

DECEMBER 2016



# 44

AFGHANISTAN'S  
MINERAL RESERVES  
CATASTROPHE/  
QUANDARY:  
HOPES AND FEARS  
CONCERNING THE  
DEVELOPMENT OF  
MINERAL RESERVES

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## KEY POINTS

- Afghanistan is endowed with huge amount of natural resources. However, they have remained unexploited, yet. Despite enormous amount of aid, the country failed to invest and manage the sector properly, which could have turned into an engine of growth for the economy and served as pull factor for other leading sectors. To be optimistic, the sector has the potential of creating thousands of jobs and may lead to vast linkages and chain of industrial development.
- The mining industry in Afghanistan is characterised by corruption, mismanagement, illegal mining, nepotism, lack of coordination, and poor monitoring and inspection. Challenges with the governance of the wealth of the country coupled with insecurity, lack of capacity and poor infrastructure makes it difficult for the lead ministry, the ministry of mines and petroleum (MoMP) to transform the sector into a high income industry for the development of the country.
- Non-tax revenue and income from the mining industry, are a potential source of revenue to replace foreign aid. Unless timely and proper actions are taken, the revenue stream will flow into the pockets of Taliban and warlords, fight over resource control will lead to escalation of local conflicts, capacity building will not take place, government revenue from the sector will decrease to its minimum level, and Afghanistan will become a resource curse country.
- The MoMP would be able to transform the sector into a more dynamic and vibrant sector by developing long term development strategy for the ministry, well-laid processes to fight corruption and nepotism, establishment of transparent recruitment process and tendering the contracts, proper mining inspection, inclusion of civil society in the process of tendering and monitoring contract implementation,

centralizing the process of awarding the contracts, inter-ministerial and inter-departmental coordination and finally focusing both on small scale and big scale mines.



# ACRONYMS

1. AEITI Afghanistan Extractive Industries Transparency Initiative
2. AGS Afghanistan Geological Survey
3. AISA Afghanistan Investment Support Agency
4. BGS British Geological Survey
5. CNPC China National Petroleum Corporation
6. DAAD German Academic Exchange Service
7. FDI Foreign Direct Investment
8. FGD Focus Group Discussions
9. GIZ German Society for International Cooperation
10. GoIRA Government of Islamic Republic of Afghanistan
11. IWA Integrity Watch Afghanistan
12. JCC Jiangxi Copper Company
13. KII Key Informant Interview
14. MCC Metallurgical Chinese Company
15. MJAM MCC-JCL Aynak Mineral Company Ltd
16. MoF Ministry of Finance
17. MoI Ministry of Interior
18. MoMP Ministry of Mines and Petroleum
19. OGC Omran Geotechnic Co.
20. SAIL Steel Authority of India Limited
21. SIGAR Special Inspector General for Afghanistan Reconstruction
22. USAID United States Agency for International Development
23. USGS United States Geological Survey



# INTRODUCTION

Afghanistan, a war torn country, lies in the heart of Asia with an abundance and wide range of natural resources and the potential to become a crossroads of South and Central Asia. There are huge reserves of hydrocarbons, ferrous and nonferrous metals, gold, platinum, silver, copper, iron, chromite, tantalum, lithium, uranium, aluminium, quality dimension stones, emeralds, rubies, tourmaline, aquamarine, amethyst, sapphires, turquoise and lapis lazuli. These reserves give Afghanistan an advantage in acquiring international investment and may serve as an engine for the country's growth in the coming years. Proper work on estimation and surveys of mining in Afghanistan dates back to the Soviet invasion of Afghanistan, where the Soviet team of geologists conducted extensive research and only few clues from them are withheld with the Afghanistan Geological Survey (AGS), post-Taliban era with the presence of international community, the US Department of Geological Survey (USGS) revealed \$1 trillion untapped reserve of mineral resources, identified 1,400 different minerals, while the government of Afghanistan estimates up to more than three trillion dollars.

