini and micro-hydro (<500 kw) and solar-based power systems that provide off-grid supply to about 100 villages.<sup>9</sup> These off-grid supplies are used as a primary source of electricity in the rural areas where access to the national grid system is not available.

In 2012, 72.8% of the electricity consumed was imported.<sup>10</sup> Most of the imported power went to cities, towns, and villages in border areas. However, a 442-km high voltage (220 kV) transmission line now runs from the Uzbekistan border across the Hindu Kush to Kabul, with a capacity of just under 300 MW.<sup>11</sup> This was built with the help and donations from the US Agency for International Development (USAID), the Asian Development Bank, and the World Bank.

## Hydropower

Hydropower is the primary source of domestic electricity production in Afghanistan. There are currently 11 hydroelectric power plants each producing more than one megawatt. Most of this electricity goes to urban centers. Capacity in rural areas comes from hundreds of small, mini, and even micro (single dwelling) hydro plants, installations, as well as an unknown number of private diesel generators. Informal assessments suggest that perhaps 30% of these smaller installations are not working.<sup>12</sup> Yet more than a few observers testify to the high value of small-scale hydro plants for bringing electricity to people in villages away from population centers.<sup>13</sup>

Total hydropower capacity for Afghanistan has been estimated at 23,000 to 25,000 MW, with less than two percent developed. Of the total, 1,200 MW is assigned to small, mini, and micro capacity plants whose current development and output is not fully recorded but could be on the order of 500 to 600 MW.<sup>14</sup> The 23,000 to 25,000 MW figure should be considered somewhat theoretical due to the variable degree of annual snow cover observed over the past decade, as well as the predicted future melting of glaciers in the Pamir Mountains.

There are currently six medium-scale hydroelectric power plants operating in the country. They include:

*Darunta Dam*, near Jalalabad – 11 MW – case study provided (see below)  
*Kajaki Dam*, near Kandahar – 33 MW - case study provided

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<sup>8</sup> Saleque, "Introduction to Petroleum and Mineral Resources of Afghanistan"

<sup>9</sup> Ashraf, "Energy Sector Afghanistan"

<sup>10</sup> DABS, "Afghan Energy Sector Overview"

<sup>11</sup> Ibid.

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<sup>12</sup> Liu, Masera, and Essler, *World Small Hydropower Development Report 2013: Afghanistan*

<sup>13</sup> Zorpette, "Re-engineering Afghanistan"

<sup>14</sup> Ibid.

*Mahipar Dam*, near Kabul – 66 MW – operational but lacking sufficient water  
*Naghlu Dam*, near Kabul – 100 MW – operational, provides most of the electricity used in Kabul;

*Sarobi Dam*, near Kabul – 22 MW  
*Pul-i-Khumri*, in Pul-i-Kumri (Baghlan Province), two facilities, total ~12 MW<sup>15</sup>

The following information, covering two of these hydropower plants, reflects the general state of the country's facilities.

#### *Darunta Dam*

This installation is located on the Kabul River in the Nangarhar province, 80 km east of Kabul and seven kilometers west of Jalalabad.<sup>16</sup> It was constructed in 1964 by the former Soviet Union as part of their international assistance outreach programs, and originally produced 45 MW of electrical power. It is used as an essential irrigation water pumping station in the agriculture-dependent Jalalabad region. Currently, the hydroelectric plant houses three turbine units, each with a capacity of only 3.8 MW, yet all units combined now produce only eight MW.<sup>17</sup> This reflects a lack of maintenance over the past 30 years, due to conflict, absence of equipment or technical expertise. The power station is now at risk of failing.

On October 2004, USAID committed \$10 million of an \$11 million project, to “rehabilitate, upgrade, and modernize the second of three turbine-generators, to ensure long term reliability and operation at the maximum installed capacity” and to “build local capacity through on-the-job training of local operators and technicians, as well as management, to ensure that they have the

skills and resources needed to maintain the plant in the long term.”<sup>18</sup> The remaining 10% cost of the one million dollars was negotiated at the contract signing ceremony and to be covered by the Governor of the Nangarhar province, Gul Agha Sherzai.

Specific work included “Replacing the existing turbine runners with fixed blade runners thereby providing an increase in power of up to 40%” - from eight to 13.5 MW.<sup>19</sup> The first anticipated project completion date was set for March 2006, and the most recent date for January 2012. Yet the project was never completed due to financial complications. On March 2013, USAID announced that it would no longer fund the remainder of the project, citing Governor Sherzai's unwillingness to fulfill his financial obligations. Governor Sharzai denied the accusation. The Darunta Hydroelectric Power Plant Rehabilitation was never completed and USAID funds were channeled to the Afghan Infrastructure Trust fund for other projects.<sup>20</sup> The dam remains in critical need of repair.

#### *Kajaki Dam*

The Kajaki Dam is one of two major hydroelectric plants generating power for the south region of Afghanistan. It is located on the Helmand River in Helmand province, 160 km Southeast of Kandahar, the second largest city in the country. Kajaki Dam generates 33 MW of electricity, and is of strategic importance to the region due to its supply of water for irrigation. Twelve of the 33 MW produced are transmitted to Kandahar, yet the city's needs are much higher. It continues to suffer from a chronic power shortage, with households having only six to eight hours of electricity per day

<sup>15</sup> Ashraf, “Energy Sector Afghanistan”

<sup>16</sup> USAID Project Information Sheet: “Darunta Hydroelectric Power Station – Rehabilitation”

<sup>17</sup> Ibid. Page 1

<sup>18</sup> Ibid. Page 1

<sup>19</sup> Ibid. Page 2

<sup>20</sup> Wasdam, “USAID suspends work on the rehabilitation of Darunta Dam”

and half of the city's factories shut down on a regular basis.<sup>21</sup>

Between 1951 and 1953, the dam was constructed with American funding to irrigate the Helmand River Valley. In 1975, USAID funded the installation of two hydropower-generating units, 16.5 MW each, bringing the total electricity production to the current 33 MW. The powerhouse was designed to hold three equally sized power units, however, the third unit was never delivered. Following the invasion of Afghanistan, the US Air Force (USAF) bombed the Kajaki Dam on October 2001.

In 2005, USAID made the decision to install a third power unit of 18.5 MW that would potentially raise electricity production to 51.5 MW. In September 2008, a detachment of 3,000 British soldiers transported a six million dollar, 210-tonne turbine in a 100-vehicle convoy over 180 km along the Helmand river valley, from Kabul Airport to Kajaki Dam, bypassing Sangin, the most violent part of Helmand.<sup>22</sup>

Currently, the turbine awaits assembly and installation. The current USAID contractor, GFA Consulting, is making final efforts as NATO troops have withdrawn from the region. Due to the withdrawal, USAID signed a transfer of management responsibilities of oversight of the installation of the turbine to DABS in May 2013. DABS awarded a \$75 million contract to GFA consulting in December 2013. The anticipated installation of the power unit is scheduled for March 2016.<sup>23</sup>

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<sup>21</sup> USAID, "Kajaki Dam Powerhouse Boosts Power to 33 MW"

<sup>22</sup> Leithead, "UK troops in huge turbine mission"

<sup>23</sup> USIAD. "Installation of Turbine Generator Unit 2 at Kajaki Dam Hydropower Plant."

## Gas

As a long-term goal, Afghanistan has much potential for gas-fired power generation. The country has proven natural gas reserves of 49.6 billion cubic meters (bcm) and a total estimated resource of over 1.6 bcm (59 Tcf). Most of these reserves are therefore yet to be tapped and developed. A small (~100 MW) gas-fired power plant was built by the Soviets in the late 1970s near Mazar-e-Sharif. This plant was converted to coal in the early 1980s, so that gas could be sent across the border into then-Soviet territory.<sup>24</sup>

The two main hydrocarbon basins are located in the north and extend into neighboring central Asian states. The larger basin is in the Amu Darya Basin Province, encompasses 417,000 km<sup>2</sup> and includes portions of Turkmenistan and Uzbekistan. The second is in the Afghan-Tajik Basin Province, with an area of 97,000 km<sup>2</sup>, which spreads into Tajikistan. According to the USGS, Afghanistan has 444 bcm in natural gas<sup>25</sup> resources.

Afghanistan also has significant resources of oil and coal. These, too, could be explored for power generation. Natural gas is considered the superior choice by the current government, due to its lower levels of air pollutants and carbon emissions.

Afghanistan's government is partnered with the ongoing TAPI pipeline project, scheduled to open in 2018. This will deliver Turkmenistan natural gas from the northern portion of the Amu Darya Basin into India, running through Afghanistan and Pakistan. The pipeline will transport 33 bcm per year.<sup>26</sup> Afghanistan will purchase 500

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<sup>24</sup> Ashraf, "Energy Sector Afghanistan"

<sup>25</sup> USGS "Assessment of Undiscovered Petroleum Resources of North Afghanistan"

<sup>26</sup> *Times of India*, "Pradhan in Pak to Push TAPI Pipeline"; Saleque, "Introduction to Petroleum and Mineral Resources of Afghanistan."

million cubic meters of gas from it in the first 10 years, and one bcm and 1.5 bcm in the following second and third decades respectively. The country will also collect about \$300 million per year in transit fees.

The Ministry of Mines and Petroleum of Afghanistan is the primary governmental entity tasked with energy production. This organization states:

“The Ministry of Mines is working on a comprehensive development plan to replace outdated equipment and infrastructure in the gas fields and modernize the operations of Afghan Gas Enterprise to support renewed demand for energy resources in Afghanistan. The plan includes the rehabilitation of several gas wells in producing fields and a revitalized program to begin production from new fields, virtually untapped during Soviet times. These new gas supplies will require investment in new infrastructure including natural gas processing plants and pipelines to deliver clean, domestically produced energy supplies to residents and industrial customers in Afghanistan.”<sup>27</sup>

The Ministry of Mines is working with international donors such as USAID to construct a new 200 MW gas-fired thermal power plant south of Sheberghan, Jawzjan Province<sup>28</sup>.

In order for natural gas to be used as fuel to generate electricity, one or more processing plants must be operational to turn raw gas into a dry, pipeline-quality product. Obviously, a gas-fired power plant is also needed, which will be connected to the national grid. At present, Afghanistan has one such effort being developed, the

Sheberghan Gas Development Project. This project entails: 1) the drilling and rehabilitating of three gas wells in the Juma and Bashikurd gas fields; 2) designing and building a gas processing (“sweetening”) plant; and 3) attracting private investors to finance the construction of 200 MW gas-fired power plant.<sup>29</sup>

Currently, hydrocarbon operations are handled by the Afghan Gas Enterprise, a governmental agency that will play a major role in supplying gas to the Sheberghan power plant. A 220 kv transmission line from Sheberghan to Marzar-e-Sharif will be constructed to supply the latter with power.<sup>30</sup> Mazar-e-Sharif is considered a key urban center, as it is a gateway to trade and transport links with Central Asia and is not a major target of insurgent attacks. As of early 2015, there are hopeful signs that the Sheberghan Project will be completed. A consortium of private investors has secured \$582 Million in funding commitments for construction and operational costs<sup>31</sup>.

Natural gas offers the opportunity to diversify power sources away from an over-reliance on hydroelectricity. In addition to the resources already noted, there are potentially significant gas deposits in other parts of the country where small discoveries of oil and gas seeps exist, such as Helmand field in Helmand province, Katawaz field stretching along the Pakistani border, and Tirpul hydrocarbon field in the northwestern Heart region, stretching into Iran. These areas are to be further surveyed and explored. At this point, however, it would be logical to focus priorities on existing and underdeveloped wells in the Afghan Tajik and Amu Darya fields. As with the example of the Sheberghan Gas Development Project, it would be advantageous from an

<sup>27</sup> Ministry of Mines and Petroleum, “A Brief History of Natural Gas in Afghanistan”

<sup>28</sup> USAID, “Sheberghan Gas Development Project”

<sup>29</sup> Ibid.

<sup>30</sup> USAID, “Sheberghan Gas Field, Critical Path”

<sup>31</sup> Ibid.

economic and strategic standpoint to build the power plants on the territory of the established gas fields, in close proximity to the wells.

With the TAPI pipeline, Afghanistan will have access to additional natural gas imports. The pipeline will cross Afghan territory in its western and southern portions, away from the current hydrocarbon deposit basins of the northern provinces. These two regions have also been identified by USGS as potential earth mineral deposits sites, which in the future will potentially develop their own extractive industry sites.

## Oil

Afghanistan's two primary hydrocarbon basins contain both natural gas and crude oil deposits. According to assessments published by the USGS in 2011, the estimated mean volumes of undiscovered and technically recoverable crude oil in the Amu Darya basin province are 962 million barrels (MMB), and 946 MMB in the Afghan-Tajik basin province. Afghanistan's has approximately 1.9 billion barrels of possible oil reserves, plus 560 MMB of natural gas liquids (NGL).<sup>32</sup> Although reserves are present, Afghanistan does not have its own petroleum companies that can drill and operate its oil fields, and thus must contract with foreign firms in order for any drilling to occur.

Afghanistan's first major international oil production contract was signed in December 2011 with the China National Petroleum Corporation (CNPC) and Afghan-owned joint venture partner Watan Oil and Gas. The contract applied to three oil blocs, with an estimated 160 MMB of recoverable oil, in the Sar-e Pul and Faryab provinces in the

Amu Darya basin. Each bloc contains at least one known field or discovery well. Representatives of CNPC estimated China's investment at \$400 million.<sup>33</sup> The agreement is valid for 25 years and commits CNPC to drill new wells and build a refinery. At the time of the signing, the Afghan Ministry of Mines estimated a seven billion dollars income potential over the life of the contract, given an oil price of \$100 per barrel.<sup>34</sup> By early 2013, CNPC had begun production from at least one of its blocs. Conflicting figures have been given for oil flow rates, with a minimum of 1,950 barrels per day. CNPC stated it originally expected to extract 1.5 million barrels annually.<sup>35</sup>

The CNPC project faced difficulties from the beginning that continue to stall production. As of 2014, serious disagreements between Watan and CNPC over cost-sharing and financial responsibilities ensued, bringing further development to a halt. There also appears to be questions regarding the transparency of the original contract and the size of the government's royalty.<sup>36</sup>

Another problem has been the 2015 collapse in oil prices from 50 to \$60/bbl, which has undoubtedly moved Afghanistan down the priority list for CNPC. The company has much larger interests and activities in Turkmenistan's immense gas resources to the north. Despite repeated announcements of design completion and construction start dates, no refinery has yet been built.

Due to a present lack of infrastructure, Afghanistan has to import oil products from Russia, the United Arab Emirates (UAE), Turkmenistan and Uzbekistan, at an annual

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<sup>32</sup> USGS, "Assessment of Undiscovered Petroleum Resources of North Afghanistan"

<sup>33</sup> Harooni, "Afghanistan signs major oil deal with China's CNPC"

<sup>34</sup> *Ibid.*

<sup>35</sup> Shalizi, "China's CNPC begins oil production in Afghanistan."

<sup>36</sup> "Amu River Basin contract seen detrimental for Afghanistan," *Pajwok Afghan News*.

cost of \$3.5 billion. Afghanistan is capable of using its own resources to replace these imports - as well as potentially producing fuel oil for a power plant - but only if it can create and enact a more transparent contract system.

## **Coal**

According to the USGS, Afghanistan has “moderate” volumes of accessible coal. In 1975, Soviet geologists estimated the existence of 400 million tons of accessible reserves; however, new assessments suggest the resource could be significantly larger.<sup>37</sup>

Most of Afghanistan’s coal is located at depths requiring underground mines for extraction. Coal has been used for many years, at least since the 1920s, to provide heat for homes, local businesses, commercial enterprises, and process heat for industries, such as textile manufacturing, food processing, and cement making. While production has risen greatly since 2005, coal is prevented from becoming a ubiquitous fuel due to lack of transportation.

Coal deposits occur in a long, discontinuous belt through the north-central portion of the country, from the province of Badakhstan in the northeast to Herat in the west. Small local mines and several larger extraction sites are mostly unmonitored - roughly 20% of them are government-run and very dangerous.<sup>38</sup> Small mines often have no roof supports. Dust, gas, collapses, and explosions are consistent hazards. Safety levels are well below modern standards and yearly deaths are likely in the hundreds.

While coal is likely to be the cheapest source of electricity for power plants with

capacities over 100 to 150 MW, there are concerns with using it as a main fuel. Issues include the physical health of miners to include the ever-present possibility of disasters taking place. Afghanistan is not yet at a point where safety regulations, imposed by the central government, can be expected to command widespread obedience. Moreover, there are also issues of carbon emissions, as well as air and water pollution.

## **Nuclear Energy**

Nuclear energy has been proposed as a viable option for supplying electric power in Afghanistan.<sup>39</sup> The primary benefit of nuclear power is that it can provide large amounts of reliable base load electricity at low cost for fuel, operation, and maintenance. The disadvantage is that it requires high levels of initial capital investment, as well as trained technical expertise to operate safely. In addition, there is likely to be resistance from several countries about placing nuclear materials in the same geographic space as Taliban insurgents. Certainly, security would need to be a well-considered factor. Though the building of a nuclear device from spent fuel is not possible without reprocessing facilities, a “dirty bomb” would still be conceivable if such fuel were stolen.

Options for Afghanistan include two basic types of plants. First, moderate and large-scale power plants, supplying from 300 MW up to 1,500 MW or more could be built to provide power to various parts of the country. Such plants’ currently cost roughly two to five billion dollars. A second option is to use a series of smaller; cheaper (~\$350 to \$500 million) reactors sites near major population centers.

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<sup>37</sup> USGS, Projects in Afghanistan

<sup>38</sup> Saleque, “Introduction to Petroleum and Mineral Resources of Afghanistan”

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<sup>39</sup> U.S. Department of State, “Peaceful Nuclear Cooperation: United States & Afghanistan.”

The Small Modular Reactor (SMR) is a new generation of nuclear power plants designed to solve the problems associated with large nuclear plants. Among its stated advantages are: 1) modularity (reactors built and assembled in one place, shipped complete to final site); 2) lower capital investment; 3) reduced water use and increased flexibility (can be built at various sizes, installed individually or in sets); 4) non-proliferation (can be installed underground and yields only small amounts of nuclear waste); 5) long interval refueling (current designs suggest up to eight to 10 years between refueling).<sup>40</sup>

SMRs are considered a new technology due to their advanced design. However, “mini-nukes” have existed for decades, especially in the former Soviet Union. Presently there are more than 45 SMR designs under development for various purposes and applications, and the projected timelines of readiness for deployment range from 2016 to 2020, and 2025 to 2030.<sup>41</sup>

Yet as with any potential power generation option – disadvantages and risks are always present. The most obvious one is security. While it is the duty of Non-Proliferation (NPT) treaty signatories to refrain from building nuclear weapons by the countries that do not already possess them, it is a high-risk case to entrust these countries to run their own nuclear programs without supervision and expect compliance.

Afghanistan should not be encouraged to develop its own nuclear program but should instead be provided the opportunity to acquire dual-use materials to potentially build nuclear energy facilities under international supervision. As a signatory in 1970 to the Nuclear Non-Proliferation

Treaty (NPT), Afghanistan should uphold its principles, and refrain from uranium enrichment practices, although uranium deposits exist in Helmand province.<sup>42</sup>

Another security related obstacle is the possibility of a nuclear energy plant being attacked terrorist groups. Guaranteeing security will be challenging given Afghanistan’s warring history. Small Modular Reactors are preferred over large nuclear plants, as SMRs could be constructed and operated underground, which would be a more favorable situation since a higher level of security would be more feasible.

Another drawback of nuclear power generation is its cost, which, requires large initial investments. Construction costs are high, but after the plant is built and becomes operational, the cost associated with operating and maintaining the facility is much lower.

### **Non-Hydro Renewable Energy**

Afghanistan has significant solar and wind resources, along with important geothermal potential. Solar and wind power facilities have been built in a few areas, with small-scale solar power projects now being used in hundreds of villages.<sup>43</sup>

Such energy schemes, are intended for small-scale use only, mainly individual homes, irrigation pumps, and subsidiary power for schools, mosques, medical clinics, or small businesses that mainly depend on diesel generators or hydropower. The so-called “village solar,” seems unlikely to replace large generators in most cases. Moreover, maintenance of solar installations has proved to be a challenge in rural areas of developing nations.

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<sup>40</sup> WNA, “Small Nuclear Power Reactors.”

<sup>41</sup> Ibid.

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<sup>42</sup> Hamdard, “Is Afghanistan’s Uranium being plundered?”

<sup>43</sup> Ashraf, “Energy Sector Afghanistan”

Presently, non-hydro renewables have little to no chance of being applied to sizeable mining operations with power demands in the hundreds of kilowatts. As for geothermal resources, these are potentially quite large but have not yet been explored.

### Power Transmission

Responsibility for Afghanistan’s electricity transmission rests with Da Afghanistan Breshna Sherkaat (DABS), which acts as a national power utilities company advised by USAID. One of DABS’ goals is to secure and expand the nation’s electrical grid system.

Presently, this system is not an interconnected network (*Figure 1*). Instead, “Nationally, seven grids distribute power, with supply coming from domestic hydropower generation, imported power and thermal generation.”<sup>44</sup> These seven local grids are included within four main power and transmission systems, as follows:

1. North East Power System (NEPS). This is the largest grid area, linking 17 load centers (including Kabul and Mazar-i-Sharif) with Uzbekistan & Tajikistan, with 220 kv and 110 kv lines.
2. South East Power System (SEPS) consisting of Kandahar linking

Figure 1. Map showing location and extent of separate power grid systems, as well as power plants and substations. ( Zorpette, 2011).



<sup>44</sup> DABS, “Afghan Energy Sector Overview”

- Kajaki (110kv)
3. Herat System linking Herat Zone with Iran (110kv)
  4. Turkmenistan system linking Herat and areas east to Shebirghan and Mazar-e-Sharif (110 kv).

A majority of Afghanistan's current electric power comes in the form of imports from several neighboring countries. Most lines are 110 kv, which limit the degree of long-distance transmission. The government has plans to expand the network of 220 kv lines and to install a 500 kv line from the Turkmenistan border to Sherbirghen.<sup>45</sup>

The network that poses the most issues is located in the south - the Kajaki Dam and Kandahar City, the second largest in the country. Though the Kajaki hydro plant generates approximately 33 MW, only half of this number reaches Kandahar, in part due to illegal taps put in the transmission line by the Taliban. Much of this stolen power goes to work irrigation pumps that supply water to poppy fields for drug trafficking, whose major profits return to the Taliban.<sup>46</sup>

In March 2014, DABS signed several contracts to expand NEPS from Kabul to Kandahar, thus linking NEPS and SEPS. This connection would improve power availability for mining operations in this part of the country. The \$151 million funding for the effort is supplied by USAID.<sup>47</sup> There are concerns, however, that sabotage by the Taliban could impact the total project in the Kandahar area.

Linking the NEPS and the Herat systems is a logical goal, as this would allow for power delivery to more than half of the ring road and vicinities. This would supply power to

northern areas where oil, gas and other number of significant mining opportunities exist.

## Conclusion

Afghanistan's electricity power grids and transmission have historically been built by foreign aid, including the US, the former Soviet Union, and more recently by NATO coalition forces. Afghanistan's first decade under a post-Taliban government has seen both major advances in access to electricity as well major disappointments.

Progress has been intermittent, weakened by failures, poor project choices and substandard management by USAID. But it has also been definite and encouraging on both large and small scales.

Key issues for Afghanistan's power sector include the following:

- How to further the repair, upgrading, and continued maintenance by local people of existing hydropower facilities, including small, mini, and micro installations that provide power to local villages and businesses.
- The need to begin development of non-hydro domestic sources for power generation. This means weighing the risks, costs, and benefits of natural gas, oil, and coal.
- How much to rely on imported power in the short- and long-term; what level of balance should be targeted between imported and domestic sources.
- How to expand and connect the existing grid networks, and how to integrate these with local power generation, e.g. from small hydro.

<sup>45</sup> DABS, "Afghan Energy Sector Overview"

<sup>46</sup> Zorpette, "Re-engineering Afghanistan"

<sup>47</sup> Korshak, "DABS to Extend Power Grid to Southern Afghanistan."

- Whether to consider new power technologies, like Small Modular (Nuclear) Reactors, that might be appropriate to Afghanistan's mixture of centralized and localized authority structures.
- What kinds of public-private investment arrangements might work best for achieving the above goals?
- The need to consider the short and long-term externalities of various choices for power generation. This would be centered on environmental and public health impacts.

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# Transportation Infrastructure

## *Building the Path to a Better Afghanistan*

Adam Easter

*“Poor iron won’t make a sharp sword”*

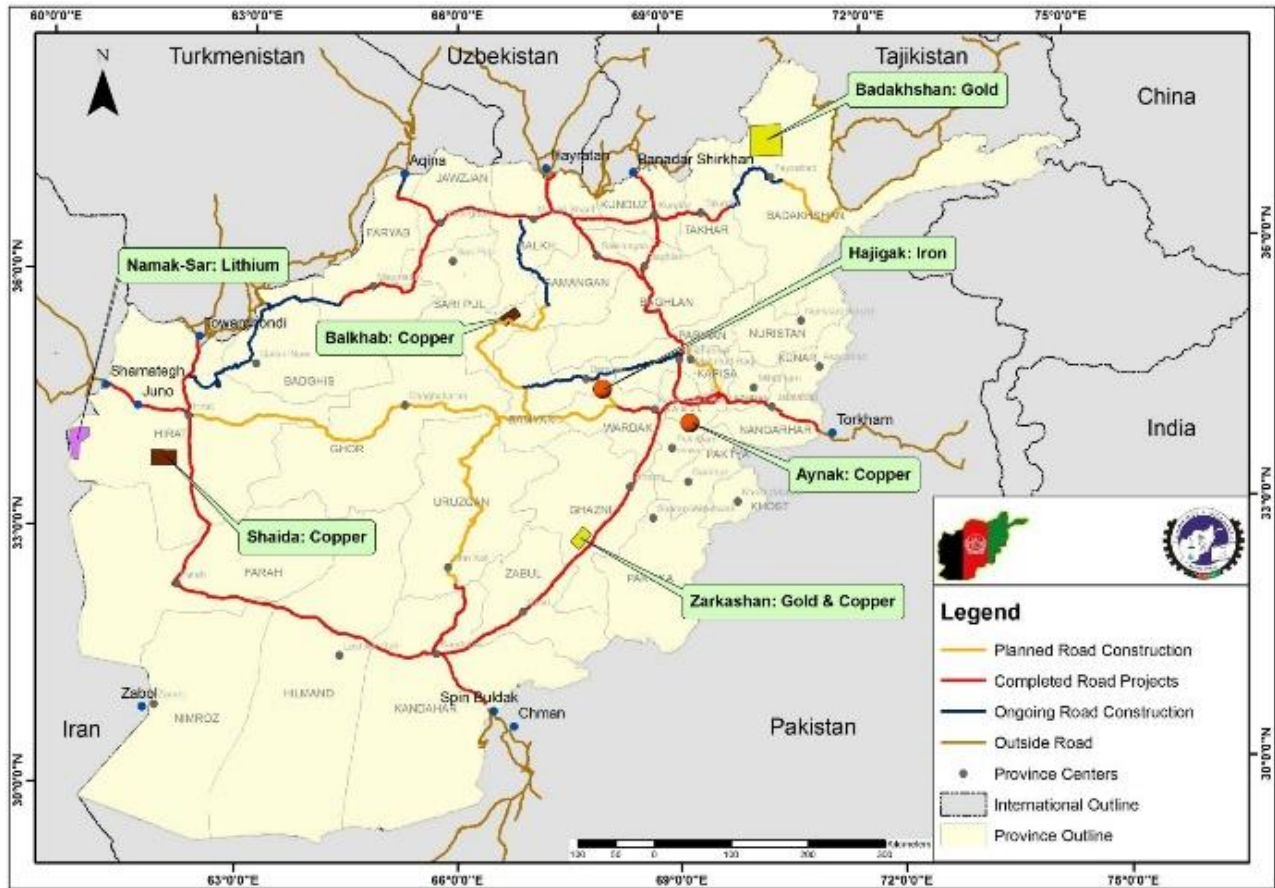


Figure 1. Existing roads, ongoing road construction, and planned major roads within Afghanistan in addition to roads in and out of the country.

### Introduction

Future economic development in Afghanistan, particularly if related to its mineral wealth, will not be possible without major improvements in transportation infrastructure. Decades of war, insurgency, and poverty have not been kind to the country’s system of roads and railways.

Afghanistan ranks 158<sup>th</sup> out of 160 nations in the 2014 World Bank’s Logistics

Performance Index (LPI). The index reflects the “quality of trade and transport related infrastructure” and the “timeliness of shipments in reaching destination within the scheduled or expected delivery time.”<sup>1</sup>

Afghanistan’s transportation infrastructure is “inadequate.” This remains the case despite significant improvements that have already been made.

<sup>1</sup> “Logistics Performance Index.”

## Roads

### *Existing Network*

Road construction has been the second largest recipient of US aid since the US' invasion of Afghanistan in 2001<sup>2</sup>. In fact, over four billion dollars have been invested in Afghanistan's roads, since the overthrow of the Taliban<sup>3</sup>. As of 2014, the US had invested \$2.2 billion in road construction, operation, and maintenance alone<sup>4</sup>.

Afghanistan now has greater domestic and regional transportation capacity with the near completion of the "ring road," and the development of the Northern Distribution Network (NDN). Maintenance and security concerns continue to plague existing road networks.

### *Ring Road*

The Ring Road is the single most important piece of infrastructure within Afghanistan. This transit corridor is so vital that three of every four aid dollars appropriated towards road construction has gone towards this project<sup>5</sup>. The ring road is an immense highway system that loops around the Hindu Kush Mountains and connects the entire nation of Afghanistan. The road stretches 3,058 km<sup>6</sup> starting in Herat and moving first south, then east, through the provinces of Farah, Nimruz, Helmand, Kandahar, Zabul, Ghazni, Wardak, Kabul, Parwan, Baghlan, Balkh, Jowzjan, Faryab, Badghis, and ultimately back to Herat<sup>7</sup>. The Ring Road is designed to run through every major city in Afghanistan.

Most of the Ring Road is paved, with the exception of an unfinished length of dirt road in the north of the country that runs primarily through the Badghis province<sup>8</sup>. The Salang Tunnel allows the ring road to pass through the Hindu Kush north of Kabul. The highway "connects 16 of Afghanistan's 34 provinces"<sup>9</sup>. Although the ring road runs through approximately half of all Afghan provinces, over two thirds of Afghans live within 48 km of the highway<sup>10</sup>.

Various Afghan governments have attempted to complete the Ring Road since construction began in the 1960s, but consistent conflict has prevented the completion of the project. The Salang Tunnel is a 2.7 km-stretch of roadway through Salang Pass that was originally completed with substantial Soviet assistance in 1964<sup>11</sup>. Highway One, which connects the 483-km distance between Kabul and Kandahar, is the most important and heavily trafficked segment of the Ring Road. This stretch of road was originally completed in 1966 with \$39.3 million in US assistance, from a total fund of \$42.9 million<sup>12</sup>. Reconstructing Highway One was one of the first projects completed after the 2001 US invasion<sup>13</sup>. No road projects were implemented during the Mujahedin era, from 1989 to 1996, and only modest improvements were made to Afghan road infrastructure under Taliban rule from 1996 to 2001<sup>14</sup>.

The Ring Road remains incomplete after more than 50 years of sporadic development. The last remaining unpaved

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<sup>2</sup> Qayoom Suroush, "Going in Circles."

<sup>3</sup> Ibid.

<sup>4</sup> *Economic and Social Development*.

<sup>5</sup> Qayoom Suroush, "Going in Circles."

<sup>6</sup> "On Afghanistan's Road to Somewhere, Taliban Block the Way | National Security & Defense | McClatchy DC."

<sup>7</sup> Qayoom Suroush, "Going in Circles."

<sup>8</sup> Ibid.

<sup>9</sup> Sieff, "After Billions in U.S. Investment, Afghan Roads Are Falling Apart."

<sup>10</sup> Qayoom Suroush, "Going in Circles."

<sup>11</sup> Ibid.

<sup>12</sup> Ibid.

<sup>13</sup> Sieff, "After Billions in U.S. Investment, Afghan Roads Are Falling Apart."

<sup>14</sup> Qayoom Suroush, "Going in Circles."

stretch of road is from Akina in Faryab Province, through Badghis Province, and on to Herat. This equates to merely 233 km of additional pavement. Some of the proposed routes exist as dirt roads. Other sections would need to be built from scratch.<sup>15</sup> Badghis is the poorest Afghan Province and the Taliban has used the underdevelopment of Badghis to make inroads in northern Afghanistan. This development has complicated the latest attempt of completing the Ring Road. Craig Steffensen, the director of the Asian Development Bank (ADB), has recommended that the organization hire a “special force of 500 Afghan police officers” from nearby Faryab Province to safeguard workers. Kidnappings and attacks on road crews are on the rise in the region.<sup>16</sup>

Nevertheless, work continues. In January 2012 the ADB awarded a \$477 million dollar contract to two companies collaborating on the project; METAG, a Turkish company and ECC International Constructors, an American company. The contract stipulates completion of the link in four years.<sup>17</sup> Both companies have extensive experience building large development projects in Afghanistan.<sup>18</sup> METAG’s involvement is especially symbolic as a gesture of goodwill from Turkey, who would like to expand their interests in the region. Completing the Ring Road is an essential step towards connecting Afghanistan together. Additionally, the highway will fill a major demand for transportation between Central Asia and East Asia with the Persian Gulf, as well as South Asia, with goods and markets northward towards Central Asia and Europe.