During the 2015-2016 fiscal year, only 29% of Afghanistan's total national budget was funded domestically. 70% was financed through foreign aid, leaving a 1% budget deficit. In 2010, when the USGS survey identified a \$1 trillion reserve of mineral resources, major hopes were pinned on the resource development of 1,400 identified minerals and the strategic geographical location of Afghanistan, especially in light of decreasing foreign aid.

Based on a recent report by the Special Inspector General for Afghanistan Reconstruction (SIGAR), the U.S. has spent \$488 million to develop Afghanistan's extractive sector, but the outcome of the projects has been insignificant. The Afghan government has put hope on the development of the mining sector and creating industrial linkages to boost domestic revenue, leading towards a more self-sufficient economy. By

2015, it was estimated that revenue from the extractive sector could wean Afghanistan off aid, but the total revenue collected was only \$30 million. The main question is, "What went wrong?" Afghanistan did not become the transit-route between South and Central Asia, nor was the government able to develop the mining sector to generate an alternative revenue source and establish a sustainable development trajectory for the growth of the economy.

Along with the gradual withdrawal of international troops from Afghanistan, foreign aid decreases, in 2015 Foreign Direct Investment (FDI) declined by 30%, domestic investment has dropped significantly, and foreign companies and NGO's are leaving Afghanistan. The most politically and economically relevant challenge for the government of Afghanistan is to boost domestic revenue. Hence this policy brief will open a discussion on how to increase domestic revenue. In addition, the paper provides evidence for designing a strategy to achieve the goal of having more vibrant and efficient mining management that also has its political and economic importance both for the donor countries and the government of Afghanistan. On the other hand, there have been recent reports on the illegal extraction of mines by local warlords and Taliban. Some reports say that insurgents earn more than the government of Afghanistan from the extractive sector. Mining, after narcotics, is the second largest source of revenue for insurgent groups. Unless timely and proper actions are taken by the government, the mining sector is at risk of continuing resource depletion. Nevertheless, the reduced profits from mining will lead to the escalation of terrorism in the region. Therefore, the lack of capacity, inefficiency and the non-existence of a long-term policy related to the mining sector jeopardizes Afghanistan's future peace and security.

Hence the outcome of this paper will help to develop an efficient revenue and tax collection system related to mineral resources and improve the monitoring and management of mining deposits to prevent the resource curse. This policy paper will have specific recommendations and suggestions for the

Ministry of Mines and Petroleum (MoMP) and to the government of Afghanistan, but, more generally, will be a guideline for other stakeholders as well.

## OVERVIEW OF THE MINING SECTOR

### Large [scale] Mines

Huge reserves of untapped mineral reserves lie in the mountains of Afghanistan. Work on estimation and exploration of the sector started during the Soviet occupation of Afghanistan in the early 1980s. During the Taliban era, activities in the mining sector were halted and, after 2001, with the presence of the international community, activities resumed. Beginning in 2007, major mines have been contracted. The USGS started mapping the reserves and estimated a \$1 trillion reserve while the Afghan government estimated the reserves up to \$3 trillion. After signing the Mes-Aynak copper<sup>1</sup> contract with a state-owned Chinese enterprise in 2007, another contract was signed with an Indian consortium on the Hajigak iron<sup>2</sup> mine in 2010. Chinese companies were also interested investing in the mines located in the north of Afghanistan. Signing of all these major contracts created big hopes for the government of Afghanistan. The government estimated that by 2015, the sector will have a \$1.5 billion contribution to the GDP. Unfortunately, the real figure shows way less revenue from mining sector (\$30 million). During the interviews with private sector representatives, it was found that

1 Erica Downs, "China buys into Afghanistan," Brookings (Summer-Fall 2012), <https://www.brookings.edu/wp-content/uploads/2016/06/China-Buys-into-Afghanistan-Erica-Downs.pdf>