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<sup>15</sup> Ibid.

<sup>16</sup> “On Afghanistan’s Road to Somewhere, Taliban Block the Way | National Security & Defense | McClatchy DC.”

<sup>17</sup> Qayoom Suroush, “Going in Circles.”

<sup>18</sup> “ECC International Constructors, LLC (ECC) and METAG Insaat Ticaret A.S. (METAG) Joint Venture Wins \$477 Million Ring Road Project in Afghanistan.”

Proper road maintenance has emerged as a major challenge to all road infrastructures in Afghanistan. This especially pertains to the Ring Road because the highway bears the vast majority of heavy auto traffic in the country. Although the project is still incomplete after 13 years, much of the completed segments are neglected and require significant repair. The US military reports that the vital segment of road between Kabul and Kandahar “has deteriorated roughly 40%” in the past two years alone<sup>19</sup>. Recently, casualties and disruptions have increased because of an inability to repair heavy damage caused by IEDs and heavy use<sup>20</sup>. As long as the Afghan road network remains damaged, transportation will remain unpredictable and unreliable.

#### *Northern Distribution Network*

The Northern Distribution Network (NDN) is a shipping route that was developed by the US to ship non-lethal supplies from Europe into Afghanistan. Trains take goods from ports in the Baltic States through Russia into Central Asia and down into Afghanistan. The overall transport mechanism is a mix of road, rail, and air methods. Alternatively, some goods are shipped by boat across the Black Sea, then overland through the Caucasus, later over the Caspian Sea to Central Asia, and finally into Afghanistan. Most goods from the NDN enter Afghanistan through the Hairatan gateway border crossing with Uzbekistan. The US has relied on, and increasingly developed this transit route as a reaction to souring relations with Pakistan<sup>21</sup>.

The NDN is an important linkage between Europe and Afghanistan. The route could

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<sup>19</sup> Sieff, “After Billions in U.S. Investment, Afghan Roads Are Falling Apart.”

<sup>20</sup> Ibid.

<sup>21</sup> *Central Asia and the Transition in Afghanistan.*

continue to serve Afghan interests even after the US ends its service mission. Problems within the network persist because much of the trade is one sided, into Afghanistan<sup>22</sup>.

### *Tajikistan*

In August 2007, the US Corps of Army Engineers completed a bridge across the River Panj into Tajikistan. The bridge replaced an unreliable Ferry connection between the two countries. Leaders from both countries were present at the inauguration of the bridge and expressed optimism for the new connection<sup>23</sup>. The project was completed by the US at a cost of \$36 million. The US hopes the bridge will foster further north-south trade within Central Asia<sup>24</sup>. Trade across the new bridge could expand and connect with existing trade routes north to Central Asia and China. However, some observers are concerned that narcotics and militant extremists could more easily penetrate the already porous border with Tajikistan.

### **Developing Network**

#### *Gardez – Khowst Highway*

The Khowst highway stretches 101 km and connects the Paktia Province with the Khowst Province in the east of the country. The city of Gardez in Paktia is closely linked to the Ring Road and Kabul. Khowst sits along the Pakistan-Afghan border and is separated from Paktia Province and the rest of the country by mountains. Connecting these two regions will integrate Khowst within domestic trade networks and will also provide Gardez and the rest of the country

with another accessible route into and out of Pakistan.<sup>25</sup>

In June 2013 the Minister of Public Works at the time, Najibullah Ozhand, abruptly stopped construction on multiple projects, including the Khowst highway, in response to rampant corruption and poor-quality results. Infrastructure projects were halted because most contractors are accountable to foreign donors instead of the Afghan government. Therefore, issuing a moratorium on underperforming projects was the only action that the government could take to address the problem<sup>26</sup>.

Construction resumed a year later in June 2014. Much of the highway was already completed except for an unpaved 25 km stretch, which will require the construction of two bridges. Additionally, contractors will need to replace and repair existing bridges and drainage structures. Many of the completed segments were subpar and couldn't withstand seasonal inclement weather<sup>27</sup>. Finishing the highway is expected to cost approximately \$32.8 million. Completion is scheduled for the end of 2015<sup>28</sup>.

### **Maintenance**

Donor nations have serious doubts about the Afghan government's capability to maintain existing road structures. According to the US Department of Transportation "Afghanistan does not currently have sufficient funding and technical capacity to maintain its roads and highways"<sup>29</sup>. When the international community originally funded road projects, there was a widely

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<sup>22</sup> Ibid.

<sup>23</sup> "US-Made Tajik-Afghan Bridge Opens."

<sup>24</sup> Nasrullah Arsalai et al., *South Asia and Central Asia: Building Economic and Political Linkages*. Pg. 234

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<sup>25</sup> *Economic and Social Development*.

<sup>26</sup> Qayoom Suroush, "Going in Circles."

<sup>27</sup> "RECONSTRUCTION OF THE GARDEZ TO KHOST ROAD."

<sup>28</sup> *Economic and Social Development*.

<sup>29</sup> Ibid.

held expectation that Afghanistan's government would develop the capacity to maintain them. Subsequently, the US only appropriated approximately five million dollars annually for operating and maintaining the existing roads. Additional funding has not been made available<sup>30</sup>.

The 2015 draft budget for government operations, presented to Parliament early this year, allocates just 0.4% of the total funds for road maintenance. This allotment, which equals about \$17.3 million, will not sufficiently cover the cost of maintaining all the roads within the country. The Special Inspector General for Afghanistan Reconstruction (SIGAR) estimates that Afghanistan will need an additional \$100 million in order to maintain the current roads at an adequate level<sup>31</sup>.

Neglect and misuse of the existing road network has taken a serious toll on transportation infrastructure in the country. The World Bank recently reported that "85% of Afghan roads are in poor shape and a majority cannot be used by motor vehicles"<sup>32</sup>. Although, President Karzai and his cabinet approved the establishment of a road authority in August 2013 to address these problems, the Afghan government has not yet commissioned one. The Ministry of Public Works is tasked with funding and establishing the road maintenance authority<sup>33</sup>.

## Rail

### Regional Interests

Afghanistan has a severely underdeveloped railway system. *Figure 2* demonstrates Afghanistan's only rail infrastructure.

Uzbekistan, Kazakhstan, Tajikistan, Kyrgyzstan, and Turkmenistan have "a developed railroad network"<sup>34</sup>. Pakistan has a coherent rail system that runs near the Afghan border in two separate corridors. Furthermore, the Pakistani network has two rail connections into India. Iran has been heavily investing in its own rail system that links the majority of the country together.

Demand for greater rail connectivity in and around Central Asia is increasing and represents a huge opportunity. Expanding the rail network could prove lucrative and mutually beneficial for Afghanistan and its neighbors. Iran has efficient rail connections to Turkey and, by extension, Europe. Again, railways into Pakistan continue on into the famed Indian rail network.

Finally, rails into Central Asian Republics connect directly to China, Russia, and on into Europe. New Silk Road proponents have even expressed interest in developing a rail connection through the Wakhan corridor and into the Chinese network. However, development of direct rail infrastructure into China does not appear economically viable under current conditions.



Figure 2. The only rail line in Afghanistan in red and the proposed "Rail Ring" in blue that connects to rail networks in neighboring countries.

<sup>30</sup> Ibid.

<sup>31</sup> Qayoom Suroush, "Going in Circles."

<sup>32</sup> *Economic and Social Development*.

<sup>33</sup> Ibid.

<sup>34</sup> Nasrullah Arsalai et al., *South Asia and Central Asia: Building Economic and Political Linkages*. (Page. 223)

## Track Gauge

Afghanistan sits on the crossroads of three major regions: Central Asia, South Asia, and the Middle East, as shown by *Figure 3*. Each region has a different track gauge from one another. Track gauge is the width between the two tracks of a railroad. When a train travels between two gauges, the train must stop and adjust the width of its wheels, referred to as a “break in gauge”.

To the north, nations use the Commonwealth of Independent States (CIS) gauge that measures 1,520 mm. Trains in Pakistan and India use the Legacy gauge that measures 1,676 mm. In Iran the “Standard” gauge used measures 1,435 mm. Most tracks throughout the world use

Standard gauge<sup>35</sup>. This poses a unique problem to Afghanistan because the nation has essentially no railroad infrastructure and must choose one of three potential gauge widths.

## Existing Network

### *Mazar-e-Sharif – Hairatan*

There is only one railway in Afghanistan. The track spans from Hairatan on the border of Uzbekistan with the major northern city of Mazar-e-Sharif. The route is an extension of the well-developed rail network of Uzbekistan into Afghanistan. The line runs a distance of just 75 km from the border to Mazar-e-Sharif. Fortunately, an Asian Development Bank (ADB) grant paid \$165



Figure 3.<sup>1</sup> This map shows all of the rail lines in the region according to track gauge. Each region uses a different gauge from one another and are therefore incompatible and require a “break of gauge” to travel trains between tracks of different gauge width.

<sup>35</sup> Jonathan H Klein, John H Winner, and Jeremy N Drew, “RAILWAY DEVELOPMENT PLAN.”

million of the cost of the project, which left the Afghan government responsible for the remaining five million dollars of the \$170 million total cost<sup>36</sup>. Most of the Afghan expense went into preparing land for construction and securing land rights along the route. Developing sophisticated infrastructure is viable and may prove vital to the future Afghan economy.

A significant portion of Afghan trade goes through Hairatan. The rail link cuts travel times and eases truck traffic coming across the bridge between the two countries. In fact, around “70% of cargo transiting the NDN enters” Afghanistan from Uzbekistan at the Hairatan border point<sup>37</sup>. In addition, locals in the area were excited at the prospect of a new railway. Rural Afghans along the route and around Mazar-e-Sharif saw the connection as an opportunity to sell their agricultural products to wider markets<sup>38</sup>. If developed transparently and responsibly, the mining industry could be similarly welcomed.

Afghanistan’s only railway highlights some of the problems for future rail development, chiefly maintenance. Proper maintenance requires highly technical know-how that very few Afghans have, therefore, the line is administered by Sogdiana Trans which is an appendage of Uzbekistan’s state-owned railroad company<sup>39</sup>. Another challenge for the railway is security. Although there have been no notable attacks on the infrastructure, there are 470 police officers tasked with protecting the mere 75 km of rail<sup>40</sup>. The huge gap in maintenance capability and the daunting security situation could hinder

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<sup>36</sup> Bank, “US Treasury Awards ADB for Landmark Afghan Railway Project.”

<sup>37</sup> *Central Asia and the Transition in Afghanistan*.

<sup>38</sup> Bank, “US Treasury Awards ADB for Landmark Afghan Railway Project.”

<sup>39</sup> Ratnam, “Afghanistan’s Minerals Await Vital Railroads.”

<sup>40</sup> *Ibid*.

further development of the Afghanistan rail network.

## **Developing Network**

### *Iran to Herat*

Iran is actively expanding their rail network into Afghanistan. The most logical route runs from Mashhad in northeast Iran to Herat. Iran has heavily invested in track improvements in its own territory including electrifying certain routes and “double tracking.” Double tracking refers to running parallel tracks on higher volume routes to achieve greater freight or passenger capacity<sup>41</sup>. There is a 58-km unfinished stretch remaining in order to finish the rail project connecting Mashhad, Iran to Herat city. The Afghan government is responsible for completing this section but the project has run into some problems, including increased insurgent activity in parts of Herat Province<sup>42</sup>. Once completed, the railway will facilitate increased trade in and out of Afghanistan.

### *Turkmenistan, Afghanistan and Tajikistan*

On March 20, 2013, the presidents of Turkmenistan, Afghanistan, and Tajikistan met in Ashgabat and announced a trilateral plan to construct a railroad that would run through the three countries. There are two proposed routes for this railroad. The first stretch starts in Atamurat, Turkmenistan and ends at the Afghan border in Imamnazar. The length of this segment runs approximately 85 km. Turkmen president Berdymuhamedov announced his intention to begin construction on this segment during the second half of 2013. Turkmenistan will fund its own segment and president

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<sup>41</sup> “Network Expansion Is in Full Swing.”

<sup>42</sup> Motevalli, “Iranian Engineer Brings Roads, Rail to Afghan West.”

Berdymuhamedov said that he will potentially assist in efforts to extend the line all the way to Akina in Afghanistan<sup>43</sup>.

The second stretch is contested among the leaders of Tajikistan and Afghanistan. Afghanistan would like to see the secondary stretch of the route start in Imamnazar and continue to Andkhoy, Akina, Mazar-e-Sharif, Kholm, to Kunduz, and finally to the Tajik border. This route is longer and has a length of 383 km making a total length of 468 km. Tajikistan prefers a shorter route that deviates in Kholm towards Kaldar on the Tajik border. This shorter route runs 408 km. The first proposed route, preferred by Afghan authorities, would incorporate the sizable city of Kunduz into the new transportation network before it turns north toward Tajikistan. Authorities in Tajikistan support the shorter route because it could traverse the distance to Turkmenistan faster.

Despite the minor disputes over routes, all the parties involved are optimistic about the mutually beneficial project. Tajikistan and Turkmenistan are pleased to form a connection circumventing Uzbekistan who has periodically mired relations in the region. Additionally, the Central Asian Republics look towards China as a potential financier for the project because China would also benefit from the corridor. The railway would link China to Central Asia and beyond to the Persian Gulf. China is also contemplating the potential extraction of mineral reserves along the proposed line<sup>44</sup>. An impressive rail network is developing in northern Afghanistan and could spark sustained economic growth in Afghanistan and the region.

## Sea Ports

### *Pakistan*

Although Afghanistan is completely landlocked, extensive ground infrastructure connects it to ports in Pakistan. The Afghan Transit Trade Agreement (ATTA) is a treaty signed in 1965 that “specifies the port, route, transport modes, and customs transit procedures” for trade between the two nations<sup>45</sup>. Pakistan is Afghanistan’s main trading partner and provides vital access to ports<sup>46</sup>. Relations between Afghanistan and Pakistan are inconsistent and have recently deteriorated, although trade with Pakistan remains a viable option.

### *Iran*

Direct access to Arabian Sea ports in Afghanistan is rapidly developing. India is investing in expanding the Iranian port in Chabahar. This port sits on the Gulf of Oman near the Pakistan border. A trilateral agreement between Afghanistan, Iran, and India is currently under final review and the agreement would formalize and open trade between Afghanistan and India through Iran<sup>47</sup>. India wants access to iron ore deposits in Afghanistan<sup>48</sup>. Afghan minerals going into India would be transported to the Chabahar Port and shipped a short distance to ports on the west coast of India because existing routes through Pakistan are highly restricted and frequently blocked. As a landlocked country, emerging port connections will be highly strategic for Afghanistan’s economic development.

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<sup>43</sup> “Trilateral Summit Endorses Regional Railway Project.”

<sup>44</sup> *Ibid.*

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<sup>45</sup> Nasrullah Arsalai et al., *South Asia and Central Asia: Building Economic and Political Linkages*. Pg. 118

<sup>46</sup> *Ibid.* (Page. 200)

<sup>47</sup> Zenat Mohammadi, “Kabul, Tehran and New Delhi to Sign Agreement On Chabahar Port Soon.”

<sup>48</sup> Nelson, “India Plans ‘World’s Most Dangerous Railroad’ from Afghanistan to Iran.”

## New Silk Road

The New Silk Road (NSR) initiative was first proposed in 2011. Former Secretary of State Hillary Clinton envisioned a long-term economic project that would “transform Afghanistan into a hub of transport and trade” and would serve to connect markets in India, Pakistan, and Central Asia through Afghanistan<sup>49</sup>. Major initiatives of the NSR proposed by the US State Department include “completing the Ring Road,” “establishing rail links between Afghanistan and Pakistan,” and several energy related projects with Central Asia<sup>50</sup>.

## China

Increased interconnectedness between China and Afghanistan is crucial to the NSR. Traditionally, Afghanistan and China have engaged in rich cultural and economic exchange. China is committed to this massive undertaking that is referred to as the Silk Road Economic Belt. Chinese officials believe the project aligns with Beijing’s policy of “amity, sincerity, mutual benefits, and inclusiveness” while also serving Chinese economic and security interests<sup>51</sup>.

In order to get projects underway, China is prepared to spend billions through their newly created Asian Infrastructure Investment Bank (AIIB). As a first step in building the NSR, the Chinese have announced \$16.3 billion in investments that will “build and expand railways, roads and pipelines” through the lesser-developed western provinces of China.

This vital infrastructure will link with a pledged \$50 billion investment “in

infrastructure and energy deals in Central Asia.” As part of the AIIB initiative, China has promised an additional \$327 million to Afghanistan, much of which will fund rail lines and highways as well as other infrastructure projects<sup>52</sup>. These exciting initiatives would enable Afghanistan greater capacity to export goods including minerals

## *The Wakhan Corridor*

Although no specific project has been announced, connecting Afghanistan and China through the Wakhan corridor remains a possibility. Both, railways and roads are viable options. The remote mountain pass originally belonged to Afghanistan to serve as an important buffer between colonial Britain and Imperial Russia. The narrow valley now lays unused and isolated. While the prospect of revitalizing this historic connection seems promising, the project would require substantial expertise and funding.

## *Cultural Connections*

Cultural exchange is another important link between China and Afghanistan. In fact, Kabul University has recently reopened the Confucius Institute<sup>53</sup> and there are over a thousand Afghan students currently enrolled in educational institutions in China. These students are learning the language and technical skills that are crucial to Afghanistan’s growing economy. Emerging cultural connections complement the emerging physical connections across the region. Forging links between people leads to greater economic exchange.

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<sup>49</sup> *Central Asia and the Transition in Afghanistan.*

<sup>50</sup> *Ibid.*

<sup>51</sup> “China-US Collaboration Conducive to Developing Afghanistan’s Wakhan Corridor CHINA US Focus | CHINA US Focus.”

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<sup>52</sup> “The New Silk Road.”

<sup>53</sup> “China-US Collaboration Conducive to Developing Afghanistan’s Wakhan Corridor CHINA US Focus | CHINA US Focus.”

## Challenges

The US Department of State is aware of the transportation challenges present in Afghanistan, while “promoting connectivity in a region that is the least-economically integrated in the world.”<sup>54</sup> Conversely, these efforts can yield the most transformative results.

Several countries in Central Asia cultures and institutions inclusive of free market principles. For context, approximately 60% of the time it takes to ship goods from northern Kyrgyzstan to the nearest Russian town is spent waiting at two border crossings. This system is ineffective as it encompasses 64% of the cost to export a product.<sup>55</sup> Addressing these issues may promote greater connectivity in and out of Afghanistan.

### *Time*

Large infrastructure projects, like highways and railroads, won’t materialize overnight. The significant time it will take to construct the NSR infrastructure is another major challenge. Many of the projects proposed in the NSR development strategy “will take three to 10 year to yield results”<sup>56</sup>. People grow weary of waiting after 14 years or underwhelming results.

### *Regional Cooperation*

Regional cooperation in the Central Asian and South Asian regions is minimal. One major issue is Pakistan. Paul Brinkley experienced the visceral and paranoid attitudes that Pakistani businessmen had towards India during his meetings in Pakistan<sup>57</sup>. This zero-sum mentality is not

conducive to the constructive development of ties between nations in the region. Farzana Raja, a member of the National Assembly of Pakistan, explains how Pakistani authorities refuse to grant India transit-trade agreements through their territory. India desperately wants land routes through Pakistan to send goods to Afghanistan, Central Asia, and onwards toward Europe through Turkey<sup>58</sup>. Increased regional cooperation has the potential to foster a vibrant transportation infrastructure in Afghanistan.

Establishing an infrastructure connecting much of Eurasia seems daunting, however, Afghanistan has been at the center of vibrant Eurasian trade in the past. If NSR provisions are realized, Afghan minerals could find greater access to international markets.

## International Support

After many decades of war, the reconstruction of Afghanistan has become a popular initiative amongst the international community. Paul Brinkley went as far as to label the Afghan conflict the “good war”<sup>59</sup>.

Transportation infrastructure is the top priority for aid organizations tasked with spending foreign cash inflows. Afghanistan is fortunate to have aid money that has been allocated to build physical infrastructure. These funds are active and potential sources of financing for transportation projects.

### *Afghanistan Infrastructure Trust Fund*

Established in December 2010, the Afghanistan Infrastructure Trust Fund (AITF) aims to develop Afghanistan’s economy. Both the Afghan government and

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<sup>54</sup> Department Of State. The Office of Website Management, “U.S. Support for the New Silk Road.”

<sup>55</sup> *Central Asia and the Transition in Afghanistan*.

<sup>56</sup> Ibid.

<sup>57</sup> Paul Brinkley, *War Front to Store Front*.

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<sup>58</sup> Nasrullah Arsalai et al., *South Asia and Central Asia: Building Economic and Political Linkages*. (Page. 219)

<sup>59</sup> Paul Brinkley, *War Front to Store Front*.

the ADB administer the fund. Japan, the US, and the UK constitute the fund’s largest donors. AITF has stated goals to develop stronger transportation infrastructure within Afghanistan and to develop the mineral extraction industry.<sup>60</sup>

*Central Asian Regional Economic Cooperation*

The Central Asian Regional Economic Cooperation (CAREC) is an important regional player that initiates cross border infrastructure programs. Since 2001, CAREC has dispersed over \$24 billion for infrastructure projects. The ADB partnership with CAREC has provided the organization with nine billion dollars of the previously stated total.<sup>61</sup>

*Central Asia-South Asia Regional Market*

The Central Asia-South Asia Regional Market (Casarem) is an organization tasked with increasing regional transportation links for trade as well as other economic endeavors. Many of the organizations

infrastructure projects receive funding from the ADB and the World Bank. Afghanistan plays an important role in the regional market. There is a permanent Casarem secretariat in Kabul<sup>62</sup>.

*South Asian Association for Regional Cooperation*

The South Asian Association for Regional Cooperation (SAARC) is an important regional trade bloc that is interested in further developing transportation links between member countries. SAARC was first established on December 8, 1985, but Afghanistan wasn’t admitted until 2006. The permanent secretariat is in Kathmandu, Nepal. Former Foreign Minister of Pakistan Shah Mehmood Qureshi highlighted the importance of developing “transport... infrastructure to link SAARC countries with each other as well as with Central Asia”<sup>63</sup>. Afghanistan is in an essential geographical position to make SAARC’s stated goals a reality. Additionally, these bonds will enable Afghanistan to better develop its mineral resources.

**USAID DEVELOPMENT ASSISTANCE, AS OF JUNE 30, 2014 (\$ MILLIONS)**

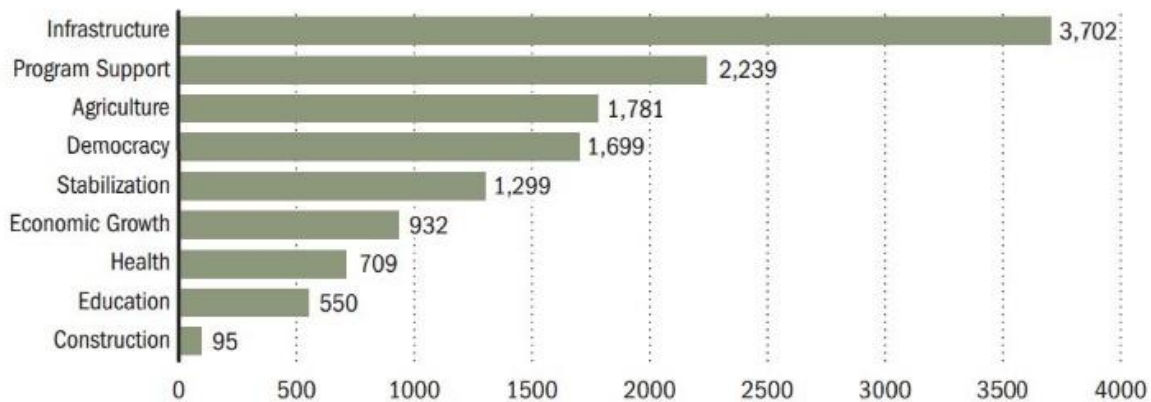


Figure 4. USAID expenditures in millions of US dollars as of 30 June 2014. Infrastructure projects receive the overwhelming majority of funds.

<sup>60</sup> admin, “Afghanistan Infrastructure Trust Fund.”

<sup>61</sup> Bank, “ADB President Visits Kyrgyz Republic to Strengthen Partnership, Attend CAREC Ministerial Meeting.”

<sup>62</sup> Nasrullah Arsalai et al., *South Asia and Central Asia: Building Economic and Political Linkages*. (Page. 12-14)

<sup>63</sup> *Ibid.* (Page. 12)

## *USAID*

An arm of the State Department, USAID has given over \$3.7 billion for infrastructure projects as of June 30, 2014. As pictured in *Figure 4*, infrastructure has received more funding than any other sector.<sup>64</sup>

## **Conclusion**

Afghanistan is fortunate to be at the geographical center of several of the world's most dynamic regions: Central Asia, South Asia, and the Middle East. Unfortunately, this landlocked nation has experienced more than its fair share of instability, conflict, and human suffering. The recent rediscovery of rich mineral deposits gives Afghans hope for a prosperous future.

The development of extractive mineral industry is impossible without first addressing the severe lack of a cohesive transportation infrastructure network. New projects, including the NSR, highlight the vast potential and interest in transforming Afghanistan into a regional and even continental transportation hub. The exploration and extraction of minerals in Afghanistan, tackled with a fairly sophisticated transportation network capable of delivering goods and merchandise in a timely manner, could develop in tandem in order to build a sustainable economy.

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<sup>64</sup> *Economic and Social Development.*

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# International Diplomatic Concerns

## *Afghanistan's Place on the Global Stage*

Michael Lane Smith

*“One who doesn't appreciate the apple, won't appreciate the orchard”*

### **Introduction**

Afghanistan occupies a highly strategic position at the juncture of the Middle East, Central Asia, and South Asia. Afghanistan's unique location illustrates the diversity of ethnic groups in the country, the complex and varied relationships Afghanistan has with its neighbors, and the equally complex relationships with global powers such as the US, China, and Russia, all of which have interests in the region.

These relationships have a direct impact on Afghanistan's ability to develop a self-sustaining economy for its people, as they are dependent upon their neighbors for subsistence. Furthermore, Afghanistan is landlocked, and depends on transport infrastructure in neighboring states to ship goods and foster international trade. Unfortunately, Pakistan, Afghanistan's largest trading partner continues to fight India's influence in Afghanistan while providing protection to Taliban insurgents.

Iran has significantly increased its trade with Afghanistan and has pledged hundreds of millions of dollars in reconstruction assistance. Turkmenistan, Pakistan, and India, meanwhile, are all interested in cooperating on a major gas pipeline that would run through western Afghanistan and provide a key new energy source to the surrounding regions.

These examples suggest the importance of neighboring states in the development of a potentially substantial mining sector in Afghanistan. There are nevertheless, many

obstacles to overcome. Any solution to this problem must involve infrastructure including transportation, power distribution, foreign investment, and security. Fortunately for Afghanistan, its neighboring nations and other regional powers have immense resources. These interests may be able to provide what is necessary for Afghanistan's development.

As the Government of Afghanistan begins its first year as the primary military presence on the ground, the new administration is confronted with a complicated regional position. It must now begin its own nation building. A major part of this process will require cooperation with neighboring countries to set the stage for decades of development, necessary to build a sustainable economy.

### **Regional Concerns**

Complicated multilateral agreements between Afghanistan and its neighbors make the region a complex entity even without the consideration of larger global interests. The region is undoubtedly divided on a myriad of issues; “there are border, energy and water disputes, along with the deep sense of mistrust towards the neighbors.”<sup>1</sup> The drawdown of NATO/ISAF puts the area at a greater risk of more serious threats and challenges. For the first time, Afghanistan's military is at the helm of most military operations.

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<sup>1</sup> Baizakova and Baizakova, “Connect Central Asia: Role of Afghanistan.”

Having accepted and received more money than any nation on earth in development and military aid, Afghanistan is now heavily indebted. Vast investments by foreign entities are prone to disappear into bureaucratic pockets, or be spent on areas where the investments are wasted. The aggressive support for different factions of extremist groups near Afghanistan's border have been instrumental in maintaining the chaos that have pervaded throughout the troubled country. Afghanistan's dynamic nature means its neighboring countries have the potential to be an immense benefit or great detriment in the future.

### *Pakistan*

Pakistan is the most troubled of Afghanistan's border nations. An obsession over potential Indian power, and an unhealthy desire to control the region, encourages poor foreign policy and weak foreign relations. However, Pakistan's isolationist mentality certainly complicates the international community's attempt to provide reconstructive aid to the war torn region.

The presence of the Pakistan based Taliban is a consistent problem for Afghanistan's security. As ISAF diminishes the number of combat forces, Afghanistan will continue to fight with guidance from the US and NATO, but with considerably less support. The Taliban operates mainly in Federally Administered Tribal Areas (FATA) and Baluchistan in Pakistan.<sup>2</sup> Baluchistan is a persistent problem for the Pakistani government as they struggle to incentivize officers of their police force to work in a hazardous environment.<sup>3</sup> The Pakistani government fails to meet regional security

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<sup>2</sup> *Progress Toward Security and Stability in Afghanistan*, April 2014. Page 99.

<sup>3</sup> Mukhtar, "Govt Reluctant to Send Fresh PSP Officers to Balochistan."

needs and is unable to abide by the National Action Plan developed in the wake of the Taliban attack on a school in December of 2014.<sup>4</sup>

Pakistan's current Prime Minister Nawaz Sharif, who in his previous two terms was forcefully removed,<sup>5</sup> is currently a year and a half into his third term. If Prime Minister Sharif is ousted again, this will spell disaster for Pakistan's future. Sharif's second term ended when the Military Chief he elected to serve, ended up forcing him to flee the country.

Historically, Pakistan and the US have had close political ties. The US is still Pakistan's largest trading partner, accounting for 15.7% of its exports.<sup>6</sup> In addition, the US has an instrumental role in Pakistani development efforts, adding over a total of 1,300 MW to the country's electricity grid.<sup>7</sup>

The recent election of Prime Minister Modi and the subsequent strengthening of the relationship between India and the US have seemed to push Pakistan further away. Reports show that Pakistan is willing to seek stronger ties with Russia.<sup>8</sup> This is the logical choice for Pakistan to pursue, if NATO chooses to abandon its relationship with them.

Pakistan is threatened by the potential influence India could exert over Afghanistan. If the two nations flanking Pakistan form a strong alliance, the potential risks to Pakistan's security, grow significantly. Former National Security Council Senior Director for South Asia, Anish Goel, commented on Pakistan's general mindset

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<sup>4</sup> *Ibid.* Page 99.

<sup>5</sup> Ghauri, "Nawaz Sharif: A Political History."

<sup>6</sup> *U.S. Relations with Pakistan*.

<sup>7</sup> *Ibid.*

<sup>8</sup> Craig, "As Obama Visits India, Pakistan Looks to Russia for Military, Economic Assistance."

towards India as “obsessive paranoia.”<sup>9</sup> Pakistan seems to solely focus on deterring India’s inevitable supremacy in the region.

Should the US even marginally abandon its relationship with Pakistan in the pursuance of closer ties with India, a renewal of East and West tensions will occur as Russia increasingly augments its global military strength.<sup>10</sup> This is a concern that may take larger form in the coming months.

Nonetheless, as much as the US wants Pakistan to be at the discussion table, Pakistan continuously fails to comply with basic social graces, by attempting to “shore up what it perceives as ‘strategic depth’ against India.”<sup>11</sup> Predictably, the attempts to marginalize India have repeatedly failed in the past, moving Karzai’s government to turn towards India. Independently of Karzai’s less than western-pleasing decisions, Ashraf Ghani’s government is more comfortable pursuing western allies. It appears that Pakistan is isolating itself.

The next phase in counter-terrorism activities against Al-Qaeda and the Taliban require significant intelligence from Pakistan, as it has in the past.<sup>12</sup> Ties between the two countries are in better order after the Afghanistan–Pakistan Transit Trade Agreement was signed in 2010.<sup>13</sup> Although the agreement calls for cooperation between Pakistan and Afghanistan, little progress has been made so far.