2 Andrew Topf; "Indian consortium and Canadian firm awarded big Afghan iron ore contract," Mining (November 2011), <http://www.mining.com/indian-consortium-and-canadian-firm-awarded-big-afghan-iron-ore-contract/>



mismanagement of the sector, lack of modern technology, poor human capital, insecurity, nepotism and corruption were the main reasons for the failure to generate more revenue.<sup>3</sup> Although some private companies working currently on different mining projects believe that; weak inter-ministerial coordination and communication has resulted in contracts falling into the wrong hands, with the absence of proper site control of the mines exploration and extraction process, the reserves are mostly ruined, halted, almost with no revenue to the government and private sector.<sup>4</sup>

On the other hand, government officials in particular officials of MoMP stated the main reasons for the failure as deficiencies with mineral laws, poor inter-ministerial coordination, nepotism, corruption, and problems with the process of tendering contracts.<sup>5</sup> On the verge of foreign troops withdrawal, it was estimated that mining sector income would compensate for the loss in foreign aid, but a high ranking official in the MoMP noted that, the sector is not capable to generate significant income in the near future. The capacity is very low and the focus of the MoMP is on development of small-scale mining, as they believe large-scale mining takes much longer time and requires proper human capital, infrastructure and technology to be developed.<sup>6</sup> Mes-Aynak: Mes-Aynak is located 40 kilometres to the southwest of Kabul in Mohammad Agha District of Central Logar Province. According to an initial survey, Mes-Aynak is endowed with 11.3-17 million metric tonnes of copper, 7,700 metric tonnes of silver, 600,000 metric tonnes of cobalt and an unidentified amount of gold.

In 2007, two state-owned Chinese companies, China Metallurgical Group Corporation (MCC) and Jiangxi Copper Company (JCC) outbid competitors from Europe, Canada, the United States, Russia and Kazakhstan by offering \$1 billion more

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- 3 KII with private sector representatives working in the mining sector (private sector are inclusive of companies working currently on mining sector).
  - 4 KII with private sector representatives working in the mining sector.
  - 5 KII with an official from the directorate of cadastre at the ministry of mines and petroleum (MoMP).
  - 6 KII with an official from the directorate of policy at the ministry of mines and petroleum (MoMP).

than the others for mining rights of Mes-Aynak. MCC-JCL Aynak Minerals Company Ltd (MJAM) right after securing the right to the field established a camp and the GoIRA took steps for arranging security of the mine-site and access roads.

As per reports from MoMP, MJAM has carried out additional exploration drilling to supplement earlier data, from Russian exploration programmes. The company reported a total reserve of 454.4Mt@1.75% Cu. Two ore zones have been identified, the Middle District, which will be exploited initially as an open pit and later underground, and the West District which will be exploited as an underground section. It was planned to extract some 9.9 Mt per annum of ore from the open pit, at an overall stripping ratio of about 6:1 and yielding some 186,000 t of copper per annum. By the time the underground section commences production, output will increase to some 18.1 Mt of ore per annum and copper production will rise to about 294,000 tonnes. The life of the mine is projected at some 30 years.

As part of the MCC contract, the Chinese company is responsible for creating thousands of local jobs. According to the Embassy of Afghanistan in Washington DC, the mine is expected to generate both direct and indirect employment opportunities through linkages and development of other small industries. It was estimated that direct jobs will sum-up around 10,000 and indirectly it will generate another 20,000 jobs in associated industries and businesses.<sup>7</sup> In addition to this, investment on infrastructure for the project will lead to an extra investment of hundreds of millions of dollars. A major project is a 400-megawatt power generation plant that will serve both Kabul and the Aynak copper mine.