On February 2015, Pakistan began to push Taliban leaders to start peace talks with

Ghani’s Administration.<sup>14</sup> This comes after significant relationship building with Pakistan after the transition from Karzai’s administration to Ghani and Abdullah’s. However, continuous Taliban attacks have reduced hope that these talks will lead to diplomatic progress. Two days before news of these talks broke out, suicide bombers and gunman stormed an Afghani police station killing more than 20 people.<sup>15</sup>

Historically, Saudi Arabia and Pakistan have been important allies. Saudi Arabia continues to view Pakistan as its “strategic depth in the Muslim world.”<sup>16</sup> Additionally, the Saudis recognize that a stable and peaceful Afghanistan will foment a more stable Pakistan. The relationship between Islamabad and Riyadh is important, given the interest that the Saudis have in building infrastructure in Kabul and may also contribute funding to develop projects like the TAPI Pipeline. Because of the ongoing rivalry between Saudi Arabia and Iran for leverage in the Muslim world,<sup>17</sup> the competition between these two states for influence in Afghanistan could potentially yield significant capital investment into Afghanistan.

### **Regional Power Triangle**

Afghanistan sits in the center of a power triangle made up of Iran, India, and China. These three countries are important because of the strategic influence they convey to the region.

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<sup>9</sup> Goel, Lecture to Task Force on Managing Afghanistan’s Mineral Wealth.

<sup>10</sup> Isachenkov, “Kremlin Pursues Military Modernization despite Economic Woes.”

<sup>11</sup> Clarke, “China’s Strategy in ‘Greater Central Asia.’”

<sup>12</sup> Akhtar and Sarkar, “Pakistan, India and China in Afghanistan After US Drawdown.”

<sup>13</sup> *Afghanistan - Pakistan Trade Transit Agreement.*

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<sup>14</sup> Ahmed and Goldstein, “Pakistanis Try to Nudge Taliban Along the Path to Peace Talks With Kabul.”

<sup>15</sup> Mashal, “Taliban Attack Kills at Least 20 Afghan Police Officers.”

<sup>16</sup> Green, *Saudi Arabia’s Conflicted Policy on the Afghanistan Crisis.*

<sup>17</sup> *Ibid.*

## *Iran*

Although not an ally of the US, Iran has unwillingly contributed to US goals to achieve stability in Afghanistan. Iran has been supportive of investments aimed to bring stability to the region. Conversely, Iran has become the most pragmatic of Afghanistan's border countries, and the most viable option to open a new route to the sea.

Producing a trade route to reach global markets is difficult due to the complexities of the issues present in the Afghan-Pakistan border. Given these considerations, a trade route to the sea through Pakistan is less than ideal. A route through China is unrealistic due to the harsh terrain in the Wakhan corridor. A route through Iran stands out as the most economic option.

Iran's interest in Afghanistan spiked after the Taliban rose to power. The organization explicitly displayed their anti-Shi'a sentiment, "openly [declaring] Iran their enemy."<sup>18</sup> Iran's first attempt at a diplomatic solution included an agreement to recognize Pashtun dominance in Afghanistan, a benefit to the Taliban, however Islamabad rejected the proposal before it could ever make it to the insurgent organization.<sup>19</sup>

Tehran advised that it would not object to the US' campaign against the Taliban<sup>20</sup> and triggered hope in the early years of the US Global War on Terrorism that cooperation was possible. The Good Neighbor Declaration at the start of Karzai's government created positive sentiment towards Iran. This has since been expounded upon by the millions of dollars in aid sent by Iran to Afghanistan, including \$600 million in 2010, "a very generous amount for a

country...with a bundle of its own financial problems."<sup>21</sup>

The apparent support Iran demonstrates for Afghanistan has been beneficial, however, the financial gifts could be more effectively steered. Considering that Iran's long-term interests are directly "in line with those not only of the US, but also the wider international community,"<sup>22</sup> Iran may be the ideal investor for major development projects. A politically stable, and predictable, Afghanistan is in the interest of every regional and global player.

The recent strategic agreement between Afghanistan and the US raises Iran's suspicions. The continued presence of US forces sends a message to the bordering states that it is the US, not Iran, or any other state, who will watch over Afghanistan's future. A trade route through Iran could potentially alleviate concerns of US influence by allowing Iran to build influence of its own in Afghanistan. Iran's location provides an economic solution to Afghanistan that outweighs the political requirements of reaching a port through Pakistan.

## *China*

The new special envoy for Afghan affairs, Sun Yuxi, claims Chinese aid for Afghanistan in the future will be "split into two parts - one for the government and the other for competitive enterprises." China will "invest in commercial ventures to help them develop."<sup>23</sup> China matches this pledge with another to promote political reconciliation in Afghanistan as NATO forces depart and the country is left with a reduced foreign military presence.

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<sup>18</sup> Fürtig, "Afghanistan in the Foreign Policies of Middle Eastern Countries." Page 545.

<sup>19</sup> Ibid. Page 545.

<sup>20</sup> Ibid. Page 546

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<sup>21</sup> Ibid. Page 548.

<sup>22</sup> Ibid. Page 559.

<sup>23</sup> Mengzhen, "China to Help Afghanistan Develop through Commercial Co-Ops."

China's desire in Afghanistan, other than tapping into the one trillion dollars in mineral resources, is to create the "New Silk Road" in the greater region of Central Asia. This economic belt would run from Xi'an in central China and westward through Europe.<sup>24</sup> The ambitious project would provide potential boosts in South Central Asia's economy by providing new markets for underdeveloped former Soviet Republics and former Soviet buffer states like Afghanistan.

The planned trade network would include a maritime route around the Arabian Peninsula and into the Mediterranean Sea connecting Africa to the region. China plans to "reclaim its place as the 'Middle Kingdom,'"<sup>25</sup> a nod to the ancient empire that was once the center of world trade.

Mes Aynak, one of Afghanistan's ancient archeological sites, sits on a massive copper vein. In 2007, the China Metallurgical Group Corporation (CMGC) negotiated a contract with Karzai's administration worth over three billion dollars. The deal involved extracting copper from the Aynak deposits, to produce upwards of 182 tons of copper, half of which China will have a claim over.<sup>26</sup> Another Chinese national corporation, the Chinese National Petroleum Corporation (CNPC), signed a deal to explore an area in the north of Afghanistan for oil and gas.<sup>27</sup> Both of these deals are potentially beneficial to China, as Afghanistan was also able to secure equally valuable promises from China to assist in infrastructure development. In the case of Mes Aynak, CMGC agreed to build a coal-fired power plant and a railroad from Tajikistan through Afghanistan and into

Pakistan.<sup>28</sup> China has also promised Afghanistan over \$200 million in aid.<sup>29</sup>

On June 2012, President Hamid Karzai attended the 12<sup>th</sup> Meeting of the Council of State Heads of the Shanghai Cooperation Organization (SCO) in China. During his visit, China and Afghanistan established the China-Afghanistan Strategic and Cooperative Partnership for the purpose of upholding "peace, stability and development."<sup>30</sup> This partnership alludes to the continued trade partnership from 2006, and also highlights the importance of security and cultural understanding.

The SCO has long been a vehicle for Chinese political influence. The organization has taken considerable interest in the future of Afghanistan, even establishing the SCO-Afghanistan Contact Group in 2005.<sup>31</sup> One of China's biggest challenges involving Afghanistan is reconciling its relationship with Pakistan.

### *India*

India has participated in many large-scale and public infrastructure projects, including the \$70 million Zaranj-Delaram Road and the \$80 million investment in the Salma Dam.<sup>32</sup> India's investments in Afghanistan illustrate the nation's desire for the region to develop in the coming years.

Professor Harsh V. Pant, an expert on the region, claims that the lack of stability in Afghanistan, Pakistan and other countries in South Asia, "is a major inhibiting factor for

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<sup>24</sup> Tiezzi, "China's 'New Silk Road' Vision Revealed."

<sup>25</sup> Ibid.

<sup>26</sup> Clarke, "China's Strategy in 'Greater Central Asia.'"

<sup>27</sup> Ibid.

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<sup>28</sup> Ibid.

<sup>29</sup> Ibid.

<sup>30</sup> "Joint Declaration between The People's Republic of China and The Islamic Republic of Afghanistan on Establishing Strategic and Cooperative Partnership."

<sup>31</sup> "Protocol on Establishment of the SCO-Afghanistan Contact Group between the Shanghai Cooperation Organisation and the Islamic Republic of Afghanistan."

<sup>32</sup> Pant, "India's Changing Afghanistan Policy: Regional and Global Implications." Page 7, 9.

India to realize its dream of becoming a major global player.”<sup>33</sup> If Professor Pant is correct, or India believes this to be true, the region’s stability is of the high importance to India’s national interests. India’s expenditures can be framed as investments in its own future rather than just diplomatic ventures to influence its neighbor’s.

India is currently a very powerful nation, maintaining a large military, a powerful industrial complex, and a strong labor force. Afghanistan’s economy and stability will benefit from having close ties with India. Nonetheless, Pakistan’s enduring hostility towards India is exacerbating existing issues in the region.

As a result, India has to reconcile its position next to China, Pakistan’s ever-supportive ally in Asia. As demonstrated in the war of 1962, China is capable of confronting India if it feels that India encroaches its domain. On December 2013, president Karzai requested, “heavy military equipment from New Delhi” but “India did not signal interest.”<sup>34</sup> Had India supplied arms to Afghanistan, or should it, in the future, a large backlash from Pakistan could potentially ensue.

US President Barack Obama’s visited India on January 25, 2015. Both sides hailed this visit as a sign that the world’s two biggest democracies are overcoming their historical differences. The two heads of state called their countries “natural” partners as they strengthened defense ties and sought to unblock an agreement on US investment in nuclear power stations for India.<sup>35</sup> A close relationship with India would allow for US influence in Afghanistan to remain in the

coming years as it withdraws the majority of its forces from Afghanistan.

India may find itself in the position to guide Afghanistan’s development in the future. Having already established a strategic partnership in 2011 formalizing cooperation in governance, economics, commerce, education, public administration, and security,<sup>36</sup> India is setting itself up to become the primary player contributing to Afghanistan’s success.

### **Extra-Regional Interests**

#### *Russia*

After the 9/11 attacks, Russia welcomed President Bush’s request for help.<sup>37</sup> Yet soon after, Russian president Vladimir Putin claimed that the conflict in Afghanistan was over; a pretext to get NATO and US forces to shut their bases down.<sup>38</sup> Since then, Putin has continued to undermine US influence in the region.

Central Asian states have completely acquiesced to Russian demands at the expense of US presence. Kyrgyzstan was able to defy Putin in 2009 by raising US rent on the use of their bases to \$60 million, more than Russia was willing to pay.<sup>39</sup>

It is too late for Russia to completely reverse the influence of NATO in the region. An increased build-up of Russian armament and base upgrades on a global scale<sup>40</sup> make regional actors more nervous about the possibility of Russia being a threat, however, NATO has invested heavily in the future of

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<sup>33</sup> Ibid. Page 1.

<sup>34</sup> Akhtar and Sarkar, “Pakistan, India and China in Afghanistan After US Drawdown.”

<sup>35</sup> Barry, “Modi and Obama, Hugging for India’s Security.”

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<sup>36</sup> *Progress Toward Security and Stability in Afghanistan*, April 2014. Page 99

<sup>37</sup> Radnitz, “Memories of Manas.” Page 1.

<sup>38</sup> Ibid. Page 1.

<sup>39</sup> Ibid. Page 2.

<sup>40</sup> Isachenkov, “Putin Spending Big On Military Modernization Despite Russia’s Economic Woes.”

Afghanistan and will not back down to Russia's attempts to resettle the region.

Regardless of Russia's interests in Afghanistan, Russia is politically and militarily occupied in Eastern Europe with the Ukrainian conflict, diverting its attention from Far Eastern political affairs.

### *The United States*

The US will remain in Afghanistan for a long time. In 2012, the US invested more money in Afghanistan than in any other nation. Moreover, the nature of the relationship between the US and Afghanistan has been one of mentorship rather than alliance. Afghanistan's current government is almost completely funded by the US and other foreign aid, a large contrast from the anti-western Taliban rule from 1996 to 2001, which oppressed the citizens of Kabul and contributed to mass exoduses, crippling its economy.

President Obama planned to withdraw from Afghanistan by the end of 2014, but ten thousand troops still remain in country.<sup>41</sup> Not a complete departure, but no longer an occupation. US and NATO forces remaining in Afghanistan are to provide logistical and training support to the Afghanistan National Security Forces according to the Bilateral Security Agreement signed on September 2014.<sup>42</sup>

The departure of US troops may slow down as requested by President Ghani as he visits the white house on March 2015.<sup>43</sup> Additionally, the US and other international donors committed to provide Afghanistan with \$16 billion in aid through 2015, as well

as continuing assistance through the year 2017.<sup>44</sup>

## **Creating Shared Interests in the Region**

### *The TAPI Pipeline*

The TAPI Pipeline is a potential gas pipeline project that will span from Turkmenistan to Afghanistan, and from Pakistan into India. The project is predicted to cost eight billion dollars,<sup>45</sup> and will require new infrastructure that will also increase development in Afghanistan.

Investment gas companies, including Turkmengas, Afghan Gas Enterprises, Inter State Gas Systems Private Limited, and GAIL, all have equal shares in the new TAPI Pipeline Company Limited.<sup>46</sup> This new company was created for the construction, ownership, and operation of the pipeline, with each of the founding companies to share equal profits.



Figure 1: TAPI Pipeline ([www.ojg.com](http://www.ojg.com))

<sup>41</sup> Colman, "Obama Salutes Troops as Afghanistan Marks US Exit | WashingtonExaminer.com."

<sup>42</sup> U.S. Relations With Afghanistan.

<sup>43</sup> "US Considering Slowing Exit from Afghanistan | Al Jazeera America."

<sup>44</sup> U.S. Relations With Afghanistan.

<sup>45</sup> Snow, "ADB: TAPI Gas Pipeline Making Steady Progress."

<sup>46</sup> Michel, "TAPI Pipeline Finally Sees Some Momentum."

## CASA – 1000

The Central Asian South Asian Electricity and Trade Project, also known as CASA – 1000 is an electricity trade network stretching from Tajikistan and the Kyrgyz Republic into southern Afghanistan and Pakistan. The proposed project would provide between 1,000 and 1,300 MW for trade between the four countries.<sup>47</sup> The project's energy capacity is surmountable to lighting approximately 17 million 60-watt light bulbs.

The Kyrgyz Republic and Tajikistan have a potentially large surplus of energy during the summer months, and can provide the energy kick-start that Pakistan and Afghanistan need. During the winter months this would reverse into a deficit, but more revenue in the summer would possibly reduce the winter deficit.

A summer surplus of energy signifies that the current production of energy is not at its peak, because excess energy would be wasted. Economic analysis suggests that the best decision is to sell the surplus energy to countries that absolutely need it; where the demand is exponentially high.

The project itself would cost roughly one billion dollars.<sup>48</sup> This figure is large because it factors in security, contingency plans, and other externalities so common to Afghanistan's debilitated and war struck economy. With the current GDP of Afghanistan so remarkably low, the country has resorted to outside financing to generate more revenue.

The first stages of the project have been financed by, and coordinated with USAID, the US State Department, the UK Department for International Development, the Australian

Agency for International Development, the Asian Development Bank, the Islamic Development bank, and the World Bank Group.<sup>49</sup> The project not only involves the support of many financing organizations, but also the support of a large array of nations.

The increase in energy production and energy sharing in the region is beneficial to those countries that have rising energy demand, even if they are not directly connected.

Pakistan has cooperated in the planning of this project wholeheartedly. Pakistan hosted the Inter-Governmental Council's meeting on September 2013 where the resolution was signed for the formalization of the project.<sup>50</sup> The construction and development of the network would be beneficial to Afghanistan, who has the highest financial stakes. The bidding procedures could be used to incentivize foreign entities to construct the infrastructure needed. Building roads along the route of the project's grid will also be necessary for transporting construction materials, and to accommodate large motorized equipment, which cannot safely operate on Afghanistan's mass network of dirt roads.

## Conclusion

As Coalition forces pull out of Afghanistan, and the West's attention shifts to the Middle East and Ukraine, Asian nations may move to fill the void in international influence. Afghanistan could benefit considerably from multinational projects by involving its neighbors, The TAPI Pipeline and the CASA-1000 electricity grid will offer real and tangible economic advantages, as well as creating ties with other countries throughout the region.

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<sup>47</sup> CASA - 1000, "CASA - 1000 Project List of FAQs."

<sup>48</sup> Malik, "Pakistan Welcomes Progress on Landmark Casa-1000 Project."

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<sup>49</sup> Ibid.

<sup>50</sup> Ibid.

Turkmenistan, Tajikistan, the Kyrgyz Republic, and Pakistan will all become more involved in Afghanistan's future as these projects begin construction. These economical alliances will result in substantial benefits such as mutual dependency and the building of trust.

Similar bonds can be made with India, China, Iran, and the US in the future. Each of these nations has an interest in a stable and economically successful Afghanistan. It is therefore likely they will seek to remain involved.

A key question concerns Pakistan's future role. A heavy security-focused effort will continue in this region, where significant hurdles to economic advancement continue to exist. At present, the Sharif government is unreliable at best and expected to fail. This may present good possibilities, but it is currently a source of insecurity.

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# Security and Stability in Afghanistan

## *Involving Afghans in Protecting Their Communities*

Thomas R. Caetano

*“It is shameful for a man to be denied a role in protecting his own family, clan or tribe”*

### Introduction

No significant economic progress, particularly if built upon the mining sector, will succeed in Afghanistan without adequate security. With the drawdown of coalition forces in late 2014, this task is crucial for the new administration of Ashraf Ghani and Abdullah Abdullah, and involves more than dealing with the Taliban insurgency. Furthermore, security considerations are linked directly to the complex ethnic makeup of the country and longstanding tensions between certain tribes and tribal groups.

The new democratically elected government in Kabul has vowed to tackle these issues in a number of ways. Unlike former President Hamid Karzai, the present administration has promised to eliminate ethnic favoritism. It has also vowed to include minority groups in the electoral process. Additionally, President Ashraf Ghani pledged to give full property rights back to the Afghan people,<sup>1</sup> as documented during an interview on December 4, 2014, with journalist Michal Keating. This would be an important step towards gaining respect for the central government and reducing ethnic conflicts. Improving the security situation in Afghanistan requires continuing support for successful programs now underway, such as Village Stabilization Operations/Afghan Local Police (VSO/ALP). Such programs are needed to address a number of persistent problems,

including dealing with minefields and explosive remnants of war.

### Security Overview and Assessment

#### *The New Presidency – Ashraf Ghani*

Since assuming office, President Ghani has been very clear about his intent to launch a peace process led by Afghan forces. On October 31, 2014, while addressing the Heart of Asia-Istanbul Process Ministerial Conference, President Ghani emphasized that peace was the highest priority of the new government. He reiterated his will to work together with his enemies, particularly the Taliban, and invited them to participate in an inter-Afghan dialogue<sup>2</sup>. The Taliban has yet to agree to join this debate and has rejected the formation of the National Unity Government, calling for an elongation of the conflict with the goal of ending the so-called “foreign occupation.” On October 7, 2014, the Taliban issued a statement marking the 13th anniversary of US military operations in Afghanistan and called for attacks on foreign international forces.

The Afghan government continues to face a sustained and determined challenge in securing key districts that remain under insurgent pressure. Such pressure is particularly present in the southern and eastern portions of the country. Public confidence in the government and its security forces has eroded, not only in these areas but in other districts as well.

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<sup>1</sup> Ghani, “Lecture by Ashraf Ghani President, Islamic Republic of Afghanistan Chair: Michael Keating Senior Consulting Fellow, Asia Programme, Chatham House Fixing Failed States: From Theory to Practice.”

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<sup>2</sup> *The Situation in Afghanistan and Its Implications for International Peace and Security Report of the Secretary-General.*

One key aspect to reversing this trend is strategic inclusion in the electoral and political process of the different ethnic groups and tribal factions. This is something the US has unfortunately disregarded to a certain extent. Ashraf Ghani, meanwhile, was the only major Pashtun candidate not to choose a Tajik as vice-president, opting instead for Abdul Rashid Dostum, an Uzbek powerbroker<sup>3</sup>.

Afghanistan's highly centralized system gives the president authority over nearly all levels of government. In practice, however, presidential power is constrained by political appointments negotiated with various ethnic and regional figures. This has the effect of roughly maintaining a proportional distribution of power between ethnic groups at the national level. Although this system may seem undemocratic, it provides Afghanistan with a structure of checks and balances that has held up well<sup>4</sup>. The unity government deal brokered by US Secretary of State John Kerry, with Ghani as President and Abdullah Abdullah as CEO, helped bring such balance to a higher level than it had been under Hamid Karzai. The new arrangement, it is hoped, will reduce conflicts within the government and help advance Kabul's authority in rural areas.

Much debate has arisen from the scheduled departure of US and NATO forces in 2014 and 2015; however, a presence of foreign forces will remain in Afghanistan. On September 30, 2014, the Islamic Republic of Afghanistan and the US signed a cooperation agreement consisting of 26 articles delineating the commitment of the US to support Afghanistan for many years to come. Henceforth, the viability of sustaining counterinsurgency (COIN) operations inside Afghanistan will continue, likely with a stronger incidence on Special Operations Forces (SOF)

engagements.

#### *Location of Attacks and Statistics*

In 2014, Afghanistan experienced an increased level of insurgent attacks but also a much higher involvement of Afghan Security Forces in dealing with them. Taliban insurgents conducted attacks against the government in most parts of the country. The most significant assaults occurred in Kandahar and Hilmand provinces in the south; Ghazni, Paktya and Paktika provinces in the south-east; Nangarhar Province in the east; Kunduz Province in the north-east; Faryab Province in the north; and Herat, Faraha and Ghor provinces in the west. The Afghan security forces were able to counter the insurgency with great effectiveness but with high casualty rates.

The most volatile areas continue to be the southern, southeastern and eastern parts of the country, accounting for 69% of reported incidents in 2014. The eastern part of the country showed a significant increase in incidents relative to other areas, including the Nangarhar Province, registering 768 incidents, followed by Kandahar with 592 incidents. While national security forces have demonstrated the ability to retake and secure contested areas, longer-term control and progress remains contingent on the delivery of governance and social services<sup>5</sup>.

Improvised Explosive Devices (IEDs) accounted for 27.1% of the reported incidents. Anti-Government forces continued to use targeted killings and abductions to exert control and influence on the public. Between August 16, and November 15, 2014, there were 235 incidents of assassinations and 92 abductions, a nine percent increase

<sup>3</sup> Mann, "Are Ethnic Politics Afghanistan's Great Hope?"

<sup>4</sup> Ibid. Page 2.

<sup>5</sup> *The Situation in Afghanistan and Its Implications for International Peace and Security Report of the Secretary-General*. Section B 19.

compared to the same period in 2013, during which 211 assassinations and 89 abductions were recorded. Of those attacks, 17% were recorded in Kabul City<sup>6</sup>.

### *Border Agreements*

On October 31, 2014, the fourth Heart of Asia-Istanbul Process Ministerial Conference was held in Beijing and concluded with the adoption of the Declaration on Deepening Cooperation for Sustainable Security and Prosperity of the “Heart of Asia” region. On November 5, the Agreement of Border Connection Point among Afghanistan, China and Tajikistan concluded. The agreement defines the border between the three countries<sup>7</sup>. Nevertheless, tensions persist along the border of Afghanistan and Pakistan although cross border shelling and military incursions were comparatively fewer than in 2013 for the same reporting period. On September 17, 2014, the Ministry of Foreign Affairs of Pakistan filed a complaint with Afghanistan over an alleged attack by militants across the border into North Waziristan<sup>8</sup>.

### **The Insurgency and Criminal Networks**

In order to assess the security difficulties to present and future resource extraction in Afghanistan, it is imperative to understand the Afghan insurgency, its affiliates and, the ethnic makeup and complexity of Afghanistan. The development of mineral exploration and mining infrastructure will require the formation of strong ethnic and tribal ties.

#### *The Haqqani Network and Affiliates*

The Haqqani Network has a strong presence in Pakistan’s Federally

Administered Tribal Areas (FATA) and eastern Afghanistan. Minerals in the areas occupied by the network comprise of gold, silver, iron, cobalt, chromite, copper, lithium and cesium. The Haqqani Network is traditionally considered a client of Pakistan’s intelligence services and a host to al-Qaeda. Jalaludin Haqqani founded the network and served in the Taliban regime from 1996 to 2001 as Minister of Tribal Affairs. His network thereafter fought against the Karzai government.

The Haqqani Network has targeted several Indian interests in Afghanistan. One example was the attack on the Indian Embassy in Kabul in July 2008 and again in October. The Network is the largest insurgent group closed to Kabul’s political initiatives<sup>9</sup>. The Haqqani has formed close ties with the Tehrik-e-Taliban Pakistan (TTP) federation of insurgent groups that is aligned against the Pakistani government.

The Haqqani Network poses a serious threat to mining operations by outside entities in its primary area of operations.

#### *The Hizb-e-Islami-Gulbuddin (HiG) Network*

The HiG is likely the least significant of Afghanistan’s major insurgent groups. HiG had previous ties with the Taliban, al-Qaeda and Pakistan’s Inter-Services Intelligence (ISI). It operates mainly in northeastern Afghanistan in the provinces of Kunar, Laghman and Paktia. Although a smaller insurgent group, HiG could perhaps negatively impact the extraction of gold, silver and emeralds in these areas. This network received extensive US support against the Soviet Union, but turned against its mujahedin colleagues after the communist government fell in

<sup>6</sup> Ibid. Section B 21.

<sup>7</sup> Ibid. Section B 25.

<sup>8</sup> *The Situation in Afghanistan and Its Implications for International Peace and Security Report of the Secretary-General*. Section B 27.

<sup>9</sup> Mikser, *NATO Parliamentary Assembly - TRANSITION IN AFGHANISTAN: ASSESSING THE SECURITY EFFORT*. Page 14.

1992. HiG is currently ideologically and politically allied with the Taliban, but HiG fighters sometimes clash with the Taliban over control of territory. Given that HiG is not considered a main actor in the realm of insurgency, it concentrates its efforts on high profile assassinations.

### *Criminal Networks*

Criminal networks involved in drug smuggling, kidnappings and illicit mining also exist as “accidental guerrilla” local actors. There is likelihood that these groups could be reconciled through an improvement of their socio-economic status. The same applies to local warlords and officials who continuously attempt to safeguard the power that they hold. Hampering hopes of reconciliation amongst these groups are the noticeable lack of cohesion amongst the insurgents, their different ideological standpoints and their sponsors. Criminal networks exist all over Afghanistan, regardless of political or religious ideology, which could seriously impact the exploration of petroleum and gas as well the extraction of gold, silver, cobalt, tungsten, mercury, copper, tin, barium, uranium, and zinc.

### *The Taliban – Quetta Shura Taliban (QST)*

The main insurgency faction in Afghanistan is the Taliban movement, which remains nominally loyal to Mullah Muhammad Umar, leader of the Taliban regime from 1996 to 2001. The Taliban has exerted a significant impact in the economy and social fabric of Afghanistan. In 2001, Kabul’s population was under a million, and its local economy was facing ruin<sup>10</sup>. In December 2001, the city was liberated and has since grown to an estimated population of four million. This reality, as well as the large foreign presence of government offices, has made

the city a consistent target of Taliban attacks.

The Taliban operates from several areas of the country but also from bases across the border in Pakistan. In recent years, Muhammad Umar has lost several of his top aides, including Mullah Dadullah, Mullah Obeidullah Akhund and Mullah Usmani, to combat or Pakistani arrests. However, some of Umar’s inner circles have managed to stay intact. In 2013, release of several top Taliban figures has enabled Umar to regain parts of his leadership circle. Umar and pragmatists within his circle blame their decline in power on their past associations with Al-Qaeda. Reportedly, Mullah Umar is willing to compromise his grip on power. On October 24, 2012, the Taliban stated that it does not seek to regain a monopoly of power<sup>11</sup>, but would not participate in the April 2014 elections.

There has been conflicting information regarding the willingness of Taliban leaders to engage in talks with the Kabul government. NATO confirmed that it had facilitated such talks<sup>12</sup>, yet members of the Taliban have discounted these confirmations. Similarly, in February 2015, Abdullah Abdullah announced in a cabinet meeting that peace talks would soon begin between Kabul and the Afghan Taliban, but this was met with an official Taliban statement that no truth can be given to such announcements unless they come from the “Islamic Emirate” itself.<sup>13</sup> This type of response illustrates the Taliban’s desire to control media coverage in favor of press reports about attacks. This response aligns with the insurgency’s motive to present itself as a resistance movement rather than a terrorist organization. These motives suggest that

<sup>10</sup> Williams, *Afghanistan Declassified*. Page 2.

<sup>11</sup> Katzman, *Afghanistan: Post-Taliban Governance, Security, and U.S. Policy*. Page 13.

<sup>12</sup> Bergen and Tiedemann, *Talibanistan*. Page 432.

<sup>13</sup> Khan, “The Taliban and the government: talking about talking.”

mixed messages regarding any talks will continue to be the rule.

Meanwhile, such talks contradict with the US kill-and-capture program that targets Taliban leaders. Despite killing and capturing dozens of Taliban leaders and fighter, this program has been largely unsuccessful, as the Taliban remain a resilient insurgency.

### *Al-Qaeda*

The US government has long considered Al-Qaeda to be largely expelled from Afghanistan. US officials estimate for Afghanistan to contain between 50-100 Al-Qaeda fighters, who operate mostly in eastern provinces such as Kunar.

### *Pakistani Groups*

The Pakistani Taliban (Tehrik-e-Taliban, TTP), primarily challenges the governance of Pakistan but also supports the Afghan Taliban, because some of its fighters are reportedly operating on the Afghan side of the border.

Another Pakistani group said to be increasingly active inside Afghanistan is Lashkar-e-Tayyiba (LET, or Army of the Righteous). LET is an Islamist militant faction that has previously conducted attacks in the Indian controlled region of Kashmir. The group is assessed to be increasingly active in South Asia and could potentially rival Al-Qaeda and its affiliates as potential threat to US interests.

### *Insurgent Tactics*

Prior to 2011, US commanders regarded improvised explosive devices (IEDs), including roadside bombs, as a primary threat. In January 2010, President Hamid Karzai issued a decree banning importation of fertilizer chemicals such as ammonium nitrate, commonly used for roadside bomb explosives. Since

ammonium nitrate is essential for civilian use as fertilizer, it reportedly still comes into Afghanistan from at least two major production plants in Pakistan.

Insurgents have used bombs hidden in turbans, which had, until October 2011, not been searched out of respect for Afghan religious traditions. On September 20, 2011, a similar device killed former Afghanistan President Rabbani, who led the Afghanistan National Front, the largest political opponent to the Karzai administration. A suicide bomber who wounded intelligence chief Asadullah Khalid in December 2012 might have had explosives surgically sewn into his body<sup>14</sup>.

During 2012, the major concern had been “insider attacks” (attacks on ISAF forces by Afghan security personnel, also known as “green on blue” attacks). These attacks, which apparently were carried out by Taliban infiltrators into the Afghan forces, declined by late 2012 but occurred occasionally in 2013.

### *Insurgency Financing – Trafficking Opium*

According to the UN World Drug Report of 2013, Afghanistan remains one of the foremost source countries for opiates and cannabis resin<sup>15</sup>. ISAF counter-narcotic strategy has two main goals: 1) weaken the link between narcotics and the insurgency to significantly reduce support for both; and 2) address the narcotics-corruption-insurgency nexus<sup>16</sup>.

An earlier UN Office on Drugs and Crimes (UNODC) report also found that “the statistical association between poor security and poppy cultivation was strong. Almost all villages with poor security

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<sup>14</sup> Ibid. Page 17.

<sup>15</sup> Statement by the President of the Security Council.

<sup>16</sup> Mikser, NATO Parliamentary Assembly - TRANSITION IN AFGHANISTAN: ASSESSING THE SECURITY EFFORT. Page 16.

cultivated poppies.<sup>17</sup> Most insurgent groups in Afghanistan benefit, at least in part, from narcotics trafficking. The effects are adverse on many levels, as it has led to increased addiction among Afghans themselves and to undermining the rule of law within government ranks. Only 15 of Afghanistan's 34 provinces are considered "poppy free" by the UNODC as of December 2013.

Drug traffic generates an estimated \$70 to \$100 million per year for insurgents, with reports that this number may actually be higher, up to \$430 million. According to UN accounts, perhaps 25% of insurgents' budgets originate in traffic of narcotics.

The eradication of poppy fields is not without polemic. In July 2009, the US ended its focus on eradication of poppy fields on the grounds that this practice was driving Afghans to support the Taliban as protectors of their livelihood. One US program, the "Good Performers Initiative" (GPI) gave financial awards to provinces that succeeded in reducing the production of poppy fields. Afghan personnel continued to conduct eradication activities in conjunction with US counter-narcotics agents from the Drug Enforcement Administration (DEA). The DEA presence in Afghanistan expanded from 13 agents in 2008 to over 100 by 2013, but was scheduled for a 60% reduction by the end of 2014<sup>18</sup>.

Although the idea of replacing Afghan poppy fields with legitimate agriculture has been discussed, many challenges exist. For example, before the war, the Kunduz Province was a thriving center of cotton production, with a large mill in Spinzar. Unfortunately, due to the lobbying power of US cotton farmers, USAID was banned from helping other countries grow cotton.

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<sup>17</sup> Katzman, *Afghanistan: Post-Taliban Governance, Security, and U.S. Policy*. Page 18.

<sup>18</sup> *Ibid.* Page 18.

The same was true for a host of other heavily subsidized American cash crops<sup>19</sup>.

### **The Threat of Minefields and Explosive Remnants of War (ERW)**

Afghanistan is one of the most landmine-contaminated countries in the world. A great majority of these mines remain from the period of Soviet occupation in the 1980s. Landmines were planted indiscriminately over most of the country and pose an ever-present danger to civilians. Landmines and Explosive Remnants of War (ERW) are among the worst legacies of the wars in Afghanistan and remain a threat to over 2,000 communities.

In 2001, landmines and other unexploded battlefield detritus, commonly known as unexploded ordnance (UXO, a specific type of ERW), contaminated at least 724 million square meters of land in Afghanistan<sup>20</sup>. The situation became worse after September 11, 2001. American military operations against Taliban forces resulted in increased cluster munitions and other ERW contamination<sup>21</sup>.

Mine and ERW contamination have blocked the use of approximately 161 km<sup>2</sup> of agricultural land, as well as an estimated 6.4 km<sup>2</sup> of water resources, and approximately 48 km<sup>2</sup> of residential land. As of June 2010, the overall estimated total landmine and ERW contamination in Afghanistan was 654 km<sup>2</sup>, affecting approximately 2,127 communities in 33 out of 34 provinces. Most of the land affected is pastoral land, a vital source of livelihood for many Afghans living in rural areas<sup>22</sup>.

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<sup>19</sup> Hafvenstein, *Opium Season*. Page 145.

<sup>20</sup> *Human Rights Watch Backgrounder Landmine Use in Afghanistan*. Page 1.

<sup>21</sup> Rashid, Wakil, and Jan, *Landmines and Land Rights in Afghanistan*. Page 6.

<sup>22</sup> *Ibid.* Page 6.

According to the UN Environment Program, the ownership of pastoral land is one of the reasons for the continuation of conflicts in various parts of the country. Recent conflicts, lack of funding, and limited information about mined areas in Afghanistan has prevented the country from meeting its 2013 deadline of becoming landmine free.

The Mine Action Program of Afghanistan, along with the Afghan government, submitted a plan proposing to extend Afghanistan's landmine removal deadline to 2023. Despite 23 years of clearance efforts, large tracts of the countryside remain contaminated. More than one million Afghans still live within 500 m of landmine-contaminated areas and hazards covering more than 500 km<sup>2</sup> remain<sup>23</sup>.

Of Afghanistan's 34 provinces, only one is free of mine impacts. The presence of minefields constrains large-scale development projects, such as the planned railway between Kabul and Mazar and hydroelectric dams projects in Kunar, Laghman and Takhar provinces. Presently, 43 development projects planned by the Afghan government will require some demining intervention.

"De-miners" operate in regions where no single entity is clearly in charge. In order to gain access to mine fields, obtain information about patterns of mining, hire a workforce or purchase supplies, demining agencies must negotiate between a myriad of powerful actors such as military factions, international organizations, shadowy underworld structures, local political machines, foreign embassies and aid providers<sup>24</sup>. The eradicating of minefields is not only a technical matter but also a political one.

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<sup>23</sup> Pietralik, *Afghanistan's Landmine-Removal: Extension Request*. Page 1.

<sup>24</sup> Bolton, "Foreign and Landmine Clearance- Governance, Politics and Security in Afghanistan, Bosnia and Sudan."

## **The Importance of Land Ownership Rights to Stability and Security**

On December 2014, president Ashraf Ghani was interviewed during a lecture at Chatham House and stated that in 2015, he would initiate a massive program to give full property rights to the Afghan people<sup>25</sup>. Ashraf Ghani mentioned that this was something, which had been in the works, and if successful, would be a major breakthrough. Historically, private property ownership in Afghanistan has been vulnerable due to an absence of formal protection. Since 1923, most of Afghanistan's constitutions have covered land related issues. However, in practice, private property holders have not benefited sufficiently from property protection<sup>26</sup>.

### *The Taliban Changes the Dynamics of Property Rights*

In 1996 the Taliban regime came to power and ignored the constitution and civil law of the country. Instead, the Taliban established Islamic courts for the direct application of Sharia law in relation to land issues. By supporting certain groups while attempting to solve long-standing land-related disputes, the Taliban deeply disturbed the land rights domain. War continued under the Taliban resulting in substantial population displacement that further complicated land ownership<sup>27</sup>.

### *New Attempt at Reforms*

The devastating effects of war make land reform and securing land rights a challenge in Afghanistan. The return of millions of Afghan refugees, coupled with land-shortage and the lack of institutional

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<sup>25</sup> Ghani, "Lecture by Ashraf Ghani President, Islamic Republic of Afghanistan Chair: Michael Keating Senior Consulting Fellow, Asia Programme, Chatham House Fixing Failed States: From Theory to Practice."

<sup>26</sup> Rashid, Wakil, and Jan, *Landmines and Land Rights in Afghanistan*. Page 6.

<sup>27</sup> Ibid. Page 7.

capacity for managing land-related issues need to be addressed by the Afghan government. In 2010, the government had made some progress in establishing a legal framework, but several issues remain.

Afghanistan lacks a responsive institutional infrastructure, skilled and empowered human resources, and a nationwide survey of land for credible land registry and stakeholder coordination<sup>28</sup>.

### **The Success of Village Security Operations (VSOs) and Afghan Local Police (ALP)**

#### *Village Stability Operations (VSO)*

Village Stability Operations (VSOs) have the potential to reverse the Afghan insurgency's political momentum<sup>29</sup>. A bottom-up population mobilization has become a major line of operation for the coalition forces. This structure embraces community based constructive governance and stipulates resistance to the Taliban's malicious policies and practices. The coalition and the Afghan government do not have the resources to secure the most relevant and threatened segments of the population.

In light of this, the ISAF concentrates on a campaign aimed at enabling the population to protect itself as opposed to the stance of providing protection for the population. It is only logical to mobilize the Afghan populations and to make them a party to the conflict that will determine their future. This approach has placed US Special Operations Forces (SOF) at the center of coalition operations. Through the Combined Forces Special Operations Component Command – Afghanistan (CFSOCC-A), VSOs and the Afghan Local Police (ALP) programs, the Afghan government and coalition are beginning to

treat the people of Afghanistan more as a resource and a potential solution and less of a burden or security chore<sup>30</sup>. Although VSO is sometimes interpreted as the primary strategy involving bottom-up counterinsurgency operations since the fall of the Taliban, it is in fact a secondary strategically placed solution on the bottom-up approach to curbing insurgent activity that lasted from 2005 to the middle of 2010. With the defeat of the Taliban in 2001, the international community and the Afghans it backed concluded that local governance and security should be handed over to local elites and their militias. This arrangement provided continuity with most of Afghanistan's past.

Understanding the mechanisms that govern tribalism is key in establishing security. When Afghanistan was unified in the 18<sup>th</sup> century, the central government in Kabul has been most successful in controlling the country through provincial elites who organized men into militias. This approach worked for the first few years until the insurgency began to rise and things began to fall apart in 2005. The international community forced the disbandment of various militias and created a national police force to take its place.

Unemployment became a problem again as some of the militiamen were moved into national police positions, but others left jobless.

Many of these jobless men proved willing to join the insurgency for pay. This suggests that availability of other work, such as that linked to mining operations, could reduce the recruiting abilities of the insurgency. At the same time, some commanders of local anti-Taliban militia had to be removed from their posts for preying on the population and inciting inhabitants to join the insurgency. Predatory police chiefs, who extort money

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<sup>28</sup> Ibid. Page 8.

<sup>29</sup> L'Etoile, "Transforming the Conflict in Afghanistan." Page 1.

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<sup>30</sup> Ibid. Page 4.

from locals, have been guilty of the same impact. The US penchant for lavishing development funds and insisting on intrusive power-sharing mechanisms, such as imposing term limits and leadership rotations amongst local elites, also contributed to the instability and violence<sup>31</sup>.

When the insurgents ramped up their tactics in 2005, they fully explored those weaknesses. Hamid Karzai and NATO allies responded to increased insurgent activity by amplifying Alliance forces and strengthening Afghanistan's top-down security organizations: The Afghan National Police (ANP), the Afghan National Army (ANA) and the National Directorate of Security (NDS).

Thanks to the CIA, the NDS made progress, especially because it was a small organization with a smaller scope of mission. However, the NDS' small size prevented it from further progress. The ANA also made slower but significant progress, except like the NDS, the ANA was too small to cope with COIN operations that required long-term security tactics. The ANP debilitated as it grew in size, and its brief training programs resulted in poor leadership and widespread predation<sup>32</sup>.

From 2001 to 2005, the international security forces in Afghanistan concentrated on counterterrorism missions that operated from locations distant from the rural population. As the insurgency grew in 2005, the emphasis shifted to "population centric" COIN operations. This policy did not allow for recruiting local militias, as ISAF commanders focused on protecting the population. Recruiting local militias was not a sound tactic given the general sentiment of Afghan villagers who by nature tend to be

hostile to outsiders and unwilling to cooperate even with Afghans from other parts of the country. ISAF leaders were often surprised that the nationally recruited ANSF elements assigned to rural areas were often perceived as being "foreign" NATO personnel. Some ISAF leaders requested to recruit local men into militias, but the Karzai administration denied these requests.

### *The Roles of VSO/ALP*

VSO/ALP teams engage with the population instead of perpetuating a violent argument against the Taliban. Because VSO is a doctrine directly involving population mobilization, it places renewed emphasis on identifying the root causes of stability, instead of the root causes of instability. Rather than asking, "what isn't working here", VSO operatives ask, "what is working here", and seek to amplify and support it. Over time, VSO Special Forces create, nurture, and assist successful conditions along three lines of operations: security, governance and development<sup>33</sup>. VSO progresses in four stages: shape, hold, build and transition. During the shaping phase, VSO operatives gather human intelligence (HUMINT), and open dialogue with the local leaders, while conducting COIN operations against the Taliban or its affiliates.

In the hold phase, operatives are invited to become a part of the local community. The VSO team establishes the creation of an ALP while conducting security operations in the area and instigating governance and development activities.

After the four phases are completed, the VSO team transitions responsibilities to the ALP unit and moves its operations to neighboring villages. The motivation for

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<sup>31</sup> Ibid. Page 4.

<sup>32</sup> Ibid. Page 5.

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<sup>33</sup> L'Etoile, "Transforming the Conflict in Afghanistan." Page 9.

neighboring villages to follow the same trend as villages possessing an ALP, is directly related with the desire village leaders have to be independent and able to provide security to their own people.

After a period of two and five years, the ALP element will either be absorbed into the Afghan National Police (ANA) or disbanded, or its “contract” renewed as conditions dictate. ALPs have been incorporated into Village Stability Platforms (VSPs), which consist of the ALP and its SOF partners and engages in VSOs, which are COIN operations. Most, but not all VSO sites have ALP units. As of July 22, 2011, there were 43 validated ALP sites, with a total of 6,849 ALP members.

Communities must petition the government to participate in the program, and the government selects those that it views as having the capability and potential to make the program succeed. Local *shuras* nominate commanders and ALP members, who are vetted by NDS, SOF, and village elder. The Ministry of Interior trains ALPs.<sup>34</sup>

Each VSO site has a small detachment from the US Army Special Forces, Marine Special Operations Command, or Navy SEALs. Two conventional US Army battalions (roughly 700 soldiers per battalion) provide additional manpower and support to the program. These soldiers augment the SOF teams allowing them to split into multiple parts that cover different sites.

As demonstrated during the drawdown in Iraq, the first casualty from transition efforts in any tactical theater is situational awareness. Scaling down reduces contact with local populations and tribes, which in turn signifies that the availability of

HUMINT and local knowledge is proportionally reduced. Given that a transition requires situational awareness to remain intact, the value of VSO/APL is heightened. The challenges of maintaining situational awareness with help of a bottom-up procedure of intelligence acquisition is something that VSO/APLs can provide, thus overcoming the challenges associated with military or civil transition.

### *Challenges*

The defining characteristic of VSO/ALPs is that they operate in a distributed format, working from austere locations without much support from adjacent. VSO inserts American SOF into unfamiliar geographical and human terrain and against insurgents who are intimately familiar with both. The challenges are therefore considerable.

The number of Americans assigned to a VSO site usually ranges from 10 to 20. Insurgents have several times the number of VSO operatives in the area, and usually have established networks of supporters among the civilian population who provide them with food, shelter, and information<sup>35</sup>. SOF Team members must meet regularly with elites to gain influence with them. Identifying the right villagers, groups, and individuals for inclusion in the ALP is important and difficult. Afghanistan is divided into numerous competing factions; therefore, the establishment of an ALP with one group creates resentment in a neighboring group, thus driving it into the insurgency. One focus of VSO personnel is to work with a local *shura*, the village members tasked with selecting ALP members. However, the *shura* system is often broken or dominated by one faction. To create viable ALPs, VSO personnel must be able to identify the major local

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<sup>34</sup> Ibid. Page 4.

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<sup>35</sup> Ibid. Page 12.

players and rivalries and dissolve any interpersonal intrigues. They may need to bring elders back from the cities or assist negotiations between factions.

Another important facet of military operations in Afghanistan is the inability of American troops to deal successfully with the female population. Constricted by social, religious and tribal rules, women in Afghanistan are not allowed to converse with American males. Moreover, many Afghan males feel more comfortable speaking to American females. This leads to the creation of FET (Female Engagement Teams), a program still in its infancy. FETs assist VSO and ALP personnel in obtaining information from Afghan females during searches. FETs have also served as intermediaries between community leaders and coalition forces<sup>36</sup>. The value of this program in fostering better ties between Afghans and western workers belonging to the exploration and mining industry is noticeable.

#### *The Importance of a “Strategic Narrative” in Support of VSO/ALPs*

The insurgency has momentum in the battle of perceptions because its narratives and actions are more closely aligned than those of the Coalition Forces (CF) and the Afghan national government (GIROA). Creating perceptions of success and translating them into political momentum are critical for GIROA’s ability to establish legitimacy and restore the population’s confidence and trust<sup>37</sup>. The insurgency’s narratives are based on local actions as opposed to national actions and it can credibly support them with threats, beatings, kidnappings, IED attacks and assassinations. These acts of violence are intended to portray the Afghan government as incapable of fulfilling its

promises. Narratives are critical in Counterinsurgency Operations (COIN) because they are central mechanisms through which ideologies or worldviews are expressed and facts are presented.

For a narrative to be effective it must resonate with the target audience and compel belief. For example, “Osama Bin Laden depicts himself as a man who is gathering and inspiring followers and punishing infidels. He is an agent of Islamic history who will reverse the decline of the *umma* (Muslim community) and bring about its inevitable triumph over Western Imperialism.”

The story telling aspect of a narrative seeks to activate symbols that inspire members to support an effort. In Bin Laden’s narrative, the symbols of purity against corruption, Islamic glory versus subjugation, and the struggle against apostasy seek to animate and frustrate Muslims across countries and unite them in a common cause.

The perceptions of the tribal population can drastically shape the outcome of an insurgency. In Afghanistan, perceptions matter more than the truth, as information flow is extremely limited due to rural isolation of the populace and limited media options. Playing on these limitations, the Taliban recently constructed a narrative that consistently tells rural Afghans that Americans will abandon them. This combined with confusing information coming from Kabul and Washington DC, confuse Afghans and cause many to hedge their bets when working with Afghan forces.

A VSO narrative must include three key audience segments<sup>38</sup>, which consist of the Afghan public, the insurgents, and the US and NATO domestic audience. The

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<sup>36</sup> Ibid. Page 16.

<sup>37</sup> Mann, “Shaping Coalition Forces’ Strategic Narrative in Support of Village Stability Operations.” Page 2.

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<sup>38</sup> Ibid. Page 3.

narrative emerging from the VSO experience is that Afghans stand up for themselves against criminal insurgency that is closely supported by the Afghan government and the coalition.

First, “Afghans standing up for themselves”, is the central component of the narrative. The concept of fostering bottom-up conditions that allows local villages, tribes, or *qawms* to achieve stability is rooted in Afghan history and popular with Pashtun tribes.

The second part, the “criminal insurgency” establishes who the enemy is. In Day Kundi Province, for example, the oppressive tactics employed by the Taliban became intolerable and incited villagers to rise against it. Once the Taliban was ousted in the region, it fought back with heavy-handed tactics, which incited the villagers to fight back with renowned fervor, rendering the Taliban irrelevant in the area. Stripped of a purpose, the Taliban thus becomes nothing more than a force of regular criminals with no intended meaning.

The third component establishes the role of Afghan forces (GIRoA) in supporting the population. The inability of GIRoA to deliver security, development and governance at the local level, eroded the trust that Afghans have for their security forces and government. What is needed is a balance reminiscent of the Musahiban Dynasty, when rulers like King Zahir Sha helped local Afghans to stand up for themselves with support from the national government. This balanced approach between formal and informal governance was, and still is, widely accepted in Afghan culture.<sup>39</sup>

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<sup>39</sup> Ibid. Page 5.

## Conclusion

The history of Afghanistan is replete with instances of foreign occupation, war and hardship. For the first time in its history the people of Afghanistan have a fair chance of making their country an important global player. Security in Afghanistan gradually improved after the fall of the Taliban in 2001, nevertheless the country has remained chaotic and suicide attacks and assassinations continue to be a regular occurrence. Additionally, the millions of landmines unscrupulously left behind by the former Soviet Union, upon its withdrawal in 1989, cover the Afghan landscape and continue to cause the death of tens of people every year.

Curbing violence in Afghanistan will remain a challenge for some time into the future as counterinsurgency teams from the US Special Operations Command and their NATO coalition allies continue to conduct campaigns aimed at earning the “hearts and minds” of the Afghan people. This approach has been attempted in the past as US forces stationed abroad or deployed to the Middle or Far East have always been properly instructed on the value of establishing close ties with local rural populations as well as respecting their religious beliefs and traditional customs. Nevertheless, it took a succession of tactical failures in the Iraqi and Afghan war theaters for an official doctrine to be devised and implemented.

The Afghan government must embrace the idea that solving tribal issues and maintaining peace amongst rural factions is key in establishing what could be called an Afghan sense of national unity and statehood. Strengthening the institutions that provide security to the country must also be a top priority of the Afghan government, for without a safe society in which its citizens can feel safe to go about their daily lives, stability cannot be achieved.

To be successful, a considered and coordinated response is required on a variety of issues, which include: increasing the number of qualified lawyers; strengthening public awareness of land property rights; eliminating corruption in the judicial system; minimizing the interference of local authorities based on discrimination; establishing a compensation system; and addressing gaps and contradictions in the legal framework and land reform policies. A very high illiteracy rate, especially among women, further complicates land rights issues<sup>40</sup>.

The mining and exploration of mineral resources in Afghanistan will likely fail without reasonable and effective security. Unrest, violence, kidnappings, assassinations and bombings, if not kept under control will spread and negate the efforts of those who make an attempt at establishing a functional mining infrastructure. Moreover, this is not an issue that lends itself to mining and exploration alone. The construction of Afghanistan's roads, bridges, railways, financial institutions, legal system and many others, depend on the ability of the Afghan government and its coalition of allies to provide meaningful security to its citizens, regardless of ethnic group, tribal affiliation or race.

Furthermore, providing security feeds an honor narrative and taps into the deep cultural DNA of Afghans. More fundamentally, VSO/ALP operations feed a strategic narrative of Afghans helping Afghans<sup>41</sup>. By denying tribal members a role in securing their own families and villages, especially when ANSF deficiencies leave them vulnerable to predation and mobilization by the Taliban, is tantamount to declaring them a greater threat to themselves than is the Taliban.

It also reinforces a foreign occupation narrative. Once local populations have embraced the view that the US forces do not represent an "occupation" but rather exist to facilitate good governance, development and social stability, and to protect against Taliban oppression. Sustained progress with these programs at local levels is essential to achieve success.

Successful mineral resource extraction will require a stable security landscape which in turn necessitates that the Afghan government and its people be involved in every step of the way. The creation of thousands of new jobs must be top priority – this combined with good security programs and mechanisms will help diminish if not eradicate most of the insurgency, although this is a very long-term goal.

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<sup>40</sup> Ibid. Page 8.

<sup>41</sup> Ibid. Page 8.

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# **Ethnic Relations**

## *Examining Ethnic Divisions Across Afghanistan*

Rachel Caren

*“Even the five fingers of the hand are not alike”*

### **Introduction**

Understanding Afghanistan’s diverse ethnic makeup is important to the exploration and extraction of natural resources. Decades of war and an incompetent central government have enabled tribal groups to retain a considerable amount of political, cultural, judicial, and economic power in their respective geographic areas. Experience suggests that these groups will react differently and have varying demands to mineral extraction on what they consider their land. This reality implies the need for a tailored approach by companies interested in exploiting Afghanistan’s large mineral wealth.

### **Afghanistan’s Ethnic Groups**

Afghanistan’s many tribal groups are identified by clan, kin, religion, village, geographic region, and ethnicity. Afghanistan’s four largest ethnic groups are the Pashtuns, the Tajiks, the Uzbeks, and the Hazaras. Smaller ethnic groups include the Aimak, the Turkmen, the Baloch, and others. *Figure 1* shows the distribution of these groups and their estimated percentage of the population. These are rough estimates at best, since the last census in the country occurred in 1979.

Afghan Persian or Dari and Pashto serve as the official languages of Afghanistan and are probably spoken by over 85% of the population. Uzbek and Turkic languages are spoken by 11% of the population. There are also an additional 30 minority languages in

Afghanistan. Given the country’s tribal and ethnic diversity, a large portion of the population is bilingual and understands a dialect of Dari. Eighty percent of these ethnic groups are Sunni and the remaining groups are mostly Shi’a Muslim.

Despite such complex demographic make up, many of these ethnic groups have accepted Afghanistan as a multiethnic state, as “their broader national homeland.”<sup>1</sup> However, this does not mean that people identify themselves as “Afghan,” in the same way that those who live in France identify themselves as “French.” The diverse citizens of Afghanistan revere their identities on language, customs, foods, dress, and a strong sense of difference. As stated by Faizullah Zeki, Mazar I Sharif, “Many outsiders think we are one race, but we are not, we are many peoples.”<sup>2</sup>

Furthermore, “vast distances interspersed with rugged mountains” formed a society where “the subcultures of Afghanistan were largely autonomous and independent from one another.”<sup>3</sup>

To better understand the complex dynamics of Afghanistan’s diverse demographics, this chapter will focus on the brief history, interests, and conflicts of the nations’ most prominent ethnic groups.

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<sup>1</sup> Williams, *Afghanistan Declassified a Guide to America’s Longest War*. Page 17.

<sup>2</sup> *Ibid.* Page 2.

<sup>3</sup> Brinkley, *War Front to Store Front*. Page 226.



group to defend its laws and tradition, often causing continuing conflict with non-Pashtun tribes in Afghanistan.

The Pashtuns have traditionally played a prominent role in politics and decision-making in Afghanistan. “Historically, the more populous Pashtun tribes of the south have ruled Afghanistan, yet unlike the other ethnic groups, the Pashtuns emphasize tribal structures and codes at the expense of the state.”<sup>9</sup> Given the tribe’s history, characteristics, and power, the Pashtuns will expect, and will fight to play a predominant role in the mineral extraction process.

Pashtun tribes occupy regions that are heavily rich in copper, gold, and magnesium as shown in *Figure 1*.

### *The Tajiks*

The Tajiks are the second largest ethnic group and comprise 27% percent of the population of Afghanistan. The people of the Tajik tribe are descendants of Tajikistan and speak Dari, the other official language of Afghanistan. The group inhabits the valleys north of Kabul and the Badakhshan Province bordering Tajikistan. Like most of the other tribal groups in Afghanistan, the Tajiks were conquered by the Pashtuns in the 19th century and were incorporated into the state of Afghanistan. Historically, the Tajiks worked along the Pashtuns and occupied roles in Afghanistan’s government, trade, and literature. Members of the Tajik tribe eventually entered significant roles in the governance system and became a larger part of the Pashtun ruled state.<sup>10</sup>

The Tajiks are flexible and tend to collaborate and live harmoniously with other

ethnic groups allowing them to gain a stronghold within the central government. The growing presence of Tajik tribal members within government circles indicate that the group will exert significant influence in the mineral extraction process.

Tajiks live in regions heavily endowed with a large variety of mineral wealth. These minerals include tin, copper, barium, limestone, lead, zinc, mercury, and gold as pictured in *Figure 1*.

### *The Uzbeks*

The Uzbeks constitute approximately nine percent of Afghanistan’s population and speak the Uzbek language. This group is believed to be descendants of the Turkic and Mongol peoples who inhabited “the vast open plains of Eurasia in what is today Northern Afghanistan, Kazakhstan, Kyrgyzstan, Uzbekistan, Turkmenistan, Mongolia, Inner China, and Ukraine.”<sup>11</sup> In the 19th century, the Uzbeks lost their sovereignty to invading Russian and Pashtun forces. The Russians conquered the northern part of their land and the Pashtuns took over what was left of the south. Today, the Uzbeks in Afghanistan live in regions north of the Hindu Kush and continue to carry on the traditions of their ancestors. The tribe continues to utilize horses in daily activities, engages in the game of *Buzkashi* (goat grabbing), and lives in villages made of clay structures.<sup>12</sup> In addition, many Uzbeks coexist with the Tajik ethnic group, resulting in ethnic intermarriages and dual use of the Dari and Uzbek languages. The Uzbek tribe occupies regions that are rich in gold as shown in *Figure 1*.

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<sup>9</sup> Johnson, TERO\_ITEM CSL\_CITATION {"citationID": "0i

<sup>10</sup> Williams, *Afghanistan Declassified a Guide to America’s Longest War*. Page 28

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<sup>11</sup> Ibid. Page 30.

<sup>12</sup> Williams, *Afghanistan Declassified a Guide to America’s Longest War*. Page 32.

## *The Hazaras*

Like the Uzbeks, the Hazaras comprise roughly nine percent of Afghanistan's population and speak Hazaragi, a Farsi dialect injected with Mongol terms. The group occupies the central regions of Afghanistan and is believed to be the descendants of Genghis Khan's Mongol armies.<sup>13</sup> The Hazaras have distinct physical features that strongly resemble their Mongolian ancestors. In addition, the Hazaras adopted a loose interpretation of Shi'a Islam, as their main religion, whereas most other ethnic groups in the region practice the Sunni branch of Islam.

The Hazara tribe's distinct physical characteristics as well as their "fateful decision to convert to Shiite (minority) Islam in the century"<sup>14</sup> have caused them to be the victims of violence and persecution by other ethnic groups. Historically, the Uzbeks, Turkmen, and Pashtuns raided the Hazara's lands to acquire slaves. The Hazaras have always faced adversity and continue to be treated as minority second-class citizens by other ethnic groups in Afghanistan. The Hazara group is continuously persecuted by Sunni Pashtuns, who negatively perceive the Hazara's tendencies to treat women liberally, practice Shi'a Islam, and efforts to prevent Pashtun Kuchi nomads from taking their lands in the south.<sup>15</sup>

The Hazaras live in regions rich in tin, tungsten, clay, copper, chromite, cobalt, and gypsum as pictured in *Figure 1*.

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<sup>13</sup> Ibid. Page 34.

<sup>14</sup> Ibid. Page 34.

<sup>15</sup> Williams, *Afghanistan Declassified a Guide to America's Longest War*. Page 36.

## *The Baluchis*

The Baluchis make up roughly two percent of the Afghan population and occupy much of the Baluchistan province bordering Pakistan and Iran. The group does not recognize the Durand Line, separating Pakistan from Afghanistan and continues to migrate back and forth across the border. The unmonitored migration has been problematic, as the Baluchis have been "accused of smuggling weapons for the Taliban."<sup>16</sup> Furthermore, the Baluchis are dedicated to their own code of honor, Baluchmayar. Similarly to the Pashtuns, the Baluchis also participated in the holy war against Soviet forces.

### **Traditional Autonomy**

Afghanistan's ethnic groups are largely autonomous. Historically, the Afghan central government has been weak, with an incidence on regional politics being the norm.<sup>17</sup> Hence, central governance is a relatively new concept in Afghanistan and conflicts with the structure of tribal autonomy. Tribal Autonomy "is an integral component of a group's dynamic and culture. Subsequently, most ethnic tribes in Afghanistan have a governing hierarchy or code that determines which figures hold power." For example, the Pashtun's ruling force is the Pashtunwali code "which serves them well in lieu of a central state authority...many aspects of Pashtun Society are shaped by this code."<sup>18</sup> For the Hazaras, a tribal hierarchy is in place. Local elite, known as Shaikhs, mirs or Arbabs, has more authority than their Pashtun counterparts.<sup>19</sup> For the Baluchis, "tribal Serdars, or Khans,

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<sup>16</sup> Ibid. Page 42.

<sup>17</sup> Ollapally, *Unfinished Business in Afghanistan: Warlordism, Reconstruction, and Ethnic Harmony*. Page 2.

<sup>18</sup> Williams, *Afghanistan Declassified a Guide to America's Longest War*. Page 18.

<sup>19</sup> Ibid. Page 36.

to whom they have considerable loyalty. They also have a code that is similar to the Pashtun code of Pashtunwali.”<sup>20</sup> Despite centuries of functioning self-autonomy, decades of disastrous warfare have deteriorated the ability for many ethnic tribes to self-rule, enabling the Taliban to enter vulnerable communities and take over key positions of power.

### **Resistance to State and Foreign Authority**

Afghanistan’s tribes have historically resisted outside influence and power. “Past attempts at modern state formation in Afghanistan that have directly challenged the local tribal and religious structures of society have result[ed] in ethnic backlash[es] and state failure[s].”<sup>21</sup> The international community’s efforts to implement the Bonn Agreement received the same unfavorable treatment. The Bonn Agreement called for “an interim governing structure,” however, the agreement “ignored many root problems, most notably Afghan ethnic fragmentation and distrust that has plagued the country for decades.”<sup>22</sup> As part of the Bonn Agreement, Afghanistan held democratic elections for the first time and in 2004, Hamid Karzai was elected as Afghanistan’s president. The election process is widely believed to have been fraudulent and instilled further distrust in the people.

Ethnic groups in Afghanistan perceive international influence and implementation of the Karzai administration as a continuum of “the century-old ethnic hierarchy that had discriminated against them.” Consequently, mostly non-Pashtun groups, display resentment and demand “a return to an older pattern of regional autonomy, in which local elites played a significant role in governing

their own people and a had say in politics at the national level.”<sup>23</sup>

### *Tensions Toward the Karzai Administration*

The implementation of the Bonn Agreement played a critical role in appointing Hamid Karzai as president. Many in Afghanistan view Karzai as “the Westernized Pashtun leader.”<sup>24</sup> Appointing a Pashtun leader to power raised suspicion and resentment in non-Pashtun ethnic groups. Dr. Rohullah Amin has conducted extensive research in the area of ethnic stereotyping in Afghanistan, and explained that tribes begin asking questions and become suspicious when one ethnic group receives benefits over another group. For example, Pashtun dominance has long been a source of tension amongst non-Pashtun ethnic groups. Non-Pashtun groups are often suspicious of the prominence of Pashtuns in positions of power. Ethnic tensions in Afghanistan are “historically centered on which groups would dominate the state and subordinate others.”<sup>25</sup>

The Karzai administration has consequently seeded resentment in groups that believe that American policy has allocated more resources and infrastructure to beneficiaries of the administration. In addition, the Tajiks have worked aggressively to gain back their stronghold in the Karzai administration. Their increasing “numbers in the military and perceived dominance over the Karzai administration have led many Pashtuns to distrust the government.”<sup>26</sup> Distrust and suspicions of ethnic groups in power can hamper efforts to rebuild the nation through exploration of its mineral wealth. “Many

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<sup>20</sup> Ibid. Page 43.

<sup>21</sup> Johnson, “Afghanistan’s Post-Taliban Transition.”

<sup>22</sup> Ibid.

<sup>23</sup> Barfield, “Afghanistan’s Ethnic Puzzle.” Page 61.

<sup>24</sup> Williams, *Afghanistan Declassified a Guide to America’s Longest War*. Page 29.

<sup>25</sup> Barfield, “Afghanistan’s Ethnic Puzzle.” Page 56.

<sup>26</sup> Williams, *Afghanistan Declassified a Guide to America’s Longest War*. Page 29.

Afghans feel vulnerable about the future,<sup>27</sup> and resentment towards groups receiving the benefits of mineral extraction may intensify existing ethnic conflict and instability.