Signs of building security fences, workers' barracks and access roads are visible at site after signing the contract. The Afghan

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7 Steven A Zayk, "The role of China in Afghanistan's economic development & reconstruction," Scribd (March 2012), <https://www.scribd.com/document/854446515/Afghanistan-China-and-Afghanistan-Economic-Cooperation>

government was planning to provide security by some 1,500 armed Afghans with the Chinese footing the bill. MCC has also promised to construct a smelter to refine the copper ore and will build a railroad link to transport coal to the generators and copper to China. MCC will pay \$808 million in three different instalments to Afghan government. The Chinese government as part of larger connectivity has undertaken an additional commitment to build a railway that will link Central Asia to the Pakistani port city of Karachi (which also serves as Afghanistan's free port currently). China is investing huge amount on Gwadar port and there is a possibility that Chinese company will extend this railway to Gwadar, a port located in the Baluchistan province of Pakistan. According to the contract, MCC will also build roads, schools, clinics, and even mosques.

This is the first and biggest investment in Afghanistan, which benefits the country in many ways; from adding to the budget, employment generation and economic stability. But there are certain barriers as well in implementing the project. Currently the project is being halted basically because of the discovery of significant archaeological sites. The government of Afghanistan is responsible to protect and preserve the relics before the work of excavation starts. But to some extent the government of Afghanistan failed to maintain security and order in the area while the Chinese company has their fresh demands. An official from MoMP during the interview mentioned that the government is in the process of talks with the Chinese company to renegotiate the terms of the contract. The Chinese company is not ready to carry-on with the work of exploitation under the previous contract terms.<sup>8</sup> Another MoMP official stated that the non-existence of proper human capital in the ministry and problems with the contract are the major reasons for the halt of the project.<sup>9</sup> There is a need that certain development should be done in communicating with the local people and taking their favour into consideration, especially during land acquisition and

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8 KII with officials at the ministry of mines and petroleum (MoMP) – Directorate of policy

9 KII with officials at the ministry of mines and petroleum (MoMP) – Directorate of cadastre

resettlement, infrastructure building, and tailings disposal.

**Hajigak-Iron:** The Hajigak iron mine is located between Bamyan and Maidan Wardak provinces in the Hindukush mountain range. Initial research on the mine-site was conducted back in the 1960s by different geologists, which is found to be 16 kilometres in length and 550 meters in depth. The reserve has been estimated to endow 1.8 billion tonnes ore with 62% iron, which is able to provide raw material for six million steel plants for four decades. According to the estimation done by the government of Afghanistan the Hajigak mine will inject \$300 million annually and generate more than 40,000 job opportunities.

The GoIRA has divided the mine into four parts. A Canadian Mining Company is working on (A) block located in the Behsud district of Maidan Wardak province, while an Indian company is working on the three remaining blocks (B, C, D) situated in the Kalu area, Shiber district of Bamyan province.

In 2011 a seven-member consortium of Indian companies led by the Steel Authority of India Limited (SAIL) has requested the rights of B, C and D blocks of Hajigak iron ore mine in Afghanistan. Hajigak mine is estimated to contain the world's second largest reserves of the iron ore. The consortium planned to develop the mine; build a seven-million tonne steel plant and an 800 megawatt power plant.

The fear of increased security risks following the withdrawal of the US led NATO forces have forced the Indian consortium of six companies to consider slashing the proposed \$10 billion investments for mining iron ore in Afghanistan. The Steel Authority of India may bring down the initial outlay to USD 1.5 billion. But the Afghan Ministry of Mines and Petroleum is trying hard to assure the consortium to stick to the original proposal.