### **Regional Commanders and Warlords**

The Karzai administration failed to provide the necessary resources and services to populations beyond the borders of Kabul. Regional power figures took advantage of “the arrival of Karzai’s appointees, who abused their positions or favored one faction over another”<sup>28</sup> Hamid Karzai was unable to utilize democracy to positively reform war torn Afghanistan. Furthermore, the administration’s inability to address the needs of rural populations promoted doubt as what the intentions of the international community were, and created a situation that put the central government in a susceptible position to regional commanders who want to see the central government destroyed.<sup>29</sup>

The lines between regional commanders and warlords in Afghanistan are often blurred. In this context, warlords are defined as “an individual who exercises a combination of military, political, and economic power outside a constitutional or legal framework.”<sup>30</sup> Violence has become the norm in Afghanistan and works largely in the favor of warlords and tribal elites who have the capability to offer protection to their respective communities. Warlords are able to exercise control, “especially in the rural areas [where] they provide the only stability.”<sup>31</sup>

Dealing with warlords will be a significant obstacle for mineral extraction in

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<sup>27</sup> Ahmed and Zahori, “Afghan Ethnic Tensions Rise in Media and Politics.”

<sup>28</sup> Barfield, “Afghanistan’s Ethnic Puzzle.” Page 62.

<sup>29</sup> Ollapally, *Unfinished Business in Afghanistan: Warlordism, Reconstruction, and Ethnic Harmony*. Page 10.

<sup>30</sup> Ibid. Page 3.

<sup>31</sup> Ibid. Page 4.

Afghanistan. As previously indicated, warlords have territorial control and will go to great lengths to protect their interests and people. The power of warlords can be observed in the efforts to eradicate poppy cultivation in Afghanistan. Paul Brinkley, an American businessman and government official, describes why: “simplistic ideas about paying farmers to grow crops other than poppy were not feasible. Several neighborhoods in the city had opulent large villas, each surrounded by high walls and security guards. Drug lords in the city were clearly thriving opium trade and had no intention of allowing poppy crops to be replaced.”<sup>32</sup> Warlords will inevitably demand a share of the wealth when mineral extraction occurs within a given territory or will consequently serve as a barrier in extraction. Excluding warlords from the mineral extraction process may cause further conflict, tensions, and dangers for both citizens and mining personnel.

### **Ethnic Conflicts**

Ethnicity is a sensitive topic and catalyzes centuries of tensions in Afghanistan. Consequently, ethnic tensions have played a significant role in hindering social and economic productivity in the region.

#### *Contested Population Data*

Various ethnic groups contest the population surveys and consensus data available in Afghanistan. The Karzai administration “significantly understated the size of Afghanistan’s ethnic minorities”<sup>33</sup> causing anger amongst tribes, which felt inaccurately portrayed by the central government, thus unaccounted in political representation and resource distribution. Tribal size and

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<sup>32</sup> Brinkley, *War Front to Store Front*. Page 215.

<sup>33</sup> BOWLEY, “New Worries About Women’s Rights and Ethnic Tensions Emerge in Afghanistan.”

demographics are subject to debate because of the “risks that a population-count might reduce the official size of some constituencies or expand those of rivals.”<sup>34</sup> Depending on which situation is more favorable, political elites would not elect to have an accurate portrayal of its constituents. This is because an accurate count may undermine and redistribute authority to other tribes or political figures. A large portion of the aid and money sent to rural areas was wasted as no one knew where or how to spend it. An accurate count of Afghanistan’s demographic make up will hold officials accountable for resource use and distribution by providing a valuable tool for monitoring corruption and waste.<sup>35</sup>

### *Political Discrimination*

The Karzai administration has made “discriminatory statements about the Hazaras”<sup>36</sup> and further strained ethnic tensions. For centuries, the Hazaras have faced persecution and violence, especially from the Taliban and the Pashtuns. Additionally, officials “also called the Hazaras, who are Shi’a Muslims, infidels, among other inflammatory things.” Derogatory remarks and treatment by the government further ignites tensions amongst tribal groups.

Fortunately, Afghanistan’s new president, Ashraf Ghani, recognizes the dangers of ethnic discrimination within the government. The new administration seeks to alienate itself from the demeaning tactics of the Karzai administration by addressing the needs of rural and tribal populations. In a lecture, Ghani stated, “all processes of state formation are political and moral. You need

a moral compass in order to put the country above yourself. That means you have to generate political capital, not political division.”<sup>37</sup> Ghani “seemed determined to present himself as the polar opposite of Hamid Karzai.”<sup>38</sup> With this attitude, Ghani’s administration has shifted the policies to be more inclusive of rural populations and interests.

Despite Ashraf Ghani’s efforts to shift the nation towards ethnic inclusiveness, tribal violence continues to plague Afghanistan. Incidents where members of different ethnic groups engage in violent conflict are a common occurrence. Acts of vengeful behavior amongst ethnic groups continues to fuel a cycle of violence. Targeted mistreatment of minority groups by those in power and continued ethnic fighting will foster a tumultuous environment for mineral extraction. The lack of “Sensitivity about ethnic identity can impede progress in Afghanistan.”<sup>39</sup>

### **Conclusion**

Afghanistan’s ethnically diverse population has significantly contributed to the nation’s complex history, economic, and political situation. The nation’s ethnic groups have been largely autonomous, with regional power figures in control, however, have historically faced oppression under Pashtuns exertion of control. Consequently, there are tensions between non-Pashtun groups and Pashtuns who currently occupy powerful positions. Furthermore, Hamid Karzai’s administration failed to provide necessary services to rural regions. The central government’s inability to include rural regions into major decisions making

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<sup>34</sup> Graham-Harrison, “Afghan Census Dodges Questions of Ethnicity and Language.”

<sup>35</sup> Ibid.

<sup>36</sup> BOWLEY, “New Worries About Women’s Rights and Ethnic Tensions Emerge in Afghanistan.”

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<sup>37</sup> Ghani, Lecture by Ashraf Ghani President, Islamic Republic of Afghanistan: Fixing Failed States: From Theory to Practice.

<sup>38</sup> Gordon, “Meeting Afghan Leaders, Donors Pledge Support.”

<sup>39</sup> Ahmed and Zahori, “Afghan Ethnic Tensions Rise in Media and Politics.”

processes cultivated nationwide distrust towards the administration and has consequently strengthened the power of regional commanders and warlords. Regional power actors have the capacity to influence mineral extraction processes within their respective geographic areas. Ethnicity is a sensitive and contested topic in Afghanistan and has sparked violent conflicts over issues ranging from land rights and governance to disputed population counts. The issues surrounding Afghanistan's different ethnic groups need to be accounted for in rebuilding the state. Acknowledging the needs and interests of Afghanistan's major tribal groups will be a challenge in mineral exploration and extraction.

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# The Legal and Judicial System in Afghanistan

## *Many Laws, Little Enforcement*

Patricia Denga

*“Salt preserves meat, but what can be done with salt if it is bad”*

### Introduction

In assessing what it takes for Afghanistan to have a successful mining industry, it is important to consider the functionality of the economy’s legal and judicial systems. Court systems that serve justice with integrity and efficiency promote a sound economy.

Furthermore, the method by which nations enforce their laws is important to investors.

Justice and the rule of law is key to a nation’s development and state-building efforts. A good judicial system contributes to economic growth and state building by promoting investment.<sup>1</sup> Mining companies with global experience understand that risks may be high in developing countries. While global mining companies prefer transparency, they may in some cases, tolerate a certain degree of corruption. However, global mining companies are unlikely to invest in nations where contracts can be breached with impunity by the host government

Investors want to know that legal recourses exist to protect their investments. A reliable, functioning legal and judicial system contributes directly to economic growth and state building by promoting investment.

Although it has judges, prosecutors, a written law, and a courts system in place<sup>2</sup>, Afghanistan lacks a good judicial system.

Prosecutors and judges in the urban centers and in provincial areas lack technical means of communication. Moreover, appointments for judicial positions are not made on merit and education, instead judicial positions are appointed through nepotism, personal or political connections.<sup>3</sup>

The few courts that do operate have a shortage of staff. Low salaries and insufficient training have pushed prosecutors and judges to leave their posts. Those who continue working in the courts do so on low salaries and are vulnerable to the vicious cycle of corruption that has gripped Afghanistan. With corruption, staff shortages and inoperable courts, Afghanistan’s citizens have lost faith in the justice system. In addition, “there is very little that is systematic about the legal system, and there is little evidence that the Afghan government has the resources or political will to tackle the challenge”.<sup>4</sup>

### *Historical Context of the Afghan Judicial and Legal Systems*

Shaped by the divide between supporters of secular law and supporters of Islamic jurisprudence, the judiciary of Afghanistan has evolved a number of times over the past decades and is still a work in progress. Today, the justice system of Afghanistan is almost non-existent, making the country’s destabilization even worse.

<sup>1</sup> Dubois, Schurrer, and Velicogna, *The Functioning of Judicial Systems and the Situation of the Economy in the European Union Member States*, 6.

<sup>2</sup> Miller, Perito, and United States Institute of Peace, *Establishing the Rule of Law in Afghanistan*, 5. Ibid.

<sup>3</sup> Miller, Perito, and United States Institute of Peace, *Establishing the Rule of Law in Afghanistan*, 5.

<sup>4</sup> International Crisis Group, *Reforming Afghanistan’s Broken Judiciary*, 3. Miller, Perito, and United States Institute of Peace, *Establishing the Rule of Law in Afghanistan*, 5.

After the turbulent history under British domination, King Amanullah who ruled from 1919 to 1929, in a desire to modernize Afghanistan, introduced secular laws and a constitution in 1923. For many centuries prior to 1923, the law was a combination of *Sharia* (Islamic) law and the *Pashtunwali* code of conduct belonging to *Pashtun* tribes. Since there was no central judicial system, resolution of disputes was done by council elders known as *jirgas* or *shuras*.<sup>5</sup>

In 1923, Afghanistan introduced secular law and a constitution. King Amanullah, the leader at the time, made Islam the religion of Afghanistan, but also provided protection for other religions.<sup>6</sup> One year later, a new constitution, which separated powers between the legislative, executive, and judiciary was drafted. However, Islam proclaimed the state religion.

The 1964 constitution saw the emergence of the Soviet backed People's Democratic Party of Afghanistan (PDPA). In 1973, Sardar Daoud Khan became the king after a coup. The new monarch brought in a new constitution in 1977 that banned all political parties except his own. This increased the conflict between rural and urban centers and further divided the country along ethnic and geographic lines.<sup>7</sup> Corruption in the state government was prevalent during the PDPA's time in power. The PDPA changed the laws of rural land ownership, killed anyone who opposed its reforms, used the secret police to eliminate opposition, and challenged the power of the tribal elites. PDPA actions ultimately led to revolts by the Pakistan-backed opposition culminating in the Soviet intervention on December 1979.<sup>8</sup>

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<sup>5</sup> Tondini, *StatAll ebuilding and Justice Reform*, 31.

<sup>6</sup> Kamali, *Law in Afghanistan*, 203–4.

<sup>7</sup> International Crisis Group, *Reforming Afghanistan's Broken Judiciary*, 11.

<sup>8</sup> *Ibid.*

Under the Soviet-backed government, the Supreme Court was disbanded and the Supreme Judicial Council was formed in its place. Leaders of the Soviet-backed regimes included Mohammad Najibullah. Najibullah's power was weakened in 1989 when the Soviets withdrew from Afghanistan. Najibullah's government collapsed, and in 1996, the Taliban took over power and imposed a theocratic state and Islamic emirate.<sup>9</sup>

The Taliban repealed all communist laws, reinstated the constitution of 1964 and:

“[A]dopted a radical version of Islamic law as the major source of law. As a consequence, the key function of the law became that of protecting and promoting Islamic ideals and values. A Ministry of Virtue, responsible through its religious police for the enforcement of public morality, was then created. Punishment became a tool to promote Islamic way of life among the citizens.”<sup>10</sup>

While many constitutions have been promulgated in Afghanistan, very few changes have been made to court structures, the office of the Attorney General and the Ministry of Justice. The Attorney General's Office was formed in 1967 and reported to the Ministry of Justice. In 1980, and 1987 it became independent and by 1990, the Constitution stated that the Attorney General's Office should report to the president. The Attorney General's Office hierarchy was similar to that of the law courts. The Ministry of Justice has

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<sup>9</sup> Tondini, *Statebuilding and Justice Reform*, 37.

<sup>10</sup> *Ibid.*

historically played a limited role in Afghanistan's judiciary system. Its main role has been to draft laws and administer juvenile justice.

The minimum requirements to enter the Bar included a "degree from a Faculty of *Sharia* or Law and Political Science School, otherwise an official *sharia madrassa* (Islamic School), or even a mere certification of proficiency by the Control Committee."<sup>11</sup> However, the Taliban reduced the qualifications to become an attorney. The Taliban's requirement to become an attorney was "a simple degree from an official Afghan or foreign religious school, or at least 10 years of professional and practical work experience at the Ministry of Justice."<sup>12</sup>

### **The New 2004 Constitution (Post Taliban)**

In the wake of the September 11, 2001 attacks, the US led military coalition defeated the Taliban regime in the urban centers. In December of the same year, the Bonn Agreement was adopted. The agreement called for:

[A]n independent judiciary under the auspices of the Supreme Court, reestablishment of the 1964 constitution as the founding document and creation of several commissions with the aim of rebuilding the rule of law [and] the Judicial Reform Commission and Constitutional Commission were tasked with reconstructing "the domestic justice system in accordance with Islamic principles,

<sup>11</sup> Ibid. 41.

<sup>12</sup> Ibid.

international standards, the rule of law and Afghan legal traditions"<sup>13</sup>.

The new constitution of 2004 was plagued by a lack of execution and accountability. For instance, president Hamid Karzai appointed 80-year old Fazl Hadi Shinwari as the head of the Supreme Court. The constitution stated that the head of the Supreme Court had to be less than 60 years of age. Karzai and Shinwari ignored constitutional provisions that clearly stated judges were required to "have knowledge of jurisprudence, the national objectives, and the laws and legal system of Afghanistan"<sup>14</sup>.

With the help of the international community, a new constitution was drafted in 2004. Efforts to steer away from religion in the constitution failed. Many parts of the text still made reference to Islam. Article three of the 2004 constitution actually enshrined *Sharia* as the legal authority of the state, and declared that, "no law shall contravene the tenets and provisions of the holy religion of Islam in Afghanistan".<sup>15</sup> Article 149 added "the provisions of adherence to the fundamentals of the sacred religion of Islam and the regime of the Islamic Republic cannot be amended."<sup>16</sup> A provision in the 2004 constitution states that the nation must honor and respect its treaties by abiding by the Universal Declaration of Human Rights (UDHR).<sup>17</sup> This is problematic since Islamic tenets are not always in agreement with international human rights. However, with judges only required to know either secular or Islamic law and with most well versed in neither,

<sup>13</sup> International Crisis Group, *Reforming Afghanistan's Broken Judiciary*, 12.

<sup>14</sup> Ibid., 13.

<sup>15</sup> Ibid.

<sup>16</sup> Ibid., 18. Ibid.

<sup>17</sup> International Crisis Group, *Reforming Afghanistan's Broken Judiciary*, 19.

international standards are usually over ridden.<sup>18</sup>

## The Legal Architecture

The State Legal Codes are enforced on all Afghan residents and citizens; however, the government has been unable to enforce it well. The Ministry of Justice, Attorney General's Office and the judiciary are responsible for upholding the rule of law in Afghanistan. Unfortunately the specific mandates of each branch are not clearly outlined in the constitution. This ambiguity has led to sour relations between the three branches and has consequently compromised the effectiveness of the justice system and law enforcement. This is unfortunate because collaboration between these three judicial institutions is important to convince both the Afghan population and international investors that the legal and judicial system in Afghanistan is not only functional but also reliable.

The state justice system of Afghanistan is made up of three institutions, namely the Supreme Court, the Attorney General's Office and the Ministry of Justice. While it is equal to the executive and legislative branches of the state, the judiciary branch is autonomous. Afghanistan's legal system also consists of three parts that seem to be in competition one with another. The three parts are the State legal code, Non-state, local customary law and *Sharia*.

Although these three institutions exist side by side, for years, the government has strived to have a formal legal system and rule of law in Afghanistan. The Afghan government has to decide which of these three institutions constitute the foundation for legal authority in the country. While customary law requires no reconstruction, it

handles 90% of civil disputes and some criminal cases in the country. Therefore, formal recognition and reintegration into the judicial system has to be considered.

## The Supreme Court

At the top of the court system is the Supreme Court, which is comprised of one chief justice and eight justices. Serving as the chief administrative body and court of last resort, the Supreme Court also oversees the employment, relocation, promotion and punishment of judges. In addition, the Supreme Court was granted power to review and form the constitution commission. However, there are no clear standards set for how the commissioners are appointed. Leaving the appointments of the Constitution Commission open to interpretation is an example of a conflict that needs to be resolved in order to make the Supreme Court less vulnerable to manipulation by corrupt leaders<sup>19</sup>. For example, Hamid Karzai used this ambiguity to his advantage.

Additionally, Afghanistan's president has great influence over who sits on the court bench. The president impedes the ability of the court to be independent. The president in accordance with Islamic law appoints ordinary judges and the judges of the lower courts, which "strengthens the executive's hold on the judiciary"<sup>20</sup> and weakens the autonomy of the courts. Moreover, opposition parties are denied access to constitutional review and "there are no avenues for private citizens or entities to file complaints pertaining to the violation of their constitutional rights."<sup>21</sup> This is a red flag to investors or businessmen who may

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<sup>18</sup> Ibid.

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<sup>19</sup> Ibid., 20.

<sup>20</sup> Ibid., 21. Ibid.

<sup>21</sup> International Crisis Group, *Reforming Afghanistan's Broken Judiciary*, 21.

be willing to invest in Afghanistan's mineral wealth.

Afghanistan's parliament is aware of the dangers of executive power abuse. It has attempted to solve this problem, but unfortunately; these efforts have been thwarted by corruption. The executive stronghold on power has persisted, and further increased judiciary corruption. Although the Supreme Court is responsible for reviewing case appeals from the lower courts and ensuring the legality of decisions, the Supreme Court can also overturn decisions that go against *Sharia* law. The Supreme Court insures that old Islamic rules and jurisprudence are instilled with the rule of law and human rights principles.<sup>22</sup>

#### *The Lower Courts*

The lower courts consist of two parallel courts systems. The first is the general courts, consisting of the district, appellate and Supreme Court. Provincial primary courts are in provincial capitals including Kabul, Herat and Kandahar, and are structured in a similar manner to the Supreme Court. They are composed of four divisions: penal, civil, commercial and public security.

Although defendants have a right to counsel in criminal cases, this usually does not occur. Cases are often tried without counsel or without the defendant's presence. Those in charge of administering justice often abuse or ignore both the rule of law and authoritative power, thus prolonging the cycle of lawlessness. An official from the Ministry of Justice summarized that in most cases, court sessions are not held. Instead, a group of judges meet with no participation from a defense lawyer, prosecutor or even the defendant. The judicial system lacks

viable resources, including vehicles to transport witnesses and defendants from holding cells to courts and district.

#### *The Attorney General's Office (AGO)*

The Attorney General's office was intended to be independent and autonomous. Its mission is to investigate crimes by national security officers, the police, and armed forces. However, the president appoints the Attorney General and Parliament and has not helped much in vetting the potential candidate for the Attorney General's office. With only the president appointing potential candidates for the Attorney General's office and without the Parliament's input, the Attorney General's office has become a "political dumping ground for appointees whose loyalty is first to cater to patrons, and a distant second, to the law."<sup>23</sup> Moreover, the international community, particularly, the US, have attempted to influence the Afghan government's choice for Attorney General.<sup>24</sup>

The Attorney General's office is comprised of five divisions: military, judiciary, investigation, judiciary and administrative affairs. Each of these divisions appoints a deputy attorney general as its head. Like other judiciary branches in Afghanistan, the Attorney General's office is not immune to corruption. While the requirement is for all prosecutors to be trained in either *Sharia* or secular law, many of them are uneducated prosecutors who were grandfathered in from previous regimes and have remained at their posts indefinitely.

The lack of stipulated procedures regarding how prosecutors are appointed, has led to more corruption in the department. Instead of using education and merit as the basis for

<sup>22</sup> Tondini, *Statebuilding and Justice Reform*, 53. Ibid.

<sup>23</sup> International Crisis Group, *Reforming Afghanistan's Broken Judiciary*, 24.

<sup>24</sup> Crisis Group interview, Kabul, 21 June 2010.

hiring and promoting legal and judicial employees, the hiring entity uses nepotism. As an example, eighth-grade high school drop-outs that have connections with those in high level prosecution positions, are more likely to be appointed into high-level positions, while university graduates, who aren't connected to anyone in power, are appointed to low level positions with low wages and weak chances of upward mobility,<sup>25</sup> hence those who are educated do not stay for long, and the cycle of filling legal positions with uneducated prosecutors continues.

### *The Ministry of Justice (MoJ)*

Although the Ministry of Justice (MoJ) is a minor player within the Afghan justice system, it has a broad mandate that includes “drafting, publishing and distributing legislative documents, providing pre-trial mediation in civil cases, raising legal awareness, protecting state properties through the court system, and managing the prisons, detention centers, and juvenile rehabilitation centers throughout the country... providing legal advice to the government, registering political parties and social organizations, and licensing attorneys practicing in courts.”<sup>26</sup> The MoJ is also the authority on the ownership and use of government land, as well as the chief legal counsel for the government.<sup>27</sup> It is unfortunately an organization with limited staff and minimal professional training.

### *The Non-State Justice System (Customary Rule of Law)*

The MoJ, the Attorney General's Office and the courts constitute the state justice system prevalent in the urban centers of

Afghanistan. In Afghanistan's rural provinces, the non-state justice system is more prevalent.

In rural areas, the rule of law in place is the non-state customary law. Customary law is also the default set of laws used when there is neither *Sharia* nor state law. Customary law varies from place to place and is subject to manipulation.

Trained religious judges known as *qazi* implement *Sharia* law, which is believed to be applicable universally in all of Afghanistan. With the belief that state and religion are melded together, the *qazis* are against state or customary law not based on *Sharia* law.

To date, there are many obstacles preventing the rural population from accessing the state justice system. It will be very challenging to bring the state law and justice systems to all areas of Afghanistan. However, ignoring the implementation of the rule of law in rural areas and solely focusing on urban areas will result in an inconsistent justice system and will impede state building efforts.

Although the government strives to reconcile state and non-state legal systems, rural populations have resisted state law whether *Sharia* or Western inspired.<sup>28</sup> Currently, state and non-state justice systems exist side by side, however, this structure may pose a problem for foreign investors who may prefer state law run by trained judges versus non-state customary law run by local elders. A solution to Afghanistan's justice system may require the two religious systems to coexist until the state system gains legitimacy.

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<sup>25</sup> International Crisis Group, *Reforming Afghanistan's Broken Judiciary*, 25.

<sup>26</sup> Tondini, *Statebuilding and Justice Reform*, 40.

<sup>27</sup> *Ibid.*, 55.

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<sup>28</sup> *Ibid.*, 934.

## *Challenges in Accessing the State Judicial System*

With very few courts in rural areas, local populations must travel to urban centers in order to access the state, legal, and judiciary systems.<sup>29</sup> However, travelling in Afghanistan is not only unsafe, but also time consuming, given unpaved roads and unexploded landmines.<sup>30</sup> Rural based Afghans resort to the non-state justice system due to the difficulties posed by these security factors.

Another challenge is Afghanistan's dysfunctional judiciary system, which not only affects rural citizens seeking justice, but also the judicial and legal system staff. Prosecutors and judges in rural areas typically go unpaid for months because "there is no safe way to deliver payment."<sup>31</sup> Additionally, lack of resources in provincial courts leaves the judges with no choice but to make case decisions with no reference to the law.<sup>32</sup> Finally, there is little to no accountability in rural courthouses. No one monitors the court staff to ensure that they show up for the job, yet they are paid employees. With corruption rampant and the threat of violence always looming, there is no incentive for rural Afghans to utilize the state justice system.

The justice system is intended to primarily serve the citizenry, however, in Afghanistan; illiteracy deters citizens from being acquainted with their written laws.

Educated foreigners, who work for the mining sector, can take advantage of Afghans who are incapable of reading and writing. Contracts can easily be breached

and citizens undoubtedly cheated. Another factor that discourages Afghans from using the state legal system is corruption. The unfortunate reputation that precedes the Afghan legal and justice system is that one must pay a bribe in order to access legal services.

The education level of judges, prosecutors, lawyers, and ordinary citizens is low. The US and Germany have invested heavily in educating the police and the army, however, little funding and efforts have been made to address the education of court users, not just the court staff.<sup>33</sup> Resistance to the state legal system could be due to intimidation felt by those who are illiterate. On the other hand, the non-state justice system is orally based, hence more attractive to the majority of Afghanistan's illiterate rural populations.

## **Resources and Funding for the Judiciary System**

Afghanistan does not have enough human or material resources to ensure a functioning justice system. The ratio of judges to citizens is one judge to 21,317 people and goes as high as one judge to 76,200 people in the Kandahar province<sup>34</sup>.

## **Does the Government Serve the Justice?**

Afghan government officials operate as though the law does not apply to them. Many high-ranking officials including the president enjoy unlimited impunity because the law is not enforced upon them. For example, judicial motions of those in high positions are dismissed or overturned with no explanation. Accountability and monitoring systems do not exist to ensure the rule of law is enforced. Impunity goes on unchecked and increases across all sectors of

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<sup>29</sup> Ibid., 946.

<sup>30</sup> Ibid.

<sup>31</sup> Ibid., 948. Ibid.

<sup>32</sup> Miller, Perito, and United States Institute of Peace, *Establishing the Rule of Law in Afghanistan*, 5.

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<sup>33</sup> Jensen, "Obstacles to Accessing the State Justice System in Rural Afghanistan," 941.

<sup>34</sup> Tondini, *Statebuilding and Justice Reform*, 38.

the country. The very sector that is responsible for minimizing impunity and corruption also fails. Reform is needed to restore justice to Afghanistan as well as to attract investors to the mineral economy that may catalyze state building efforts.

## **Conclusion**

The rule of law exists to ensure obedience to rules essential to social order. However, the majority of Afghans live under a high degree of lawlessness.

Afghanistan's judicial system suffers from a lack of infrastructure as well human and financial resources. Other challenges faced by the legal and justice system include low levels of competency, transparency, record keeping, and adequate training. Today, the majority of the population lives in rural provinces and does not have easy access to the state's legal system and institutions. Many obstacles including minefields, illiteracy and corruption, prevent rural Afghans from taking full advantage of their judicial system.

For the rule of law to prevail across the whole country, all Afghans must be able to easily access the legal and judicial systems. Legal and judiciary employees will need to be well trained in legal matters, and legal institutions will need to reduce corruption. Reforming the Afghan justice system appears to be a daunting task to accomplish, but with time, resources and commitment, meaningful reforms may be achieved.

## **Findings:**

- The legal and judicial system in Afghanistan is not functioning at full capacity.
- Islam is a major tenet in the constitution.
- The judicial system has three institutions – the Supreme Court, the Attorney General's Office and the Ministry of Justice.
- Three legal structures exist: state law, customary non-state law and sharia law.
- The rural provinces utilize non-state law and the urban centers use the state legal system while sharia law is universal.
- Afghanistan has no effective law enforcement.
- Lack of education of judges and prosecutors is a major obstacle in judiciary's functionality.
- Corruption is another major obstacle to the judicial system's legitimacy and effectiveness.
- Government officials feel entitled and above the law.
- but with time, resources and commitment, meaningful reforms may be achieved.

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# **Mining and Extraction Governance**

## ***Evaluating Afghanistan's Mineral Management Capacity***

Ryan Bersentes

*“There is a path to the top of even the highest mountain”*

### **Introduction**

Mineral extraction by foreign companies is best encouraged by a number of factors related to governance of the mining sector. Such factors include, clear and fixed contract terms, protection of property, a stable regulatory environment, and a discernible level of financial risk. Mining companies tend to have experience in dealing with different systems of governance across different countries. Such experience, however, has taught them to be particularly wary of corrupt systems where contract terms can be altered without warning.

This chapter concerns issues regarding the Government of the Islamic Republic of Afghanistan (GIRoA) and its current capabilities for governance over a large mining sector. This chapter will examine both the possibilities and challenges the GIRoA faces in managing mineral extraction from the point of view of the mineral stockholders and stakeholders.

### **The Expectations of Multinationals and Internationals**

Today, multinationals involved with natural resource extraction expect for certain conditions to be met by national institutions. One condition is property protection. This includes protection, not only from non-government agents, but also from corruption. Adherence to contracts must be maintained regardless of which

administration currently occupies the central government.

Conducting business in countries where long periods of conflict have deteriorated the rule of law, brings added uncertainty to an already risky enterprise. Yet, institutionally GIRoA has successfully established mineral laws that are in line with accepted governance practices<sup>1</sup>. Regulations detail guidelines of the transfer of royalties, taxation, and recompense in the event of damages<sup>2</sup>.

A full measure of the country's governance structure in the mining domain should refer to more than these regulations alone. Since 2003, a large portion of the global mining industry has sought to improve its standards

### *The Extractive Industries Transparency Initiative (EITI)*

The Extractive Industries Transparency Initiative (EITI), aims to encourage a “global standard to promote openness and accountable management of natural resources.” Extraction will foster economic growth and social development when there is accountability. In cases that lack openness, corruption flourishes and benefits go to a select few who then seek to protect their statuses by any means necessary.

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<sup>1</sup> “Full Text of Tokyo Declaration Issued after Afghan Development Conference.” BBC Monitoring Asia Pacific. July 9, 2012.  
<http://search.proquest.com.offcampus.lib.washington.edu/pais/docview/1024050677/F7ED808617B94795PQ/3?accountid=14784>. Article 11.

<sup>2</sup> Minerals Law to parliament\_0.pdf, 2013.  
[http://www.globalwitness.org/sites/default/files/library/Minerals%20law%20to%20parliament\\_0.pdf](http://www.globalwitness.org/sites/default/files/library/Minerals%20law%20to%20parliament_0.pdf). Page. 48

Afghanistan joined the EITI in March of 2009. In early 2014, the EITI reported that Afghanistan is “working toward” compliance. At the same time, however, Revenue Watch’s Resource Governance Index, gave Afghanistan a governance ranking of 49 out of 58 for 2013.

### *The Multi Stakeholder Group*

Afghanistan has assisted in setting up the Multi Stakeholder Group, however, this organization has done little to alleviate the worries of actual local stakeholders and possesses very little power over any extraction projects<sup>3</sup>. GIROA publishes its revenue accounts from projects, but is largely incomplete or difficult to access. This unreliability is due to the administration’s reluctance to disclose information that could potentially damage foreign investment<sup>4</sup>.

The GIROA has been able to meet only the most basic of EITI requirements, however, lacks a framework for further implementation. Although Afghanistan possesses a comprehensive regulatory code, laws requiring the engagement of stakeholders outside Kabul need improvement<sup>5</sup>. In summary, the necessary legal code is in place, but the problem lies in GIROA’s enforcement of the code.

### **Afghan Governance**

The first barrier to any new mining operation in Afghanistan tends to be government bureaucracy. In December of 2001, a new constitution was created following the fall of the Taliban from power.

In 2004, the new constitution specified the creation of a strong presidency with powers to appoint the heads of the ministries of the nation’s various provinces<sup>6</sup>. This was done in order to defend against what was feared to be a fracturing of political power among tribal or ethnic groups following the liberation of Kabul from the Taliban<sup>7</sup>. A structure was put in place that largely excluded local authorities from influencing national politics. This resulted in reduced ability for local leaders and communities to get involved in the extraction process, leading to disenfranchisement. Since Afghanistan’s government is highly centralized around the current president, and all minerals are initially the property of the state, extraction policies have been controlled by the office of the president. Unilateral control over mineral deposits creates uncertainty among multinational investors<sup>8</sup>.

### *Traditional Governance*

Examining traditional governance in Afghanistan’s offers insight into the nation’s complex governance structure. The traditional system based on family ties and religious ceremony had previously provided a vital and indirect link between local populace and the national government<sup>9</sup>.

These systems have seen their authority severely weakened though decades of war and attempts by the GIROA to increase its jurisdiction in rural areas. Furthermore, the provincial system has failed to provide an avenue for effective and reliable brokering

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<sup>3</sup> Afghanistan\_2011\_EITI\_Report.pdf. Government, September 2014 Page. 1

<sup>4</sup> Global Witness. “Copper Bottomed,” December 2012, 74, Pg. 28

<sup>5</sup> Gaps in New Afghan Mining Law Pose a Threat to Stability | Global Witness.” Accessed February 8, 2015.

<http://www.globalwitness.org/library/gaps-new-afghan-mining-law-pose-threat-stability>. Page. 2

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<sup>6</sup> [Article] Afghan Const. Sec. 2. [Article] IRoA Consti. art. 75. sec. 3.

<sup>7</sup> Barfield, Thomas. Afghanistan: A Cultural and Political History. 1st ed. Vol. 1. Woodstock, Oxfordshire: Princeton University Press, 2010., Page. 278

<sup>8</sup> Interview with US Foreign Service Officer Carmela Conroy

<sup>9</sup> Interview with Dr. Rohullah Amin, Researcher in the American Institute of Afghan Studies.

between local authorities.<sup>10</sup> Now militia leaders occupy the roles of the local elders, acting as intermediaries between any formal institutions, be it a mining corporation or even the Kabul government. To access the wealth that lies beneath the land of the Afghans, one must understand both sides of Afghanistan's governance. The formal central, provincial, and municipal structure and the informal traditional authority can be difficult to differentiate, as all facets are deeply intertwined.

### *Provincial Governance*

The internal governance of the 34 provinces of Afghanistan operates similarly to that of Kabul. The governor acts as the *de jure* head of the state and works in tandem with Afghanistan's various ministries and local *shuras*. After the 2004 presidential elections, governors are now appointed by the president as opposed to being elected. Furthermore, they must contribute to the current president's ruling coalition. This signifies that a province's governing position is usually occupied by an individual with influence in local ethnic groups. Influence is usually centered on a province's urban centers, with government influence diminishing into rural areas. Therefore, a president usually appoints a governor whom he can trust with informal influence in these outer areas<sup>11</sup>. This system of governance leads to a situation where governors weigh the need to support local interests against resources offered by the President.

This conflict of legitimacy between an urban-centered central government and rural areas is not a new issue for Afghanistan. A centralized state with enough of a monopoly to compel complete compliance over the

tribal and ethnic authorities has never existed. For over a century, the rulers in Kabul have systematically tried to establish its authority over the rural areas of the county where the majority of the population resides.

### *Shifting From Provincial to Central Governance*

Various regimes throughout Afghanistan's history, often backed by foreign militaries, have dismantled much of the traditional tribal governance rural Afghans have relied upon for justice<sup>12</sup>. Locals in these largely traditionally autonomous communities judge the legitimacy of the central government on its ability to provide essential utilities. For neglected rural provinces, village elders and shura councils are continually perceived as the source of legitimacy because they are able to provide the resources that Kabul cannot.

Formal links between communities and the state have largely been unable to administer justice and foster development. In fact, rural communities often refer to "the government" not as a concept but as a location. Heads of municipal or sub-provincial jurisdictions often rely on the support of the governor than the locals to acquire the resources and funding needed to maintain their positions<sup>13</sup>.

### *The Minister of Mines and Petroleum or (MoM)*

The Minister of Mines and Petroleum or (MoM), responsibilities extends over the entire bidding process, from announcement to acceptance. Acceptance of a contract is the only time where the MoM must seek the

<sup>10</sup> Revenue Watch Institute. Afghanistan RGI Report, 2014.

<sup>11</sup> Barfield, Thomas. Afghanistan: A Cultural and Political History, Page. 338

<sup>12</sup> Interview with Anonymous former USAID Contractor

<sup>13</sup> Barakat, S., Evans, M., & Zyck, S. A. (2012). Karzai's Curse-- Legitimacy as Stability in Afghanistan and Other Post-conflict Environments. Policy Studies, 33(5), 439-454.

approval of other ministries. This decision is made by a vote among cabinet members, meaning the president has virtually complete control over which companies receive licenses for extraction<sup>14</sup>. Current mineral laws require independent consulting firms to create annual reports regarding social or environmental impacts, but these documents are not directly provided to local leaders and communities.

Officials that have the power to unilaterally make demands and unilateral power reflects the lack of the rule of law, the centralized nature of Afghan governance, and the failure of Kabul's government to insulate its own bureaucracy.

#### *Ministry of Finance (MoF)*

During extraction, the administrative department under the most scrutiny in regards to transparency is the Ministry of Finance (MoF). As the ministry responsible for collecting royalties, taxes and other state revenue, the MoF is also charged with the keeping of accounts. Recent inquiries made by independent firms into MoF have revealed differences between the amount companies have reported to pay and what MoF reports to receive. In 2011, there was an unresolved residual of payments totaling over three million dollars that the MoF could not account for.

#### *Ministry of Rural Rehabilitation and Development (MRRD)*

Another ministry, no less essential to GIRoA's management of its mining industry, but which currently takes a backseat to the previously mentioned ministries is the Ministry of Rural

Rehabilitation and Development (MRRD). The MRRD's primary focus in mineral extraction is the collection of municipal fees and social payments detailed in a contract. *Community Development Councils (CDCs)*

The focus of CDCs is to provide a direct link between rural communities and the national government. CDCs aim to move local governance away from the hands of local elders and into more democratic councils made up of both male and female villagers.<sup>15</sup> CDCs disperse grants to develop infrastructure projects including improved irrigation. In addition, CDCs provide the means for locals to consult experts and produce an educated decision as to how funds are allocated.

As CDCs coexist with more customary institutions such as *shuras* or councils of elders, these authorities see them as threats to traditional authority and male dominated customs. The purpose of CDCs become ambiguous and their influence in a community wanes.

#### **Mes Aynak: A Case Study**

When the Aynak contract (AMC) was signed in May 2008 between MOM and the Chinese backed consortium MCC, it was the largest single foreign invested project in Afghanistan valued at \$2.9 billion. Kabul was projected to receive approximately \$541 million per year as the MCC agreed to pay 19.5% royalties, double the world average<sup>16</sup>. The AMC was plagued by several challenges that have inhibited mineral extraction. Both GIRoA and the MCC have cut many corners to ensure the success of this mining operation. For Kabul, the project represented a chance to prove its ability to

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<sup>14</sup> Minerals Law to parliament\_0.pdf, 2013. [http://www.globalwitness.org/sites/default/files/library/Minerals%20law%20to%20parliament\\_0.pdf](http://www.globalwitness.org/sites/default/files/library/Minerals%20law%20to%20parliament_0.pdf). Ph. 18 Article 20.

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<sup>15</sup> Interview with Anonymous former USAID Contractor

<sup>16</sup> Global Witness. "Copper Bottomed," December 2012, 74, Page 8.

attract foreign investment without US assistance. For the MCC, the project offered a chance to improve Chinese corporate prestige, as well as to provide China with an economic foothold in Afghanistan.<sup>17</sup> The Mineral Laws of 2012 apply directly to mineral contracts of this sufficient size, stating that main contractual details must be available to stakeholders. In this case, the main contractual details regarding the Aynak project were never published<sup>18</sup>. It can only be assumed that such a breach of law was allowed by the Kabul regime to mitigate the effects of local corruption on MCC. Inability to adhere to the Mining Law of 2012 exemplifies how immediate political concerns undermine long-term economic demands.

Furthermore, the GIRoA made details confidential and did not directly include the relevant local stakeholders of Mes Aynek. This was done in order to prevent local corruption from impeding the contractual process.

The communities surrounding Mes Aynek are administered by municipal leaders chosen by provincial governors. This structure is an attempt to centralize power and to reduce the likelihood of political quarrels. Yet this has only served to distance the local population from their government, especially for those in the rural areas. The AMC has mechanisms for addressing grievances, but even if they were sufficient, the confidentiality of the contract itself and the lack of local involvement translates into a situation where the information available is either useless or incomplete. GIRoA provides consultation through private firms to local villages affected by the contract, however, only addresses the economic consequences of projects and not the

associated environmental or social issues<sup>19</sup>. These factors, combined with an incompetent legal system, are largely inefficient and prevent communities from seeking restitution directly through the official administrative and legal channels. Intermediaries, local individuals with political connections, play a pivotal role in the lack of progress in Mes Aynek. The exclusion of local stakeholders, coupled with the lack of the state's ability to effectively address grievances has led to a reliance on intermediaries with informal political connections who use their political leverage to extort from the MCC and GIRoA<sup>20</sup>. Intermediaries use their influence with local authorities to stymied progress.

## Conclusions

In its current state, the Afghan national government is ill prepared to responsibly oversee mineral extraction. Plagued by corruption and a shortage of legitimacy in the central government, the central government lacks the ability to enforce regulations demanded by international transparency standards and by the Afghan people.

These problems of legitimacy and corruption stem, in part, from overly centralized structure of Afghanistan's government as well as the Kabul governments attempts to expand its authority in areas that have resisted its control for centuries.

If any minerals are to be tapped to the benefit of the nation, rural communities with stakes in these minerals must be assured by both their government and the private multinationals that they will also receive

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<sup>17</sup> Global Witness. "Copper Bottomed," December 2012, 74, Pag. 9

<sup>18</sup> Minerals Law to parliament\_0.pdf, 2013.

<sup>19</sup> Global Witness. "Gaps in New Afghan Mining Law Pose a Threat to Stability, February 2014.

<sup>20</sup> Interview with US Foreign Service Officer Carmela Conroy

direct benefits. Therefore these communities must possess a direct link to the licensing process and some contractual leverage over any projects in their territory once extraction begins.

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# Financial and Business Institutions

## *A System for the Economy*

Sarah Yu

*“Good perfume is known by its own scent rather than by the perfumer’s advertisement”*

### Introduction

In 2008, a major scandal enveloped Kabul Bank, Afghanistan’s largest commercial financial institution. The scandal was a product of corruption and the absence of enforcement of the law.

The Kabul Bank crisis severely damaged the trust that people had in financial institutions. In order to generate long-term progress toward successful economic development based on natural resource extraction, corruption has to be curtailed to bring legitimacy to the Afghan banking institution.

Within the context of the Afghan banking system, this chapter looks at the role financial institutions will play in leveraging the mineral wealth of Afghanistan for economic growth and development. It also examines the case study of a similar developing country and how it restructured its own banking system and financial institutions. Finally, the current state of foreign direct investment into Afghanistan is taken into consideration. This chapter examines the business environment, and explores the viability of special economic reconstruction zones for continuous economic development.

### A Cautionary Tale

After the overthrow of the Taliban in 2001, the international community flooded Afghanistan with aid targeted toward reconstruction and development. However, with an underdeveloped banking system,

there were no sizable financial institutions that could facilitate the transfer of funds. Out of necessity, many commercial banks were proposed, and easily approved. For example, Kabul Bank, which quickly grew to become the largest private commercial bank in the country, both in number of branches (68) and collective member deposits (\$1.3 billion or 34% of total bank assets in Afghanistan).

The bank also managed to secure a \$1.8 billion annual contract to distribute salaries to 80% of the government’s employees on behalf of USAID.<sup>1</sup> Kabul Bank’s largest success was its ability to draw in more than one million depositors, despite a general distrust of banks and institutions as a whole by the Afghan community<sup>2</sup>. In August 2010, Kabul Bank became the focus of a scandal involving losses in real estate investments abroad and the ousting of two of its main leaders. The news resulted in a weeklong bank run in the beginning of September, the first two days of which saw \$180 million in withdrawals. In addition to the bank runs, the majority of the bank’s losses were embedded in its insolvency, a result of a loan policy that emulated a grant system with no expectation of repayment. Ultimately, the Afghan government provided Kabul Bank with an \$820 million

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<sup>1</sup> Huffman, M. The Kabul Bank Scandal and the Crisis that Followed. USPolicyinabigworld. December 3, 2011. Accessed February 11, 2015.

<http://www.uspolicyinabigworld.com/2011/12/03/the-kabul-bank-scandal-and-the-crisis-that-followed-2/>

<sup>2</sup> Latifi, Ali. "Kabul Bank: A Bank That Defaulted on Trust." Al Jazeera English. March 5, 2013. Accessed February 11, 2015. <http://www.aljazeera.com/indepth/features/2013/02/201321618534143659.html>.

bailout, costing the Afghan government roughly six percent of its GDP<sup>3</sup>. Given the size of Afghanistan's economy, this scandal is "the biggest per capita fraud in history"<sup>4</sup>.

For further investigation, the Extended Credit Facility of the IMF requested a report by the Independent Joint Anti-Corruption Monitoring and Evaluation Committee on the bank scandal. It found that the Central Bank's (Da Afghanistan Bank DAB) limited capacity to enforce regulation and oversight, coupled with Kabul Bank's strong political ties with officials in Karzai's government and his relatives, created ideal circumstances for this complex system of fraudulent lending and embezzlement that utilized dummy loan-books for supervisors. Most of the funds were redirected through fake employees and companies, late government paychecks, and a system of heavy bribing that deeply embedded the bank into the politics of Afghanistan and the Karzai regime.

At the bank's inception, the owners gave money to President Karzai's brother and Vice-President Fahim as an incentive for their participation on the bank's Board of Directors. This was also intended to shield the bank from government 'interference'<sup>5</sup>. By 2010, it was estimated that approximately \$861 million – or over 92% of Kabul Bank's loan book, benefitted 19 related parties.<sup>6</sup>

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<sup>3</sup> Independent Joint Anti-Corruption Monitoring and Evaluation Committee. Report of the Public Inquiry into the Kabul Bank Crisis, Kabul: 2012. January 27, 2015. <http://mec.af/files/knpir-final.pdf>

<sup>4</sup> Boone, Jon. "The Financial Scandal That Broke Afghanistan's Kabul Bank." The Guardian. June 16, 2011. Accessed February 27, 2015. <http://www.theguardian.com/world/2011/jun/16/kabul-bank-afghanistan-financial-scandal>.

<sup>5</sup> Strand, Arne, "Elite capture of Kabul Bank". Accessed February 11, 2015. <http://www.cmi.no/publications/file/5092-elite-capture-of-kabul-bank.pdf>.

<sup>6</sup> Independent Joint Anti-Corruption Monitoring and Evaluation Committee. Page 9

After the corruption scandal was publicized, the IMF refused to renew the Extended Credit Facility arrangement unless the banking laws reformed<sup>7</sup>. The "Extended Credit Facility (ECF) provides financial assistance to countries with protracted balance of payment problems...[by] providing medium-term support to LICs [Low Income Countries], with higher levels of access to financial resources..."<sup>8</sup>). Similarly, US Congresswoman Nita Lowey temporarily froze \$3.9 billion in aid until actions were taken in response to the crisis. Despite international pressure, president Karzai resisted any action. Many attribute his unwillingness to act as a response to the absence of consequences, to his family's involvement in the scandal.

The Kabul Bank crisis revealed both where the systemic shortcomings were and identified the extent of Afghanistan's vulnerabilities. One of those shortcomings was the lack of oversight and regulation. In 2003, well before Kabul Bank applied to become a commercial bank, Afghanistan's banking laws were fairly comprehensive. These laws were "based on international best practices and provided for appropriate governance structures, operational requirements, liquidity ratios, supervision and enforcement"<sup>9</sup>.

This insight reveals that the problem was not the absence of modern policies, but rather the lack of enforcement. To some extent, the bank skillfully hid their illegal practices and activities. However, there were other flags in the six years leading up to the crisis that would have revealed the bank's inconsistent behavior. The bank's illicit comportment

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<sup>7</sup> Strand Page 3

<sup>8</sup> "Factsheet -- IMF Extended Credit Facility." Factsheet -- IMF Extended Credit Facility. September 22, 2014. Accessed February 11, 2015. <https://www.imf.org/external/np/exr/facts/ecf.htm>.

<sup>9</sup> Independent Joint Anti-Corruption Monitoring and Evaluation Committee. Page 8

would have been uncovered if the provisional requirements set forth by the policies were met. Examples include:

- 1) The Approval Process – it is unclear how rigorous the approval process was in checking the backgrounds of all shareholders. Rather than briefly verifying the main shareholder, further inquiry would have shown more detail about all shareholders, one of whom was a Russian ex-fugitive (that information was not disclosed by the Interpol at the time)
- 2) Onsite Examinations – in-person visits were not made until two years after the bank’s opening, due to a lack of qualified employees to physically visit bank locations. Once they began, many regulatory violations were reported on poor governance, loan files and promotional incentives used to gain new depositors.<sup>10</sup>
- 3) Procedural Neglect - the bank owners insisted on using an independent auditor of their choice and consistently avoided the independent auditors that DAB required until it was well past the date audits were due. DAB conceded and allowed them to use their chosen banks, in Dubai, for audits.

A consistent problem among these examples is an inability to enforce deadlines and policies, which resulted in continued illicit activity. This is due in part to the absence of technical and physical capacity to oversee the activities of all commercial banks. Specifically in regards to Kabul Bank, its ties with Karzai’s government also demonstrate the powerful role corruption plays in influencing financial institutions.

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<sup>10</sup> Independent Joint Anti-Corruption Monitoring and Evaluation Committee. Page 10

Reports claim that in 2009, the Kabul Bank provided Karzai’s campaign with \$14 million. The bank also funded the government’s bribery of other parliamentarians on several different occasions.<sup>11</sup>

This crisis has also demonstrated the futility of direct aid fund transfers as a source of true economic growth. Simply injecting money into an otherwise unprepared environment only highlights the vulnerabilities that already exist. Currently, DAB barely functions as a western like Central Bank and the majority of the country still depends on moneymen and shadow economies to supply hard currency.

Despite violating 18 different statutes and banking laws, the two main perpetrators and owners of the bank were still able to pocket their averted assets. The people who benefitted from this crisis were not all wealthy individuals directly associated with the bank. A USAID report shows that “all administrative bodies, supervisory bodies and decision-making bodies” were complicit in the near-Ponzi scheme.<sup>12</sup>

The reconciliation of financial institutions in Afghanistan is crucial for the economic development of the country. Financial institutions are the most viable medium for commercial transactions, whether in the form of continued aid or foreign direct investment. Economic development through leveraging of minerals and commodities is not feasible unless a transfer is completed without a loss of funds during the process. Current banking protocols must be re-structured to instill faith in the system. “For

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<sup>11</sup> Strand Page 79.

<sup>12</sup> Cox, Tim “Review of USAID/Afghanistan’s Bank Supervision Assistance Activities and the Kabul Bank Crisis” Office of Inspector General of USAID .March 16, 2011.

many Afghans it was their first experience with formal banking structures.”<sup>13</sup>.

This change will have to be a product of local initiative. Thus far, President Ghani’s reopening of the Kabul Bank, and emphasis on tackling corruption<sup>14</sup> is consistent with what the financial sector needs for the restoration of its banking system.

### **Kazakhstan’s Financial Restructuring: An Example**

After the Soviet Union’s dissolution in 1992, Afghanistan and Kazakhstan were left severely unstable and vulnerable. Kazakhstan, like other Central Asian states at the time, continued to operate under the same policies of government as they did under the Kazakh Soviet Socialist Republic (KSSR), a constituent republic of the Soviet Union. Despite gaining independence, Nursultan Nazarbayev and many high officials who worked for the previous KSSR, retained their former political positions within the newly formed Republic of Kazakhstan, exemplifying a continuation of centralized government rule. Nazarbayev has remained as head of state for the last 24 years. After independence, Nazarbayev prioritized restructuring Kazakhstan’s banking and financial systems, therefore, avoiding its collapse. Afghanistan, on the other hand, entered a period of civil war and political strife after the Soviet occupation ended. Through Kazakhstan’s example of

financial restructuring, we may be able to consider Afghanistan’s potential next steps in building a stronger and more stabilized financial and banking infrastructure.

The cornerstone of Kazakhstan’s restructuring plan was a system of tiered response. This model focused on simultaneous development of the banking and enterprise sectors. In addition, the model incorporated outside asset management companies (AMCs) who handled any nonperforming loans removed from the state banks. Overall, Hoelscher regards Kazakhstan’s success in avoiding potential banking collapses to be consistent with coherent restructuring policies.<sup>15</sup> This was possible because the leaders of restructuring developed a comprehensive strategy that these policies and performance could be held accountable to. While this cohesive planning may be a result of the central governments monopoly on decision-making, we can focus on the merits of consistent planning and goal-making.

Looking further at this model, the overarching plan of restructuring the banking system in Kazakhstan was focused on a tiered approach so as to fit the complex endeavor. Hoelscher attributes the success to a plan based on a detailed diagnosis of the current state of the system and its shortcomings. Rather than implementing a generalized plan for ‘banking systems in developing nations’ this plan identified the specific weaknesses of Kazakhstan’s banks and provided targeted responses. In this case, the plan included identifying factors that affected or hindered banking operations, including but not limited to interest rate controls, high reserve requirements and distortions in the tax system.

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<sup>13</sup> Matta, Bethany. "Afghan President Reopens Bank Scandal Inquiry." - Al Jazeera English. October 1, 2014. Accessed February 27, 2015. <http://www.aljazeera.com/news/asia/2014/10/afghan-president-reopens-bank-scandal-inquiry-201410113592658788.html>.

<sup>14</sup> Van Bijlert, Martine. "New Probe into Kabul Bank Scandal an 'important Symbolic Act' | Asia | DW.DE | 03.10.2014." DW.DE. October 3, 2014. Accessed February 27, 2015. <http://www.dw.de/new-probe-into-kabul-bank-scandal-an-important-symbolic-act/a-17970853>.

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<sup>15</sup> Hoelscher, David S. "Banking System Restructuring in Kazakhstan" International Monetary Fund: June 1, 1998.

This model focused on dividing the responsibility of implementing the restructuring program between the different departments that controlled the individual factors. Several other countries have also established separate entities to focus on restructuring.

Financial restructuring involves removing ineffective banks as soon as they are identified, as it was done in Kazakhstan, for several years. However, the report notes that, had they begun discontinuing the operations of undercapitalized banks that exhibited a potential threat to the banking sector earlier, the team implementing the project could have further improved private sector confidence on a shorter timeline. In the beginning, the National Bank of Kazakhstan worked on restructuring large state banks and tightening entry requirements. Only after some stability had been established, could the government of the central bank consider higher-order tasks of modernizing and focusing on the legal and regulatory frameworks that affected the banking sector.

Banks that required assistance in unloading their nonperforming loans, an asset management company (AMC) was created to receive transferred loans. Transfers could be executed with dissimilar, or nonperforming loans. Afterwards, the AMC, if able to, either focused on loan rehabilitation or liquidation. This would shift the burden to a separate entity and promote the health of the bank whose loans had been taken on by the AMC.

Kazakhstan's case suggests writing liabilities or conversion of debt into equity, effectively increasing the bank's net worth and lowering interest costs. Kazakhstan's example emphasizes Afghanistan's three areas for growth in the banking and financial

sector: action, expedience, and planning. Before operational or financial restructuring of the banking systems may occur, an adequate environment with strong governance must exist to include internal controls and risk management. When these pre-conditions are met, banks will remain solvent and profitable over time.

Despite the "success" of the Kazakh bank system, as stated by Hoelscher, much of this happened under a government inundated with cronyism, corruption, and centralized power.

### **Business Environment**

With the current withdrawal of foreign troops and reduction in foreign aid, Afghanistan must find alternative sources of capital. Currently the Afghan government is witnessing a sharp decline in Foreign Direct Investment (FDI) and Foreign Aid programs. During Afghanistan's peak years between 2005 and 2009, excluding a 125% drop in 2008 attributed to the global economic recession, the country received roughly \$228 million on average for each of those four years.<sup>16</sup> However, between 2010 and 2013, that average has decreased to approximately \$80 million per year, with the most recent reported year of 2013, showing a total of \$59.6 million in foreign direct investment. This 185% drop in capital creates a dangerous void in Afghanistan's GDP.

According to the World Bank's "Doing Business 2015" report, Afghanistan ranks 24<sup>th</sup> out of 189 economies on the straightforwardness of starting a business, which is based on the number of steps and

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<sup>16</sup> "Foreign Direct Investment, Net Inflows (BoP, Current US\$)." Foreign Direct Investment, Net Inflows (BoP, Current US\$). Accessed February 27, 2015. <http://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD?page=1>.

time it takes to register, cost in percent income per capita and paid-in minimum capital.<sup>17</sup> During Karzai's regime, procedures were shortened and eased to encourage growth and transition to a free market in Afghanistan. For example, the law on private investments allows for full foreign ownership of companies (up to 100%) and full repatriation of profit. Despite this seemingly easy process, the World Bank's 2015 report ranks Afghanistan 183<sup>rd</sup> out of 189 economies on the straightforwardness of conducting business<sup>18</sup>.

This number is based on the country's performance in the following categories: starting a business; dealing with construction permits; getting electricity; registering property; getting credit, protecting minority investors; paying taxes, trading across borders; enforcing contracts and resolving insolvencies. Of these 10 categories, Afghanistan ranks among the 10 worst in five areas: construction permits (185<sup>th</sup>); registering property (183<sup>rd</sup>); trading across borders (184<sup>th</sup>); enforcing contracts (183<sup>rd</sup>) and protecting minority investors (189<sup>th</sup> or the worst of 189 economies). The other categories were also ranked relatively low.

It is evident that despite being one of the easiest places to start a business due to low taxes and simplified licensing processes, Afghanistan is not suitable to attract foreign companies due to poor enforcement of these laws, and the absence of an established rule of law. The commonality between these characteristics is the state's legal system. Whether these factors must precede business sector growth is unclear, however what is clear is the private sector's mutual

dependence on these components of government.

Afghanistan's business environment and financial institutions require stronger enforcement of business regulations, rather than more policies, as policies to promote growth and business opportunities are already in place.

### **Economic Reconstruction Zones**

*“ Reconstruction zones (RZs), consisting of two distinct but linked areas to ensure synergies between them – a local-production reconstruction zone (LRZ) producing for local consumption and an export-oriented reconstruction zone (ERZ) producing exclusively for export – could be used to replace the fragmented way aid is provided to these countries with an integrated strategy for economic reconstruction ”*

*- Graciana Del Castillo*

Economic Reconstructions Zones<sup>19</sup> have been implemented in Haiti, the Dominican Republic, Mexico, El Salvador, China and other countries, often dubbed as 'sweatshops.' However, the notion of two economic reconstruction zones, as opposed to one that exploits an area, is to promote an investment from local or foreign investors in both the Afghan population and their productive abilities.

The government will have to carefully define the appropriate legal and regulatory framework that ERZs require. The US could grant preferences for goods produced in ERZ's, eventually widening to natural markets in the region, as it did in Haiti. Given that there is a lack of security in Afghanistan, it would be more beneficial to

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<sup>17</sup> World Bank Group, 2015. Doing Business Report <http://www.doingbusiness.org/data/exploreconomies/afghanistan/#starting-a-business>

<sup>18</sup> Ibid Page 9

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<sup>19</sup> Del Castillo, Graciana. "Reconstruction Zones in Afghanistan and Haiti" United States Institute of Peace Special Report: October 14, 2011.

establish LRZs, taking into account the location of ERZs. This particular solution, while focused on providing economic development in concentrated areas, addresses ineffective aid spending and lack of accountability. These two issues combined with a lack of oversight and rampant corruption; demonstrate why this model provides a modest solution. Although it will not solve all issues, it is nevertheless, a productive way of observing if economic development is plausible within this environment, if governance and security issues are minimized.

## **Conclusion**

Financial institutions are a vital component of economies. Without reliable, robust banking systems, the transfer of funds simply becomes another source of loss and corruption. This applies to economic development regardless of whether it is through private ventures, such as mineral extraction or foreign aid, both of which are crucial to Afghanistan's future GDP.

The investigations into the Kabul Bank Crisis and business conduct in Afghanistan demonstrated that the reformation of financial institutions and environment is only possible with a larger reform of law establishment and enforcement. Kazakhstan's restructuring plan serves as a blueprint for next steps that Afghanistan can follow. This plan would not only remove unhealthy banks before they culminate into larger liabilities of the state, but would also result in a smaller and more concentrated network of stable banks that the DAB could efficiently manage. Considering that Kazakhstan's strategy was implemented in a time of concentrated central power, Afghanistan can follow the steps, and potentially the results, so long as a stable rule of law is established.

Overall, the common factor among banking systems and business environment issues are the un-established rule of law in Afghanistan. Without the proper enforcement of policies currently in place, banking systems and businesses are vulnerable to the whims of corruption. Economic Reconstruction Zones provide a potential solution to economic development by specifically addressing Afghanistan's main shortcoming: a weak legal system. This approach would help to pinpoint the root cause of weak financial institutions. If ERZ's provided sustainable economic growth, it would identify law implementation and enforcement as potential main factors withholding growth in the rest of Afghanistan's economy. On the other hand, inconclusive results would reveal that rule of law must not be the only factor to be considered.

It is clear that financial institutions and environment hold many problems, affected by even more factors. However, the case studies of Kazakhstan and ERZ's provide potential solutions in a common strategy: build a strong foundation, concentrated either in a region or one institutional entity, and then expand. This contrasts to previous solutions applied to the larger state (easing laws to start a business or bank), and could thus provide a different point of view. Most importantly, the evaluation of banks, businesses, and solutions will need to be based on their true performance rather than faulty reports and public perception.

Case studies of ERZs in Kazakhstan provide potential solutions with a common strategy: build a strong foundation, concentrated either in a region or one institutional entity, and then expand. This is in contrast with previous solutions applied to the larger state (easing laws to start a business or bank), and could thus provide a different point of view.

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# **Human Capital and Job Training**

## ***Bridging the Gaps between Local Populations and Industry***

Devon O'Neill

*“A bird only flies as high as his wings take him”*

### **Introduction**

Decades of conflict have rendered Afghanistan one of the poorest countries in the world. A major factor contributing to this situation is the lack of human capital, including relatively low national levels of literacy, education, and job opportunities. If Afghanistan is to reap the benefits of its natural resource endowment, particularly in minerals, it must resolve these issues.

Afghanistan's economy could change drastically due to the mining industry. Former Minister of Mines, Waheedullah Shahrani, stated that the mining sector could potentially constitute 40 to 50% of Afghanistan's economy by 2024. The contracts for the Mes Aynak and Hagijak deposits represent the largest investments in Afghanistan's history, and it is estimated that the two mines could generate, in a low-impact scenario, more than 90,000 direct and indirect jobs<sup>1</sup>. The extent to which this includes Afghan employment and involvement of local populations will largely depend upon the type and level of skills needed. Unskilled labor will be needed in the short-term. However, in the long-term, mining and related companies would benefit greatly from a local workforce able to carry out more skilled jobs at comparatively modest wages.

This is a goal that the Afghan government, extracting companies, and local leaders

could all contribute towards. By utilizing and improving upon Afghanistan's human capital, the extraction of mineral wealth could create long-term value and a sustainable economy.

### *Defining Human Capital*

The World Bank defines human capital as “people's innate abilities and talents, plus their knowledge, skills, and experience that make them economically productive”<sup>2</sup>. Human capital consists of a labor force's opportunities and skills, crucial factors for national economic growth<sup>3</sup>. Investments made to a national labor force through education and job opportunities are significant drivers of economic growth. Afghanistan currently lacks the means to effectively educate its population on a large scale; however, its vast mineral resources have the opportunity to change that. In addition to revenue generation and infrastructure improvements, Afghanistan's potential mining sector presents the opportunity to create a skilled workforce and lasting economic benefits.

Individual citizens are economically valuable with a workforce population of over seven million people<sup>4</sup>, although there is only a 49% participation rate, meaning that half the population is either unemployed or participating in illicit work. Henceforth, there are approximately 14 million people

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<sup>1</sup> Gary McMahon and Brandon Tracy, 2011. *The Afghanistan Mining Sector as a Driver of Sustainable Growth: Benefits and Opportunities for Large-Scale Mining*. Page 7.

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<sup>2</sup> “Glossary.” *World Bank*.

<sup>3</sup> Dae-Bong Kwon, 2009. “Human Capital and Its Measurements.” *OECD*. Page 3.

<sup>4</sup> World Bank. 2015. “Labor Force, Total.”

who could be working in Afghanistan<sup>5</sup>. Afghanistan has a sizable domestic labor population for the prospective mineral industry to tap into. Likewise, a prosperous and accountable mining industry has the potential to give legal and beneficial employment to the population and provide sovereign and economic growth to the state.

## Education

Investing in human capital requires prioritizing education. Young Afghan people view education as the “infrastructure for all things”<sup>6</sup>, and, as such, education should be seen as a pivotal investment made by any foreign company. In order to have a skilled and capable workforce able to successfully navigate the mining industry, job training and educational opportunities will be instrumental.

### *Background*

By 2002, decades of violent unrest and political instability had created a disabled and defunct education system. There was less than one million students enrolled with 20,000 teachers, and only 1,500 students were enrolled in a technical or occupational school<sup>7</sup>. Women and girls were excluded entirely from the educational system, and there were no formal national curricula or standard textbooks.

With the displacement of the Taliban in 2001, education in Afghanistan became an international priority. Billions of dollars were donated globally to assist building facilities, hiring teachers, and reopening closed or destroyed schools. The commitments made by the newly reestablished government of Afghanistan

and international donors enabled the education sector to improve substantially since 2002. Now, nearly seven million children are enrolled, 2.5 million of the students are girls, and the number of teachers has increased eight-fold. Additionally, teachers are receiving more formal training, and education facilities have been established to teach literacy to adults<sup>8</sup>. The number of formal school facilities also increased from 6,000 in 2002 to over 12,000 in 2011<sup>9</sup>.

Despite substantial progress in the sector, the Afghan Ministry of Education remains the most vulnerable social service to unrest and uncertainty<sup>10</sup>. The landscape and culture of Afghanistan is different, thus introducing a western-traditional education is difficult. Rural areas have incredibly low-density populations; students sometimes travel hours to get to a schoolhouse. This exacerbates the rural-urban divide in Afghan literacy. Additionally, variations in education across provinces are wide, with primary enrollment rates ranging from 30% in some areas to almost 100% in others<sup>11</sup>.

In order to bridge this gap in enrollment, the Ministry of Education declares that the sector needs to “double its capacity”. The Ministry of Education has implemented a community-based education program aimed at alleviating the exclusion and vulnerability associated with gender and provincial discrepancies, which is a typical characteristic of rural education<sup>12</sup>.