The slashed plan of the consortium envisages restricting the project to only setting up a steel mill in Afghanistan to produce 1.5 million metric tonnes of steel annually. This is just one-fourth of the original plan. It will meet only the domestic demand of Afghanistan. The original plan envisaged an 800-megawatt

power plant, power transmission lines and a 900-kilometer rail line from Hajigak to Zahedan, Iran, to carry the ore to the Iranian port of Chabahar<sup>10</sup> on the Persian Gulf, about 690 kilometres west. But, in a recent interview with petroleum department of MoMP officials, it was found that no contract has been signed so far with the Indian consortium for exploitation of Hajigak Iron ore.<sup>11</sup>

Northern Hydrocarbons: While significantly smaller than the Aynak acquisition, China's second biggest investment involves the Amu Darya river basin oil reserves in northern Afghanistan. The China National Petroleum Corporation (CNPC), a state-owned enterprise won the contract for drilling three oil fields 'Kashkari, Zamarudsay, Bazarkhami' for a period of 25 years in 2011. However, the Afghan government is in search of larger oil fields near the Amu Darya basin in the coming years. According to Reuter, the previous Afghan Minister of Mines and Petroleum (Wahidullah Shahrani) mentioned that, "the Afghan government was looking to tender drilling rights for a 1.8-billion-barrel oil field near Mazar-e Sharif in Balkh province". CNPC is obliged to pay 15% royalty on oil and a 2% corporate tax on revenues to the Afghan government. The estimated revenue for the Afghan government is \$7 billion with annual payment of \$304.35 million from the project over the course of the 25-years of the contract. CNPC's contract had also included plans to build a refinery in the northern province of Faryab and Sar-e-Pul. But currently refining is carried out in Turkmenistan. Shahrani said: "the development of the Amu Darya basin had provided Afghans with 2,100 jobs in the Sar-e-Pul province".

As the prospects are indicating this is a small project for the CNPC. Hence the CNPC is after exploring more potential areas for more oil and natural gas in the Amu Darya basin. It is

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10 Ratnam, Gopal, "Afghanistan mineral riches won't go anywhere without rail" Bloomberg (February 2014), <http://www.bloomberg.com/news/articles/2014-02-27/afghanistan-mineral-riches-won-t-go-anywhere-without-rail>

11 KII with officials at ministry of mines and petroleum (MoMP), directorate of policy

quite evident from the figures showing that China is after an alternative source of energy.

### **Small Scale Mines**

Since 2013 the MoMP focused on tendering small scale mines rather than large ones. Officials at the ministry of mines during interviews mentioned that, developing large scale mines need proper technology, human capital endowment, capacity building and better security conditions. Most of the investments in the large scale mines need foreign direct investment (FDI), which requires proper infrastructure in place, availability of electricity, better security, human capital and advanced technology. On the other hand, the private sector although appreciates the ministry's intentions, at the same time criticizes the ministry for its mismanagement, corruption and nepotism, which hinders the sector growth and development.

The private sector rather urges the ministry to focus on both small and large scale mines parallel to each other. The government is in need of boosting domestic revenue collection, to the contrary, the mining sector is the only sector capable of generating huge funds contributing to country's GDP. The private sector also emphasizes that Afghanistan has to have quality human capital in place, the government needs to fight corruption and nepotism for a better mining revenue collection and transparent contract tendering process. In confirmation to this, Jawid Noorani in a report published by IWA identifies reasons for contract failure in the five big mines to be the same. Developing small mines will add a lot to employment generation, local community development and capacity building, at the same time, tendering large scale mines to foreign companies with proper monitoring of the site will lead to technological spill-over, huge increase in domestic income, infrastructure development, capacity building and generating employment with numbers of backward and forward linkages in the local context.



# THE NEED FOR URGENT REFORMS IN THE MINING SECTOR

Afghanistan is taking the dangerous path toward becoming an example of another resource curse country. The concept of resource curse refers to the common pattern whereby countries with large endowments of natural resources, in particular those that develop such resources in the absence of strong institutions for management and accountability, suffer from slower economic growth, worse governance, sometimes problematic politics, and higher conflict risks than would otherwise be the case.<sup>12</sup> Huge corruption, poor performance of the sector and local conflicts are indicators of the same. During an interview with an official at the MoMP, it was found that less income and under-development of the sector is due to large presence of warlords and insurgent groups controlling the sector. The situation not only made it difficult for the government to increase loyalty, tax revenue, and local infrastructure development but rather increased local conflicts and functions as a sustainable source of funds for the insurgent groups. Recently Raha press reported that Taliban and other insurgent groups earn more than the Afghan government from mining exploitation.