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<sup>8</sup> Ibid.

<sup>9</sup> Hogg and World Bank, 2013. *Afghanistan in Transition: Looking Beyond 2014*. Page 120.

<sup>10</sup> “History.” *Ministry of Education*.

<sup>11</sup> Hogg and World Bank, 2013. *Afghanistan in Transition: Looking Beyond 2014*. Page 123.

<sup>12</sup> “Policy Guidelines for Community-Based Education.” 2012. *Ministry of Education*. Page 7.

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<sup>5</sup> Brinkley, Paul. 2014. *War Front to Store Front*. Page 220.

<sup>6</sup> Holland and Yousofi, 2014. “The Only Solution.” Page 245.

<sup>7</sup> “History.” *Ministry of Education*.

Another detrimental condition to the educational system is the lack of formal education by instructors. Approximately 68% of primary school teachers do not meet the minimum requirements for a fully qualified teacher, and the vast majority of university-level teachers have only a bachelor's degree<sup>13</sup>.

Finally, Afghan education provides little opportunity for occupational labor mobility. Typically, local communities are educated according to their traditions and are trained for a single occupation or with a single set of skills<sup>14</sup>. Occupational labor mobility is essential in a budding market economy because it increases productivity and insulates the national economy from downturns<sup>15</sup>. The inability to easily change jobs due to the lack of appropriate education and a deficiency of domestic job opportunities creates isolated economic sectors and slows down the rate of growth<sup>16</sup>. The absence of occupational mobility stifles human capital and limits local employment options.

### *Technical Education*

The level of education required for employment in the mining industry varies widely across the sector. The spectrum ranges from basic labor, which requires little literacy proficiency, to professional positions, which require, at minimum, a bachelor degree. The various employment opportunities and respective education requirements for work in the mining industry are listed below:

- Entry-level (no requirements): laborer, drill assistant, equipment

- operator, mechanic's assistant, sample collector;
- Skilled labor (requires ability to read and write and some training): drill or machinery operator;
- Trade or technical Jobs (requires training or apprenticeship or a technical college diploma): electrician, mechanic, pipefitter, crusher operator;
- Office jobs (requires a high school diploma or equivalent): clerk, accountant, bookkeeper;
- Professional (requires a university degree): geologist, engineer, and managerial positions<sup>17</sup>

Unfortunately, the education required for many of these jobs is beyond the current educational scope of the Afghan people. Of the seven million Afghans currently participating in the domestic workforce, only 123,000 have participated in higher education, as only 31% of the population is literate. Due to the lack of skilled labor in Afghanistan, training and educational schemes must come from resources and professionals abroad.

### *Job Training in the Mining Industry*

To bridge the gap between Afghanistan's growing educational foundation and the need for specialized personnel in the mining industry, local job training and technical education facilities should be prioritized in developing the mining sector. Mineral extraction will demand a sufficient supply of basic labor skills. However, in order to maximize the benefits of a domestic mining industry, it is important to ensure that Afghans fill the majority of jobs available in mining and exploration companies; it is important that the lasting impact of the industry on the Afghan people go beyond

<sup>13</sup> Chuang and Fayeze, 2004. "If You Believe in Faith."

<sup>14</sup> Entezar, *Afghanistan 101*. Page 75.

<sup>15</sup> "The Economics Of Labor Mobility." *Investopedia*.

<sup>16</sup> *Ibid*.

<sup>17</sup> "Jobs Types in Mining, Expert Advice - CareerMine."

swinging a hammer and moving rocks<sup>18</sup>. Achieving a more successful extractive legacy will require skills development and technical job training.

Moreover, there is a wealth of international examples that exhibit the socio-economic benefits of mining. Increasing positive impacts can occur through job training, education, and, as a result, employment. From an economic standpoint, mining companies have an incentive to invest part of their profits in human resource capacity building. Importing labor increases startup costs and slows initial production<sup>19</sup>. Additionally, engaging with local communities increases resident support and political support for future expansion projects.

In other countries such as Nigeria, the government requires job training. For example, when a Nigerian local is not hired for a mining position due to lack of training, the Nigerian government requires the Operator (multinational company leasing the land) to supply local training<sup>20</sup>.

However, a World Bank report notes that it is unlikely that Afghan mineral deposits will be developed by major and more established mining companies. Larger, international mining companies would have more experience working with local communities and national governments on issues of employment and increasing value added<sup>21</sup>. Such is the case with Mes Aynak and Hajigak. The report states, “Accordingly, it will not be possible to place the burden of

expectations on the mining companies alone”<sup>22</sup>. However, there are options for technical job training in the industry that do not solely depend on the investment of a prospective company.

One option available is the construction of specialized, industry-specific educational institutions. Institutions such as these are globally built to increase value gained by the local population through expertise, provided by international and private-sector participants. The Gemological Institute of Madagascar (GIM) serves as an example of a successful institution. The GIM opened in 2004 as a result of private sector advising, gemstone experts, the Madagascar Ministry of Energy and Mines, and with funds from the World Bank<sup>23</sup>. Over 50,000 people are involved in this gemstone venture in Madagascar, but approximately 97% of their gemstones left the island in a rough state due to absence of technological experience and knowledge of gemstone cutting. The GIM trains students in gemology to international standards, teaches gemstone cutting techniques, and has an associated school of advanced jewelry making<sup>24</sup> to increase the value of gemstone output and local educational capacities.

Afghanistan has a history with international development-funded technical education. The Task Force for Stability and Business Operations in Afghanistan noted the success of a technical school at Herat University. The technical school was a driving force for increased IT industries in Afghanistan and produced trained, highly educated, and ambitious students<sup>25</sup>. Furthermore, as a result of an international development

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<sup>18</sup> Conroy, Carmela. 2015. Personal Communication.

<sup>19</sup> United Nations ESCAP. 2013. “Doing Business with Afghanistan: Harnessing Afghanistan’s Economic Potential.” Page 18.

<sup>20</sup> Silvana Tordo et al., 2013. “Local Content Policies in the Oil and Gas Sector.” Page 173.

<sup>21</sup> Gary McMahon and Brandon Tracy, 2011 *The Afghanistan Mining Sector as a Driver of Sustainable Growth: Benefits and Opportunities for Large-Scale Mining*. Page 44.

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<sup>22</sup> Ibid.

<sup>23</sup> “Starting from Scratch: The Gemological Institution of Madagascar”. JCKOnline.

<sup>24</sup> Gary McMahon and Brandon Tracy, 2011. *The Afghanistan Mining Sector as a Driver of Sustainable Growth: Benefits and Opportunities for Large-Scale Mining*. Page 42.

<sup>25</sup> Brinkley, 2014. *War Front to Store Front*. Page 290.

initiative led by Germany and the Technical University of Berlin, this center “was a remarkable example of what international development should be: an enabler for a better life”<sup>26</sup>.

Aside from traditional educational facilities, another important, but low-cost and easy-access method Afghanistan could consider in training its work force in the use of on-line mining educational materials. Only one million Afghans have access to the Internet, but significantly more also have access to a computer. A good model to note is the on-line educational program of the National Technological University that operates out of Colorado State University in Fort Collins. This school provides “virtual education” for engineers and also serves the educational needs of engineers and technical professionals in the field<sup>27</sup>. In the early 2000s, the school offered more than 300 courses, 19-degree programs, and over 50 programs on CDs. Additionally, this program now has working links in over 50 major universities in the US and affiliates in Japan<sup>28</sup>.

Additionally, the Mineral Education Coalition, an NGO also based in Colorado, has put their industrial expertise, including very basic mineral and geological educations, on CD ROMs for international distribution<sup>29</sup>. Virtual or computer-based education demonstrates the ability to use modern and available technology to provide education to those who previously had no access.

### *Potential Flight of Human Capital*

The Brain Drain phenomenon is a major concern throughout much of the developing world, including Afghanistan. Brain Drain, also called human capital flight, is the *en mass* emigration of skilled laborers and nationals to other countries. Education in a skilled and competitive field increases incentives for nationals to immigrate to a more economically developed country, usually North America or Europe<sup>30</sup>. This stems from lack of security and the economic rationalities of a better life in their chosen destination.

Brain Drain is already being observed in Afghanistan. With the pending exit of foreign aid developers, Afghanistan has already seen the exodus of a high proportion of service industry workers. President Ghani is a long-standing critic of the allocation of development donations and in 2009 stated, “Due to the enormous difference in the pay of international organization, there has been a steady brain drain from the civil service”<sup>31</sup>. Afghan service laborers are leaving Afghanistan with their international employers.

The Brain Drain phenomenon also impacts the politics of education. A major assumption associated with human capital flight is that skilled migrants are trained at their government’s expense, yet fail to repay the investment because they leave and enable other countries to benefit from their skills<sup>32</sup>. If the government of Afghanistan invests in its population and trains them as mining industry professionals or skilled laborers, how can it avoid the flight of human capital? The Brain Drain debate sheds light on the fact that labor and human

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<sup>26</sup> Ibid.

<sup>27</sup> James, McDivitt, 2002. *Status of Education of Mining Industry Professionals*. Page 15.

<sup>28</sup> Ibid.

<sup>29</sup> “Education.” Mineral Education Coalition. & McDivitt, 2002. Page 13.

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<sup>30</sup> “Skilled Migration and Brain Drain.” *UNESCO*.

<sup>31</sup> Hogg, et al., and World Bank, 2013. *Afghanistan in Transition: Looking Beyond 2014*. Page 104.

<sup>32</sup> “Skilled Migration and Brain Drain.”

capital are valuable economic assets: the government wants a return on its investment and, as is the case in many developing countries, human capital is a risky investment.

Ideally, skilled Afghans would remain in the country or return after receiving a specialized education abroad. Culturally, Afghans have strong familial and ethnic ties and a strong sense of loyalty to their region<sup>33</sup>. The return of many Afghans after the removal of the Taliban exemplifies this concept. Yet, the flight of human capital and increased emigration is related to the volatile security situation in Afghanistan, and the persisting lack of credible government institutions.

### **Mining as a Potential Source of Long-Term Economic Growth**

Despite the influx of foreign aid, money “needs to be spent in Afghanistan, not on Afghanistan”<sup>34</sup>. President Ghani stated, “For every dollar spent... on a particular program in the country, less than 10 cents was actually spent in the country”<sup>35</sup>. To potentially maximize the Afghan economy, local human labor and businesses must be included in the expansion of projects and industries. Economic benefits increase when local populations and supply chains are included in the extraction process. According to the World Bank, the combined average annual direct impact on national income from the Mes Aynak and Hajigak mines could be \$745 million. However, if the procurement of local suppliers is included in the future development of these sites, the impact could rise to \$1.04 billion<sup>36</sup>.

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<sup>33</sup> Holland and Yousofi, 2014. “The Only Solution.” Page 247.

<sup>34</sup> Hogg and World Bank, 2013. *Afghanistan in Transition Looking beyond 2014*. & Brinkley, Paul.

<sup>35</sup> Brinkley, 2014. *War Front to Store Front*. Page 284.

<sup>36</sup> Gary McMahon and Brandon Tracy, 2011. *The Afghanistan Mining Sector as a Driver of Sustainable Growth: Benefits and Opportunities for Large-Scale Mining*. Page 4.

Increasing the value of a mining operation includes diversifying the economy to encompass not only mineral extraction, but manufacturing processes as well. One of the most quantifiable benefits to Afghanistan’s mineral development is employment. Employment opportunities are not limited to working for a mining company during construction and operations; they also include working for the mining company during construction of the primary infrastructure and working in consequent projects.

For example, copper extraction presents several opportunities for additional value-added business. As *Figure 1* shows, the production of copper involves several other processes aside from the extraction of copper-bearing ores<sup>37</sup>. Raw copper must be smelted, undergo primary and secondary refining, manipulated into a useable product, and then manufactured into a commodity. Each stage of the process creates employment opportunities and skill diversification.

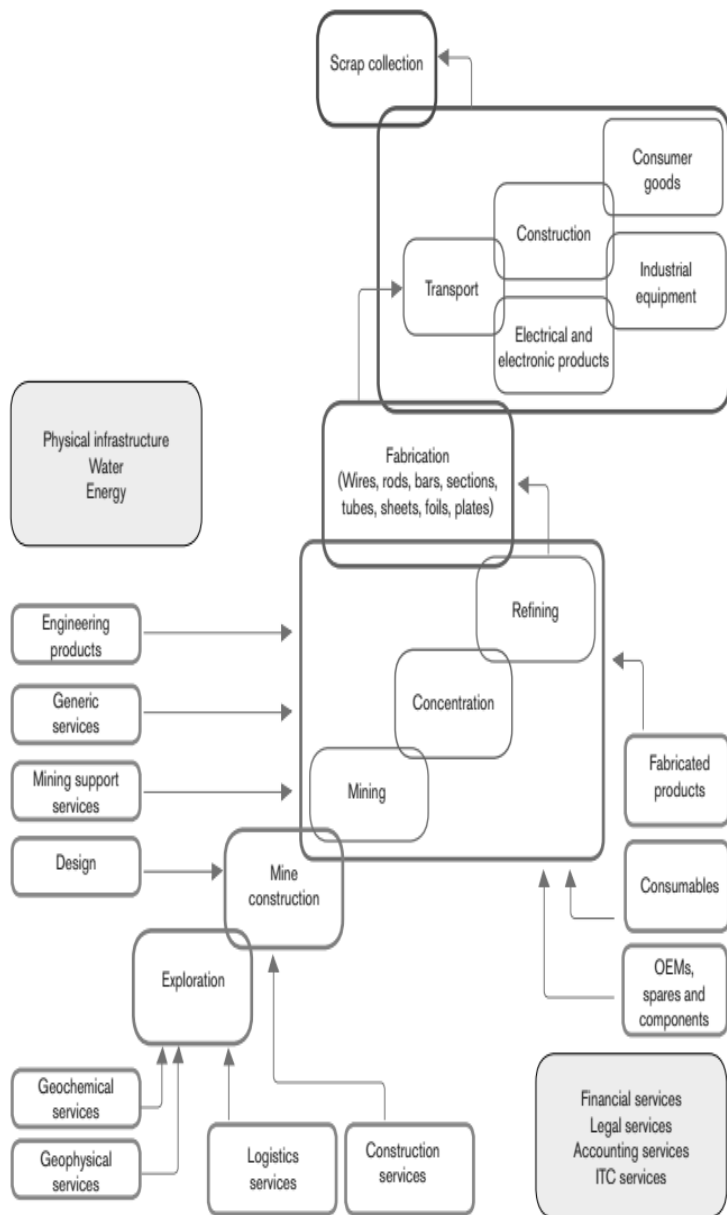
Although additional industries create new job opportunities, they also require larger investments in manufacturing infrastructure and increased levels of technical expertise.

Additionally, the geopolitics associated with diversifying the production chain for the industry is complex. For example, Chile is the largest exporter of copper as ore, but has limited smelting capabilities. This is due, in large part, to the mining contracts originally agreed upon in the 1990s, in which Japanese companies agreed to finance the mines in return for a guaranteed supply of raw ore to be smelted domestically<sup>38</sup>. The original investors in the Chilean copper mining industry had “no interest in building new

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<sup>37</sup> “2014 World Copper Factbook.”

<sup>38</sup> Tom Azzopardi, 2011. “Adding Value to Copper.”



**Figure 1: Global Copper Value Chain.** United Nations Economic Commission for Africa, Economic Report 2013

production facilities in Chile”. China is currently the top producer of refined copper and has the largest copper smelting capacity in the world<sup>39</sup>. Therefore, China is unlikely to have interest in building value added mining and exploration facilities, or infrastructures within Afghanistan, particularly at the Mes Aynak site.

While diversifying the extraction process can be geopolitically and financially

<sup>39</sup> “2014 World Copper Factbook.”

difficult, the added value for job creation and domestic revenue are significant. The skills learned while supplying mines and related infrastructure, are often beneficial to local populations because these skills are more transferable over time and across sectors<sup>40</sup>.

Domestic populations greatly benefit from efforts to create locally based industries that support the extraction process rather than using outside contractors who bring their own labor and production. For example, Argentina’s growing mining industry estimates that for each job in a mine (approximately 87,000), nearly four jobs are created in affiliated industries within Argentina (316,000)<sup>41</sup>.

Furthermore, involving local populations is essential for the long-term social sustainability of any mining project in Afghanistan. Historically, natural resources extraction can lead to conflicts. The Secretary General of the UN, Ban ki-Moon attributes natural resource-based conflicts to “the environmental damage and marginalization of local populations who fail to benefit economically from natural resources exploitation”<sup>42</sup>. Mining industries frequently observe very large in-migrations from non-local populations, placing stress on communities that receive little social or economic benefits from the operations<sup>43</sup>. Exclusion from the decision-making process and profits incurred from mining production reduces a community’s support and makes it less likely to actively participate in the mineral extraction or support side industries.

<sup>40</sup> Gary McMahon and Brandon Tracy, 2011. *The Afghanistan Mining Sector as a Driver of Sustainable Growth: Benefits and Opportunities for Large-Scale Mining*. Page 12.

<sup>41</sup> Ibid.

<sup>42</sup> Wadsam, “UN Chief Says Discovery of Vast Mineral Deposits in Afghanistan Should Be Managed Properly.”

<sup>43</sup> Gary McMahon and Brandon Tracy, 2011. *The Afghanistan Mining Sector as a Driver of Sustainable Growth: Benefits and Opportunities for Large-Scale Mining*. Page 50.

## *“Afghan First” Policy*

Increasing the domestic value chain and the involvement of local populations, while maintaining economic incentives for foreign investment, is difficult to implement in policy. For example, in 2008, the US implemented the “Afghan First” Policy, which was later adopted by NATO forces. The policy was designed to increase the share of Afghan vendors in aid contracts and nation-building projects. It gave favorable status to contracts that used Afghan businesses and local labor. General Stanley McChrystal described the policy as being “money as a weapons system” in Afghanistan<sup>44</sup>.

Ultimately, this policy failed to benefit the Afghan population to the detriment of US operations. It is against US military policy to possess large amounts of cash in the theaters of engagement<sup>45</sup> and, as a result, US agencies paid the contracted local Afghans through electronically funds transfer (EFT). However, the local banking institutions could not independently process EFT payments. Between 2008 and 2013, the financial branch of the US military, the Defense Finance and Accounting Services (DFAS), settled over 5,000 vendor payment cases, worth over \$400 million in disrupted EFT payments. The Afghan First Policy exemplifies the difficulty of aligning local infrastructure imbalances with well-meaning objectives. Utilizing local populations becomes increasingly difficult when the solution is unresponsive to the community’s inability to process complex operations, specifically electronic financial transactions.

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<sup>44</sup> “NATO Afghan First Policy.”

<sup>45</sup> “Afghan First.” USABAC. 2013.

## **Local Content Policies**

Local Content Policies (LCPs) are a global, key set of policies aimed at addressing the gap between local employment and foreign industry. There are many definitions and types of Local Content Policies; however, these policies are typically nationally regulated conditions set upon a foreign company to promote local added value<sup>46</sup>. This includes requirements that the corporation procure a certain amount of raw goods and materials from domestic sources, the construction of permanent infrastructure using local labor or materials that will remain in place post-extraction, or the provision of infrastructure unrelated to the industry but intended to benefit the local populations (such as schools or medical facilities)<sup>47</sup>.

The policy could also consist of establishing refineries or increasing the nation’s domestic production capability<sup>48</sup>. LCPs can address or regulate the actions of foreign companies at any point along the value chain of the mining industry. These policies are aimed at preventing the “resource curse” from occurring by enforcing local involvement in extractive and natural resource industries.

*Figure 2*, on the following page outlines the various stages that local content policies can interact with and the role they play in a global industry.

Many developing countries have implemented LCPs into various sectors of their economy, with various degrees of success. Below are brief case studies from South Africa and Ghana.

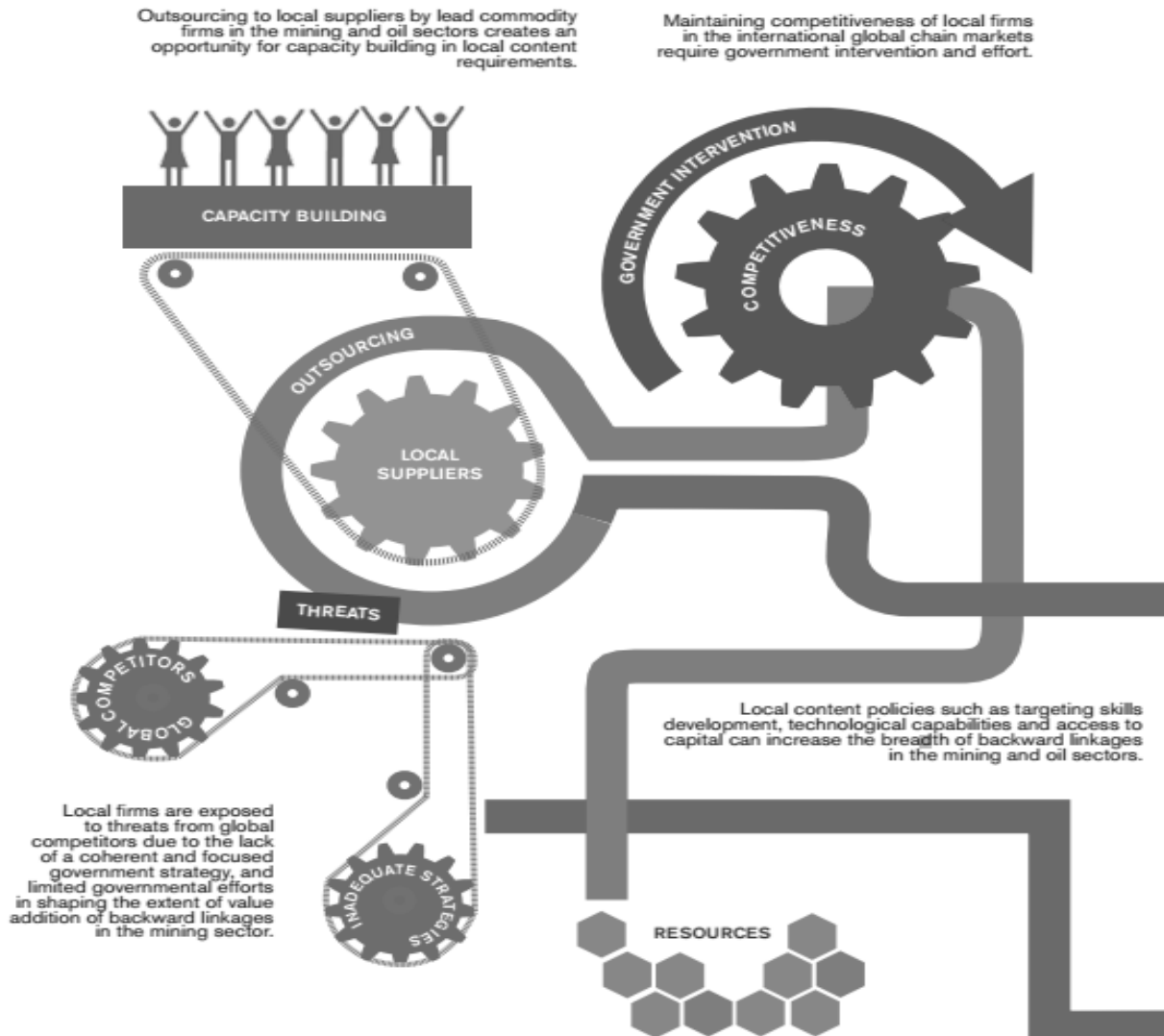
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<sup>46</sup> “Economic Report on Africa 2013.” UNECA. Page 12.

<sup>47</sup> Silvana Tordo et al., 2013. “Local Content Policies in the Oil and Gas Sector.” Page 3.

<sup>48</sup> Ibid. Page xi.

**LOCAL CONTENT POLICIES HAVE PROBABLY BEEN THE SINGLE MOST IMPORTANT POLICY DRIVER OF LINKAGES FROM THE COMMODITY SECTOR.**



**Figure 2: Local Content Mechanisms.** United Nations Economic Commission for Africa, Economic Report 2013

*South Africa*

The Republic of South Africa maintains strict Local Content Policy regulations, overseen by the South African Bureau of Standards (SABS). In order to ensure inclusion of local populations while encouraging foreign investment and industry, SABS has a very specific and transparent formula used in calculating the proportion of local content required in business transactions and development

within the country. There is an additional verification application form, published on their website, which allows foreign companies to make an initial assessment of what is required of them, prior to engaging in business activities in South Africa<sup>49</sup>.

<sup>49</sup> "Local Content Verification." *South African Bureau of Standards*.

Mining contracts in South Africa are conditional upon the following:

- 15% of ownership or equity of companies must be held by historically disadvantaged South Africans (HDSAs) within five years, and 26% within 10 years,
- 40% of management must come from HDSAs within five years,
- 10% of the employees of a mining company must be women within five years of start-up,
- The foreign company's social spending must align itself with local and regional development plans, and
- HDSAs are given preferred supplier statuses<sup>50</sup>.

South Africa represents a unique case, due to its historic marginalization of its population and the global market's response to its sensitive history. The LCPs of South Africa draw specific attention to historically disadvantaged groups, and the Government of South Africa uses local content laws to promote good-will among the populations and extractive industries.

### *Ghana*

Ghana is the second largest gold producer in Africa and has invested more than eight billion dollars in mining production between 1994 and 2010<sup>51</sup>. The industry directly employs 24,000 people; however, the majority of employment generated from mining activities originates in downstream activities, including basic steel production, geological and geochemical laboratories, and a growing local service industry<sup>52</sup>.

Similar to South Africa, Ghana has a centralized government body, which reviews and approves foreign mining contracts. The Minerals Commission, founded under the Ghana Extractive Industries Transparency Initiative, requires mining leaseholders to submit a detailed program for the recruitment and training of Ghanaian personnel and labor<sup>53</sup>. In compliance with Ghana's LCPs, mining companies must present a "localized policy and training program aimed at progressive replacement of expatriate personnel by well-trained Ghanaian personnel"<sup>54</sup>.

However, while the program is ensuring that a greater proportion of local citizens are employed, it also presents several challenges to developing the industry. For instance, multinational companies are required to procure a high proportion of their supplies and equipment from locally owned businesses or firms. In many cases, however, local companies have experience only in simpler manufactured products and equipment. Frequently, equipment produced locally does not meet global, industrial standards and, as a result, local suppliers import these items from abroad and then sell them to the multinational companies<sup>55</sup>.

Another difficulty in creating downstream industries, such as manufacturing gold jewelry, is poor infrastructure. Poor infrastructure has been cited as the "single most important obstacle" in developing value added industries<sup>56</sup>. The lack of road networks creates difficult and risky conditions to transport raw materials and, consequently, foreign companies focus solely on extracting raw materials.

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<sup>50</sup> Gary McMahon and Brandon Tracy, 2011. *The Afghanistan Mining Sector as a Driver of Sustainable Growth: Benefits and Opportunities for Large-Scale Mining*. Page 41.

<sup>51</sup> Ibid.

<sup>52</sup> "Economic Report on Africa 2013." *UNECA*. Page 216.

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<sup>53</sup> Information Services Department, 2010. "The Role of Minerals Commission in the Mining Industry."

<sup>54</sup> Gary McMahon and Brandon Tracy, 2011. *The Afghanistan Mining Sector as a Driver of Sustainable Growth: Benefits and Opportunities for Large-Scale Mining*. Page 37.

<sup>55</sup> "Economic Report on Africa 2013." *UNECA*. Page 217.

<sup>56</sup> Ibid.

In conclusion, successful LCPs are responsive to national contexts and aptitudes. Policies rely on a strong, transparent, and centralized branch of a federal government, which monitors the progress and compliance of multinational companies.

Finally, LCPs should be drafted to balance the goals of their policy with the interests of multinational corporations. For example, in Nigeria, Indonesia, Russia, and Kazakhstan, the scale and heightened profitability of future business operations affords these governments more power to set stricter local content regulations. For a multinational company doing business in these countries, the potential profits outweigh any inconvenience the LCPs may cause<sup>57</sup>. This is not the case everywhere.

## **Conclusion**

This chapter was designed to assess Afghanistan's human capital abilities in relation to the potential development of the mining industry. The opportunities and barriers associated with long-term inclusion of local populations, through employment and education, are extensive. The Local Content Policies in Ghana and South Africa reveal the challenges associated with implementing institutional safeguards and reemphasize the need for country-specific policies.

The extraction of mineral deposits could eventually finance the expansion of education; create new jobs and opportunities, resulting in tremendous economic growth. However, crafting a sustainable economy and realizing long-term benefits from natural resources continues to be contingent upon the establishment of an

efficient and cooperative legal and financial agenda to include the existence of suitable security. A strong skills-based and diversified mineral sector could foster Afghanistan's development on a large scale, but is unlikely to occur without the coordinated support and inclusion of federal, local, and tribal governance.

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<sup>57</sup> Silvana Tordo et al., 2013. "Local Content Policies in the Oil and Gas Sector." Page 58.

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# Unlocking Afghanistan's Mineral Wealth: *Lessons from Chile, Botswana, and Zimbabwe* Xiangjun Wan

*"Make bread while the oven is still hot"*

## Introduction

The recent discovery of Afghanistan's one trillion dollars worth of precious and base metal deposits drew the international community's attention to the possibility of converting the war-torn country into a global mining giant, thus fundamentally improving conditions for its people. The high level of enthusiasm this potential has generated among officials, both in Afghanistan and elsewhere, is perhaps premature. Recent decades have shown that a wealth of natural resources has not always translated into economic wealth for a country.

With this in mind, it is helpful to examine specific cases where resource extraction has been successful in developing a nation's economy and where it has not. Such "country analogies" have their limits but can be useful in highlighting certain elements of success and failure.

Chile and Botswana are two examples of developing countries whose mineral wealth empowered impressive development in economic growth. However, in global terms, these nations represent the exception. It has been common for resource abundant countries to perform ineffectively, compared to resource-poor nations.<sup>1</sup> These realities helped inspire the term "natural resource curse." Empirical studies have shown that the curse is "a reasonably solid fact" if viewed purely on the basis of correlation.<sup>2</sup>

This thesis, however, has been widely discussed and more recently subjected to considerable critique. As a result, this report will not use the "resource curse" as a lens through which to focus comparison among different countries' experience. Rather than a concentration on statistical data, this chapter examines the institutional basis for success and failure in natural resource extraction.

This study is based on the experiences of Chile, Botswana, and Zimbabwe, countries that all have valuable resources, but are otherwise very different from each other. Chile has achieved impressive long-term economic growth. Botswana successfully regulated its mining sector but exhibits mixed performance. Lastly, Zimbabwe fails to harness its natural assets.

The conversion from natural assets to sustained development is a difficult process, but the analysis of these three examples illustrates how good governance and good policies help countries benefit from their potential growth. These analogies identify common steps that good performers take in order to induce prosperity from natural abundance. To take advantage of a country's mineral resources requires a government that can guarantee property rights, the rule of law, stable macroeconomic policies, and has a tax system capable of attracting foreign investment. However, if a country is unable to effectively manage its revenue, no matter how successful its mining sector, long-term growth cannot be assured.

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<sup>1</sup> Auty, "The Political Economy of Resource-Driven Growth." Page 840.

<sup>2</sup> Ibid. Page 837.

Because no two countries are exactly alike, these case studies cannot guarantee the future success of Afghanistan in its mineral economy. The analogies compare countries with different mineral resource situations; therefore, factors that appear to be favorable in one country may not be easily replicated in Afghanistan.

## Chile

Chile had a turbulent period of instability and fractious politics. The Allende government and the Pinochet coup in the early 1970s caused great macroeconomic instability and social polarization. The country's consumer price index increased by 3,000%, and a deep debt crisis ensued causing an economic contraction in the early 1980s when unemployment rates reached 33%. Following the return of civilian rule in 1990, a widespread consensus was underpinned to prevent further disruptive boom-bust crises and avoid conditions that might precipitate political instability.<sup>3</sup> As a result, the government was committed to both economic stability and public debt reduction.

### *Property Rights Protection, Rule of Law and Democracy*

After a return to democracy in the 1990s, foreign direct investment (FDI) in the copper sector significantly increased. Today, Chile has become the largest copper producer, supplying 43% of the world's copper. In retrospect, the stimulation of long-term copper investment would not be achieved without property rights protection, the creation of a transparent legal framework and the restoration of democracy. Property rights protection was implemented as one of the many institutional changes that

took place to introduce a market economy by the military coup. Renewed property rights diminished the risk of expropriation. Following the return of democracy, the new government instilled more rules to attract FDI. This included the Decree Law 600, to guarantee foreign investors the right to transfer profits to other countries, and the Organic Constitutional Law of Mining Concessions, enacted in 1982, to ensure compensation would be based on net present value in case of expropriation, which is supported by the Chilean Mining Code of 1983.<sup>4</sup>

Additionally, Chile's concession law enforces a clear and transparent concessions process. The private sector is well informed regarding the criteria for the evaluation of bids. Furthermore, the bid and contract details are publicly available. The concession process is fair and there is no bilateral negotiation or backhanded dealing.<sup>5</sup> By the second half of the 1990s, the accumulated FDI in Chile reached \$28.4 billion.<sup>6</sup>

### *Macroeconomic Policies & Volatile Copper Prices*

Chile followed a set of fiscal policies to limit its fiscal spending. These policies included structural balanced fiscal rule with explicit fiscal surplus targets. This target rate was determined by two panels of independent economic experts who projected the potential copper price and output for the next 10 years. This projection allowed the government to only spend the amount compatible with long-term development. To reduce inflation and the impacts of the Dutch Disease, an inflation-target framework was instilled by the central

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<sup>3</sup> Gelb and Grasmann, "How Should Oil Exporters Spend Their Rents?" Page 19.

<sup>4</sup> Collier and Venables, *Plundered Nations?* Page 98.

<sup>5</sup> Korinek, "Mineral Resource Trade in Chile." Page 19.

<sup>6</sup> Collier and Venables, *Plundered Nations?* Page 92.

bank to contain Chile's historical two-digit inflation rate. A flexible nominal exchange rate system also safeguarded the Chilean economy from external sharp commodity price fluctuation.<sup>7</sup>

As a result, Chile avoided high volatility in the nominal exchange rate.<sup>8</sup> Moreover, the central government debt came down from 45% in 1990s to 4% in 2007. Sound monetary frameworks and fiscal strategy enabled the government to manage capital inflows.

### *The Taxation System*

An overview of Chile's taxation system in the mining sector suggests that it is well designed with a range acceptable to private sector investments. This is made possible by the mining law that imposes a progressive and non-discriminatory mining tax. The law includes higher tax rates during times of very large profits and lower interest rates to encourage individuals and small mining companies to engage in economic activity. This way, small firms, which may not benefit from economy in a large scale, is supported in their mining efforts.<sup>9</sup>

The private sector is allowed to offer expertise and freely invest in infrastructure sectors traditionally dominated by the government, hence, the concessions law facilitate successful participation of the private sector in infrastructure projects ranging from roads to seaports, schools, hospitals, and prisons since 1991.<sup>10</sup>

### *How Chile Manages Tax Revenue*

Property rights, rule of law, democracy, and a well-designed tax system are in place as strong institutional bases so mining in Chile is secured and attractive to foreign investors. However, good management of tax revenue is equally important. In 2006, the government had switched tax regimes from a profit-based system to a royalty system. Foreign companies pay an annual taxable operation income, which significantly increases Chile's tax revenue potential.

The government manages revenues from royalties through the Fund for Innovation and Competitiveness, administered by the Ministry of Economics.<sup>11</sup> The National Council for Competitiveness outlines how this fund can be used for human capital development, and dissemination of technologies or innovation policies.

In addition, Chile created two Sovereign Wealth Funds (SWFs) through the Fiscal Responsibility Law (FRL) in 2007, to protect the country from sharp international price variation of commodities. The Pension Reserve Fund (PRF) funds future old-age and disability solidarity pensions and solidarity pension contributions arising from pension reforms; the Economic and Social Stabilization Fund (ESSF) ensures stable government spending during times of slower growth. Furthermore, SWFs are also invested abroad conservatively in order to avoid the Dutch disease and reduce exchange rate volatility.

Chile has a transparent management system for its SWFs. In fact, "Chile's SWFs are being managed transparently, and the government is committed to the best practices in this area".<sup>12</sup> The authorities

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<sup>7</sup> Bank al-Jazā'ir, IMF Institute, and International Monetary Fund, *Beyond the Curse*. Page 205.

<sup>8</sup> *Ibid.* Page 205.

<sup>9</sup> Korinek, "Mineral Resource Trade in Chile." Page 23.

<sup>10</sup> Hill, "Foreign Infrastructure Investment in Chile." Page 176.

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<sup>11</sup> *Ibid.* Page 102.

<sup>12</sup> Collier and Venables, *Plundered Nations?*. Page 102.

publish monthly prospectuses on both funds as well as extensive quarterly reports discussing performance relative to financial market developments and established benchmarks.

### *Tax Revenues Expenditure and Economic Diversification*

While some countries demonstrate difficulty in achieving diversification in the manufacturing sector, Chile has shown that this is possible to accomplish with the help of SWFs.<sup>13</sup> SWFs have boosted economic diversification, particularly with outward-oriented economic strategy. The funds are invested in areas that directly contribute to further diversified growth. For instance, a range of export commodity has developed such as the high-valued salmon, wine and horticulture.<sup>14</sup> Furthermore, these industries are supported by public services including long-term public-private partnerships aimed to help producers maximize their capabilities through R&D and adaptation of technologies. Chile's effort to diversify exports away from its natural resources has prevented the nation from becoming dependent on its resources.

### **Botswana**

Botswana has succeeded in mining its natural resources with striking economic performance. This country grew with an extraordinary average annual growth per capita income of seven percent between 1966 and 1999.<sup>15</sup> This growth was fueled by the development in mineral resources. Throughout the past 40 years, diamonds have been the key to the transformation of the country's economy and society. The diamond-mining sector is accountable for

80% of its export revenue, 55% of government revenues, and 35% of the country's GDP. Botswana's Orapa mine is the world's largest diamond mine in terms of total value of carats produced.<sup>16</sup>

Unlike Chile, Botswana owes its success to a strong institutional base, which developed before the resource sector. As a country that has also taken similar steps to Chile, Botswana has not sustained long-term growth, particularly with high unemployment rates and unequal income distribution. This report suggests that this phenomenon is closely related to how the country distributes its tax revenue.

### *Property rights and democracy*

Botswana has a history of tribal leadership. The Tswana society practiced traditions of consulting their tribal leaders and seeking a consensus. Usually, a chief served as the tribal executive and was in charge of formulating economic policy, resolving conflicts within the tribe, and managing external conflicts with other tribes.<sup>17</sup> At the same time, leaders were perceived as equal to their people and stayed closely connected with them through a traditional form of local gathering "Kgotla".

The traditional institutional bases exempt political elites from repressive and corrupt social and political characteristics. After Botswana gained its independence in 1966, the Botswana Democratic Party (BDP) became the governing party by 81% of the vote.<sup>18</sup> Democratic systems of governance have enhanced good policies in Botswana. Policy at the national level has been contested through regular elections and

<sup>13</sup> Dunning, "Resource Dependence, Economic Performance, and Political Stability." P.456

<sup>14</sup> Chandra, *Technology, Adaptation, and Exports*. Page 15.

<sup>15</sup> Lewin, "Botswana's Success." Page 81.

<sup>16</sup> Throup et al., *Botswana Assessing Risks to Stability*. Page 7.

<sup>17</sup> Lewis, "Explaining Botswana's Success: The Importance of Culture."

<sup>18</sup> Lewis, "Explaining Botswana's Success: The Importance of Culture."

meaningful legislative roles. Both enforced accountability for results that are expected to broadly benefit the electorate.

Another institutional foundation related to mining can be found in cattle-based rural constituencies. These constituencies establish a clear interest in protecting property rights. The institution of private property provides political stability, and ensures participation of a broad cross-section of the society.<sup>19</sup> In addition, Botswana's infrastructure was in better condition than several of its neighbors, therefore, increased international interests in the mining sector during the early stages of mineral development.

#### *Leadership and Sustained Economic Growth*

In retrospect, Botswana's successful "state-led" development and economic planning based on mineral development was not a unique strategy, as many African countries adopted similar strategies. However, the same strategy led to economic crises in most of the countries. Botswana was able to avoid economic crisis because of its secure political elite, which has pursued growth-promoting policies, and developed modern institutions of political, economic, and legal restraint.

Indeed, it took three successive leaders to achieve sustained economic growth. Botswana's presidents focused on development, ethical leadership and accountable public services. The legacy of Botswana's second president Mofeane, relates to new forms of structural transformation, especially privatization and diversification into services and downstream manufacturing to make Botswana the "Diamond Centre" of the world, which was previously farfetched

but seems now to be within reach.<sup>20</sup>

Additionally, Botswana implemented good macroeconomic policies. Botswana's approach to preventing the Dutch Disease consisted of several components: fiscal saving, and a surplus on the current account of the balance of payments. Together, these policies limited erosion of domestic productivity and competitiveness. High fiscal saving limits current consumption and reduces pressure on domestic price inflation, a typical problem in natural resource booms.

Another important driver is Botswana's transparent management in the mining sector, which in return helped generate added revenue. Strong initiative was taken to enforce and strengthen existing transparency rules with minimal government interference in the mining sector. For example, the Mines and Minerals Act, passed into law in 1999, contains clear regulations for every stage of the mining process.<sup>21</sup>

Botswana's complex regulations also played a significant factor in its stable economy by featuring increased transparency in its laws, increasing requirements regarding the technical capabilities of mining companies, improving laws to promote the exploration of additional mines and reforming taxation and royalty system.<sup>22</sup> The ministry has been effective at managing the country's large diamond source, including negotiating deals with mining firms, dealing with tribal authorities and a committing to zero tolerance of corruption and bribery.<sup>23</sup>

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<sup>19</sup> Gelb and Grasmann, "How Should Oil Exporters Spend Their Rents?" Page 18.

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<sup>20</sup> Acemoglu, Johnson, and Robinson, "An African Success Story." Page 3.

<sup>21</sup> "Botswana: A Mining Nation Transforms." P.135.

<sup>22</sup> Robb Jr, "Diamond's Wealth Is Forever." P.648-649

<sup>23</sup> Lewis, "Explaining Botswana's Success: The Importance of Culture."

## *Tax Revenue Management*

Budget surpluses accumulate as government savings balance at the Bank of Botswana, in the Government Investment Account (GIA). The counterpart to the GIA is the “Pula Fund” portion of the foreign exchange reserves. The Pula Fund is sometimes referred to as Botswana’s SWF in that it is managed for long-term investment returns.<sup>24</sup> Similar to Chile, the Bank of Botswana also maintains a Pension Fund.

## *Spending Revenue and Economic Diversification*

Despite Botswana’s success in mineral development, mineral wealth has not transformed it into a long-term sustainable economy. Additionally, the country faces several challenges, particularly limited social gain.

Diamond revenues are distributed in the form of welfare payments to the largely subsistent population of the arid countryside and to the underclass of the expanding urban areas, as well as to HIV/AIDs care and prevention.<sup>25</sup> While poverty rates have significantly been reduced, this form of financial support leads to unsustainable growth.

Although the diamond sector provides prominent revenue, it employs fewer than 8,000 workers. Botswana cooperates with De Beers in the extraction of diamonds and the Diamond Trade Company for sorting, cutting and marketing. This suggests that the country has neither developed its own value added industry nor created more jobs. The urban unemployment rate is about 17.5%, but unofficial estimates, which are probably

more accurate, suggest that the rate may be twice as high.<sup>26</sup>

Outside the mining sector, Botswana’s economy remains underdeveloped. Tourism is a small but significant source of income. Agriculture contributes less than three percent of GDP. The arid environment in Botswana prevents agricultural commercialization. Manufacturing and construction remain poorly developed and even the informal sector is small. The coal sector could be a promising new export sector and a potential substitute for Botswana’s diamond revenue. Botswana is home to more than 200 billion tons of estimated coal resources, however, as a land-locked country, does not have the infrastructure for developing a coal industry. Future efforts will need to develop export infrastructure to support coal activities in the land-locked country, the greatest constraint to development of the sector.<sup>27</sup>

Literature also suggests that the lack of diversification is laid in the government.<sup>28</sup> Evidence suggests that the government and the private sector were fraught with limitations and challenges. Botswana’s ruling party is in decline. As a result, mineral investment expansion from the government to the market remains shallow and narrow. The private sector is concentrated in the capital city. The entrepreneurship capacity is low and 43% of Botswana’s households living in poverty outside the capital city.<sup>29</sup>

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<sup>24</sup> Ananiadou and Claro, “21st Century Skills and Competences for New Millennium Learners in OECD Countries.” Page 34.

<sup>25</sup> Throup et al., *Botswana Assessing Risks to Stability*. Page 8.

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<sup>26</sup> Ibid. Page 7.

<sup>27</sup> “Botswana-Country Mining Guide.” Page 25.

<sup>28</sup> Contech, “The Challenges of Economic Development Policy Governance in Developing Countries: The Case of Botswana.” Page 403.

<sup>29</sup> Ibid. Page 407.

## Zimbabwe

Zimbabwe has significant deposits of gold, iron ore, coal, platinum and particularly diamonds, mainly found in the Marange diamond fields. Despite the existence of diverse and rich deposits of minerals, the mining sector in Zimbabwe remains underdeveloped.

### *Property Right and Democracy*

Mining in Zimbabwe is unfavorable because there are no property rights laws and a democratic system in place. Zimbabwe is supposedly a presidential republic; however, democracy is highly suppressed in this country. The Movement for Democratic Change (MDC) was formed in 1999, as a major challenge to president Robert Mugabe and his party, the Zimbabwe African National Union-Patriot Front (ZANU-PF). Nevertheless, the MDC has limited political influence as power is highly centralized in the hands of president Mugabe and his family.<sup>30</sup> Members of president Mugabe's ruling party subsequently took numerous, often undemocratic moves to bolster power.<sup>31</sup>

### *Weak Financial Institutions*

Weak financial institutions and the lack of financial resources are problematic in Zimbabwe's mineral extraction process. The central bank, a key state institution, is unable to channel funds through normal channels, causing major constraints on both large and small miners.<sup>32</sup> In 2002, a decade of relentless bank note printing pushed inflation rates into the billions, rendering Zimbabwe's financial power worthless.<sup>33</sup> By the end of 2012, investment in the

mining sector grew considerably, resulting in significant growth in mineral exports and government revenues; however, the country still has an estimated 95% unemployment rate.

### *Tax Revenue and Legal Framework*

Neither the Zimbabwe Revenue Authority (ZIMRA) nor Zimbabwe's mining laws are sufficient for monitoring mining activities. Zimbabwe proposed to create its SWF in early 2014; however, this is seen as unlikely to have a material impact on private investment. In addition, Zimbabwe's government is notoriously known for lacking agreement accountability. Several organizations reported on Zimbabwe's violation of bilateral agreements by indigenizing a company.<sup>34</sup>

### *Indigenization Policy*

There is an inherent uncertainty in private mining because of the development of the indigenization policy. In early 2006, the government announced plans to take a 51% share of all foreign-owned mines for local black Zimbabweans. This proposal has been modified several times, once allowing firms already invested in community projects to keep their majority share.<sup>35</sup> However, in 2013, the election of Robert Mugabe's as president reiterated the possibility of the "indigenization" of the mining sector.

### *Diversification*

Deteriorating infrastructure over the past 15 years has hampered economic diversification by impeding construction of roads, railways and the generation of electricity.<sup>36</sup> Security forces have been

<sup>30</sup> Ibid. Page 317.

<sup>31</sup> Robb Jr, "Diamond's Wealth Is Forever." Page 655.

<sup>32</sup> Padayachee, *The Political Economy of Africa*. Page 318.

<sup>33</sup> Ibid. Page 319.

<sup>34</sup> Robb Jr, "Diamond's Wealth Is Forever." Page 660.

<sup>35</sup> Ploch, "Zimbabwe:Background." Page 32.

<sup>36</sup> Padayachee, *The Political Economy of Africa*. Shangahaidonhi and Gundani, "The Feasibility of Value Addition in the Mining

accused of serious human rights abuses. Police arrested an estimated 20,000 illegal miners each year, including several hundred small-scale miners, and confiscated gold, diamonds, emeralds, and gold ore. Many of the country's unemployed have resorted to illegal mining and selling their goods on the black market.

## **Conclusion**

Chile and Botswana's examples demonstrate that strong institutional frameworks, and good governance are crucial elements to the successful exploration and extraction of natural resources. Zimbabwe's case on the other hand, demonstrates how countries that lack rule of institutional bases aren't able to effectively manage their mineral wealth.

Botswana and Chile, both established congruent property rights laws, democracy, and stable macroeconomic policies. Well-designed tax regimes and legal frameworks attract more foreign investors. Both demonstrated the importance of quality, honest, and efficient institutions. Moreover, the creation of a Sovereign Wealth Fund prevented high volatility and drastic fluctuations in the commodities market. In Zimbabwe, violence and disorder prevailed due to the absence of consolidated institutions and true democracy.

Furthermore, mining in Zimbabwe is unfavorable because its "indigenization policies" discourage FDI. In terms of spending, Chile diversifies its economy with an "outward-oriented" economic strategy. A range of high-value industries has been developed, creating jobs and sustaining long-term growth. On the other hand, Botswana's economic success is fragile because it remains highly dependent on

mining revenues. Distribution of revenues in the form of social welfare payments does not generate sustainable growth. Also, Botswana's landlocked geography hinders the country from developing coal. Some of the greatest challenges that Botswana faces relate to its high unemployment rate and high-income inequality.

Afghanistan does not have a secure and stable political environment as required by the mining industry. Nevertheless, it has made extraordinary progress in terms of building institutional capacity, including legal reform and private sector development. These efforts will foster favorable conditions to the exploration and extraction of minerals.

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## Conclusion

*“Patience is bitter, but its fruit is sweet”*

This report was a brief examination of Afghanistan’s capacity to utilize its vast mineral resources to create a sustainable economy. Almost \$1 trillion worth of minerals could provide a means to significantly amend economic and social damage caused by decades of war. However, fruitful economic development will take time to develop. Afghanistan faces a myriad of barriers to economic sustainability through natural resource development. These barriers can be addressed through short-term and long-term initiatives.

Short-term initiatives must include infrastructural projects supporting the availability of water and energy essential to mineral exploration. In addition, the road and rail infrastructure must be in place to enable the transportation of materials and equipment in and out of the country. Security consideration will also need to be granted in the short-term. Security dangers and tribal relations continue to hamper development efforts. For instance, landmines and insurgency are constant threats to any economic activity.

Furthermore, high levels of inefficiency and corruption hinder Afghanistan’s financial, legal, and government institutions. Influential political figures do not recognize the judicial system as a credible institution; therefore, financial institutions are rampant with corruption and capacity inadequacies.

Afghanistan must improve its system of legal accountability and fund transfers in order to facilitate business activity. Mining and mineral exploration investors will take

these factors into account when calculating the risks involved in doing business in Afghanistan.

Mineral extraction could provide many opportunities for the Afghan people, including increased employment, infrastructure, and value-added industries. By taking steps to ensure the involvement of local populations and using the mineral revenue as a protection for future generations, the potential mineral wealth could create long-term value and a sustainable economy.

Afghanistan has a host of crippling issues that has plagued the nation for decades. However, forward thinking and a newly elected president hold hope for a bright economic, social and peaceful future. President Ashraf Ghani has pledged to reduce corruption, combat instability and address the needs of Afghanistan’s diverse population.

Afghanistan’s newly realized mineral wealth represents a potential source of indigenous revenue, Afghan empowerment, and future economic prospects.

# Policy Recommendations

## Minerals

**Short Term:** *The Areas of Interest (AOIs) outlined by the US Geological Survey (USGS) must be further explored via on-the-ground reconnaissance investigations to gather more accurate estimates of Afghanistan's mineral capacities.*

**Mid-Term:** *The government of Afghanistan should prioritize small-scale mining operations.*

Rather than pushing for the extraction of minerals from the Mes Aynak and Haji-Gak deposits before others, the GoA should first begin to mine small-scale metal deposits in the North (specifically in the Jawzjan, Balkh, Kunduz, and Baghlan provinces), which are situated near population hubs and existing transportation. If the GoA chooses to begin with small-scale mining, they will see a more immediate benefit in both quicker financial returns and increased employment. Additionally, metal deposits, such as copper in the San Pui province, offer the most predictability with regards to the quantity of mineralization present and are held at a stable global market price.

**Long Term:** *The GoA and USGS should encourage competition by enabling more than one extractive company to operate within one mining district.*

This approach will spur innovation and interaction of labor, supplies, capital, and infrastructure between companies.

## Infrastructure

### Water

**Short Term:** *Develop infrastructure for the extraction of groundwater resources in the Northern River Basin and increase the extraction of groundwater from the Amu Darya River Basin.*

The significant gap between groundwater usage and recharge in the Amu Darya and Northern River Basins presents an opportunity for increased groundwater extraction. The Northern and Amu Darya River Basins should be at the center of groundwater development as they are geographically located in the north, where the first mineral extraction projects are likely to be developed.

*Establish irrigation education programs for Afghan farmers*

Irrigation education programs are essential for providing Afghan farmers with the ability to efficiently cultivate crops. Afghan farmers do not use efficient irrigation techniques and tend to over-irrigate. Furthermore, old farming techniques, such as using oxen for draught power, are still being used in Afghanistan. Establishing programs in the agricultural regions of Afghanistan to relay more efficient practices to farmers would be a relatively immediate solution to conserving more water.

**Medium Term:** *Initiate bilateral water treaty negotiations with countries surrounding the Amu Darya River Basin.*

There are no current bilateral agreements between Afghanistan and riparian countries of the Amu Darya. The Amu Darya River Basin is the largest river basin in Afghanistan and is a crucial water source for Afghanistan and neighboring countries. Bilateral water treaty negotiations with countries surrounding the Amu Darya River Basin will play a crucial role in completion or beginning of hydroelectric projects in this basin. The development of hydropower upstream (largely in Afghanistan) affects downstream parties and their water supply for irrigation. A comprehensive and fair water allocation system must be negotiated between riparian countries of the Amu Darya Basin.

**Long Term:** *Begin large-scale extraction of groundwater in all river basins in Afghanistan.*

In 2002, the annual potential of groundwater in Afghanistan was 20 billion cubic meters while the annual usage of groundwater was about three billion cubic meters. This gap between groundwater potential and usage is reflected in all river basins in Afghanistan and presents opportunities across Afghanistan for the development of groundwater. The five river basins in Afghanistan are located in diverse geographical areas of Afghanistan, which means they will be able to supply mining operations scattered throughout the country with water. Groundwater extraction should be done with close attention to any long-term impacts on the environmental and sustainability in general.

### ***Energy***

**Short Term:** *Continue with the current donor sponsored projects*

At present, there are a number of energy development projects that the US

Government is directly involved with. Organizations including USAID, the World Bank Group and the Asian Development Bank actively fund these projects. These efforts should not be abandoned, however, development should be monitored to ensure that effective implementation and commitments to the Afghanistan are met.

**Long Term:** *Attract investment to financing in the construction of new power generating projects.*

It has to vigorously develop its hydropower and hydrocarbon potential to provide for its energy deficient economy. With foreign investment, Afghanistan should construct new dams and install gas-fired power plants. Yet for the purposes of meeting the energy needs of its highly lucrative extractive industry and for diversifying its energy resources portfolio, Afghanistan should invest in the latest generation of modular nuclear power plants. However, given the dangerous potential of nuclear power, the international community must vigorously monitor who has access to nuclear energy.

### ***Transportation***

**Short Term:** *Establish and fund a government agency tasked with maintaining transportation infrastructure, roads and rail.*

The Afghan Ministry of Public Works must administer not only the construction of transportation projects but also maintain the infrastructure that already exists. One major aspect of this initiative will be to monitor the ongoing construction of the final unpaved section of the Ring Road through the Badghis Province. Another important initiative of this initiative will be the repair and maintenance of the heavily trafficked Highway One between Kabul and Kandahar.

**Medium Term:** *Plan and finance the construction of a northern rail corridor from Iran through Herat and continuing westward to Kunduz.*

The delayed rail project connecting Herat with the existing rail network in Iran must be completed. This railway should connect with the proposed rail network in Akina and onward to Kunduz. The entire stretch of railway from Herat to Kunduz should be constructed using the Standard gauge, which is the most widely used gauge in the world. Using the standard gauge will enable rail traffic to continue from Kunduz all the way through Iran, Turkey, and into Europe without a break in gauge. Additionally, Kunduz is near the Wakhan corridor that borders China. The Chinese rail network also uses the Standard gauge. The proposed Turkmen and Tajik lines can connect directly in northern cities that run through this line as well as the existing Uzbek line in Mazar-e-Sharif.

**Long Term:** *Construct railways throughout Afghanistan that would connect the entire region.*

Build a railway from Kunduz, through the Wakhan corridor, and into China. A railway between the northern Afghan rail corridor and China would directly connect China with Iranian Ports and Europe without a single break in gauge. Another aspect of this project would be to construct a “Rail Ring” from Herat to Kandahar, Kabul, through Salang Pass, and finally linking to the northern rail corridor in Kunduz. Eventually, rail connection could easily connect to Pakistan at Kabul and Kandahar and into India.

## **Security and Stability**

**Short Term:** *Continue landmine removal.*

The eradication of the millions of landmines that cover the Afghan landscape must continue, but at a faster pace. The presence of landmines in Afghanistan will severely cripple the exploration and mining efforts of energy companies. Human casualties and loss of expensive equipment are just a few of the facets that are affected by this tragedy.

**Short and Medium Term:** *Utilize Private Security Companies (PSCs) to augment VSO/ALPs operations or security details.*

PSCs have been a permanent feature in the landscapes of Iraq and Afghanistan since the early 2000s. Some have done a worthy job at accomplishing their assigned missions and have done so with integrity. Nevertheless, the social blemishes left behind by companies such as Blackwater, which showed a total disregard for the established rules of engagement (ROI), are hard to erase. PSCs have a place in Afghanistan if used in a small scale and strictly restricted by written guidelines that follow the rule of law. In 2009, small PSCs operated very successfully in Afghanistan. The operatives of these small companies were well equipped, spoke Dari or Pashto and stayed in the field, developing ties with tribal populations. These teams could potentially augment VSO/ALPs.

*Provide continuity to the VSO/APL programs.*

These programs have already been implemented with success in Afghanistan. The program’s doctrine is continuously improved and tested by members of the US Army SOF. The US should train Afghan

nationals in the use of VSO/ALP doctrine. This would add a contingency should the US and NATO forces withdraw completely from Afghanistan.

*The importance FETs and communicating better with Afghan men and women.*

Women comprise a large segment of the Afghan population and are an integral part of Afghan society. The Afghan woman is usually perceived by westerners, as incapable of speaking her mind, submissive and powerless when facing males in most types of disputes. Afghan culture is patriarchal and women are subjected to many forms of injustice, however Afghan women do resist oppression and unfairness, even if passively. Afghan women value education, volunteer to served in the Afghan Armed Forces and recently an article published by the Washington Post dated February 26, 2015, told the story of Sara Bahayi, Afghanistan's first female taxi driver. Insofar as it is important to provide continuity to VSO/ALPs, it is also necessary to support the freedom of Afghan women who will likely constitute a large percentage of the workforce associated with the exploration and mining of Afghanistan's natural resources. The Female Engagement Team (FET) program should be expanded and its doctrine officially implemented on paper and in the field. Given the mistrust that Afghan men have for foreign troops and their sense of comfort when conversing with foreign women, FETs are crucial in establishing dialogue between Afghan men and women and foreign VSO/ALP teams.

## **Ethnic Relations**

*The central government must incorporate ethnic groups into national decision-making processes in order to ease ethnic tensions.*

In order to prevent backlash and resentment, the central government must give tribal groups a stake in mineral extraction process. This can be achieved extending and facilitating democratic election processes to all tribal groups. Equal political opportunities will ease tensions amongst groups whom are often suspicious of the power of other ethnic groups.

*Provide resources beyond Kabul to rural populations.*

The failure of the central government to address the needs of rural populations has enabled regional power figures to gain control over certain territories. Regional power figures and warlords will create a security barrier to mineral extraction with their given territories.

## The Legal and Judicial System

*Remove corrupt senior officials in the legal and judicial system and have a revolving system for prosecutors and judges at senior levels.*

Judges and prosecutors will be randomly placed in provinces or offices and occasionally moved to another province or office. Legal and judicial employees must be selected based on merit.

*Introduce checks and balances into all branches of the legal system including the Attorney General's Office and the Ministry of Justice. Furthermore, the courts must be autonomous of the government.*

*Centralized training or retraining for all legal and judicial employees.*

Training must be offered in a language that the law is written in.

Increase access to the state justice system through the use of mobilized courts, especially in rural provinces where populations find it difficult to travel to the courts in urban centers.

## Mining and Extraction Governance

*Improving Safeguards and Reporting Practices*

Though Afghanistan has declared its intention to implement the Extractive Industries Transparency Initiative (EITI), progress has been slow and sporadic. Changes are needed to improve investor confidence in the legal and structural framework of Afghanistan's mining industry.

*Each ministry involved in extraction must independently develop a framework to execute the recommendations outlined in the EITI.* Most recommendations are administrative in nature and would not require legislative approval. The implementation framework should include but not be limited to:

### A. Bureaucratic Changes

- Publish all mining contracts that are sufficiently limited in scope.
- Establish grievance procedures for the loss of property due to auxiliary contracts.
- Establish grievance procedure for loss of livelihood for non-property owners affected.
- Contextual Information regarding projects should be easily accessible and in the relevant languages.

### B. Statute Changes

- Demand that the MOF and MOM produce comprehensive periodical reports on all small projects to the Afghan National Assembly.
- Ultimate ownership of mining companies should be published.
- Ensure local stakeholder input for the establishment of the grievance mechanisms for independent mining projects.

- Require independent firms or the MRRD to make periodical social and environmental assessment reports to the National Assembly.

## **International and Diplomatic Concerns**

*Complete Large-Scale Power Projects that interlink the interests of nations in the region.*

By finishing the large-scale power projects, Afghanistan can become a hub of the energy market in the region. Its central location can be turned into an advantage once its economy is self-sufficient. Once built, the TAPI Pipeline will allow Afghanistan to utilize vast amounts of power it doesn't currently have. In addition, this pipeline connects different nations and is vital to the stability of the region. Specifically, this project will call for Pakistan to rely on Afghanistan for its rising energy needs. Similarly, completing the SA- 1000 will allow Afghanistan to tap into large amounts of power and will link many nations together.

*Promoting an Enabling Environment*

In order to enforce extraction contracts of Afghanistan's mineral resources, the nation's bureaucratic schism between the national and rural authorities must be mended. The traditional policy of expanding centralized administrative capacity through political patronage must be superseded by a more inclusive system that encompasses the customary authorities in rural areas.

*It is recommended that the Office of the President of the Islamic Republic of Afghanistan formally involve the Ministry of Rural Rehabilitation and Development (MRRD) into the county's mining industry.*

This is done in order to:

1. Have a third ministry to provide a check on the Ministry of Mines and

Petroleum as well as that of Ministry of Finance.

2. Engage the local population in mineral extraction by treating the enterprise as a rural development project.
3. Improve the security of foreign investment by promoting direct contact between rural councils and corporate management.

The MRRD will integrate into the extraction industry primarily through a current GIRoA program called the National Solidarity Program (NSP). The focus of the NSP is to facilitate and maintain locally managed development projects in rural areas. Such a program could be co-opted so mining companies are directly cooperating with local communities to develop mining projects. This will be done through the NSP's Community Development Councils (CDCs) to move administrative responsibility out of the hands of the ineffective provincial system and male dominated elder system, and into a set of inclusive and transparent committees.

## **A System for the Economy**

### ***Human Capital and Job Training***

**Short Term:** *Construct an educational strategy that focuses on mineral sector skills training and education.*

Increased access and quality of education in the mineral sector could be achieved through several approaches, including: virtual or computer-based mining sector educations, the establishment of institutions, and increased support for industry-specific exchanges abroad. This strategy should focus on easily quantifiable and monitored objectives, such as employment of local personnel and the construction of infrastructure.

**Medium and Long Term:** *Assist and advise the Afghan government in crafting Local Content Policies for the mining industry.*

These policies should prioritize the inclusion of local populations and labor within the mining industry and include local procurement of goods, expansion of local supply chains, and technical training.

### ***Financial and Business Institutions***

**Short Term:** *Assess and audit all commercial banks and close any that are violating current policies.*

Focus on a small number of strong banks and counter the previous lack of capacity to continuously monitor banks

**Mid Term:** *Implement an Economic Reconstruction Zone.*

Create a zone that implements its own rule of law, that extends to all portions of that

territory, and building up business, or foreign investment, in that environment. Consider industries that provide goods to local communities, (goods are already tariff-free because of the general poverty), and can also offer labor to the general public.

## **Unlocking Afghanistan's Mineral Wealth**

### *Lessons from Chile, Botswana, and Zimbabwe*

*Afghanistan needs financial institutions with clear fiscal rule in transparent management to build a well-functioning sovereign wealth fund.*

A fiscal rule predicts long-term inflation target and eliminates uncertainty induced by fiscal revenues linked to copper price fluctuation. The case study on Chile demonstrates that a clear fiscal rule in place helps with the building of a well-functioning sovereign wealth fund. Both fiscal rule and sovereign wealth fund define how revenues are spent or saved in the country therefore makes further impacts on economic diversification.

*Allocate resource revenues.*

Long term sustained growth and economic diversification in Chile are achieved by spending part of its income tax revenue in investing in human capital, technologies and innovation. In comparison, Botswana's majority of fund goes into social welfare services that people are depended to. As a result, Botswana has a high unemployment rate and inequality of rich and poor.