Afghanistan also experiences huge unemployment in the mining sector. During an FGD<sup>13</sup> with Polytechnic university students, it was found that Polytechnic University graduates after graduation mostly look for employment opportunities in other sectors, mentioning that chances of finding employment with mining companies are less than 5%.

Timely and proper measures to develop the strategic plan for the development of mines, proper control of the sector, and initiating a transparent channel for revenue collection will

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12 Resource curse definition has been taken from Investopedia <http://www.investopedia.com/terms/r/resource-curse.asp>

13 FGD with Polytechnic University students.

add significantly to Afghanistan's GDP, increase employment opportunities, prevent money from flowing to the pockets of insurgent groups, decrease corruption at the MoMP and mining-sites, and huge capacity building will take place at the ministerial level. Obviously, with better infrastructure, trained and experienced employees, better security conditions, transparent process of tendering the contracts and proper control of the sector, Afghanistan will become one of the top most attractive places to foreign investment.



## CHALLENGES AT THE MINING SECTOR

*The mining sector despite raising hopes and having huge potential for economic development faces many challenges. As a result of desk study, conducting key informant interviews (KII) with the private and public sector and reviewing evidence and statistics, the following major challenges can be pointed-out that has hindered mining sector development.*

- Weak Human and Technological Capacity: Officials at the ministry confirm lack of human capacity both for the ministry and private sector,<sup>14</sup> on the contrary, private sector rather points to huge corruption as the main driver of failure.<sup>15</sup> The private sector complains that laws are not clear, and during tendering the contract ministry cannot screen good companies from bad companies, fall of contracts in the wrong hands results in spoiling the mine-site and create other problems at a later stage. They also complained that professionals with good experience and educational background cannot secure positions at the ministry due to corruption and nepotism.

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14 KII with officials at the ministry of mines and petroleum (MoMP) – Directorate of cadastre

15 KII with private sector representatives working in the mining sector – OGC



- Lack of Transparency in the Tendering Process: Two major problems have been identified with regards to transparency while tendering a contract. First, huge influence of bidders during tendering process. Jawid Noorani has provided evidence that some of the major mines in Afghanistan have been contracted due to the influence of bidders in the bidding process and also those companies won the contract were somehow related to high ranking officials at the ministry. On the other hand, since the law is not clear, there is no proper monitoring and control, everyone, even an oil logistic company applies for bidding and most of the time out of irresponsibility they offer higher bids and win the contract. But, later on, it ends up with a disaster. They do not have the capacity, the machinery, experts and not even the will to develop the site.<sup>16</sup>

- Illegal Mining: Warlords and insurgent groups are in control of most of the mine-sites. Clashes, conflicts, and inappropriate development of the sector have been reported as a result of illegal mining. Mines have been a sustainable source of funding for insurgent groups as well. During a KII with the private sector, it was pointed out that mining no longer can be a sustainable source of revenue for the government, as warlords don't pay taxes, royalties, and mostly start exploitation during the exploration phase, which damages the mine and leads to loss of revenue. The same has been confirmed by the case study done by Jawid Noorani on Hewad Brothers controlling Kuhi Safi Chromite.

- Security: Security is another major challenge that prevents foreign companies from investment, limits MoMP control of the mining-site and private sector access to the field for further studies and exploitations. Some officials pointed out that works on Mes Aynak have been halted due to the large security deficit.

- Infrastructure: Lack of access to power, roads, railways, refineries are other major reasons for under-development and

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16 KII with private sector representatives working in the mining sector – OGC & Afghanite

less attractiveness of the sector for international and private companies' investment.

- Inter-Ministerial Coordination: Officials at the ministry raised the issue that a transparent process of revenue collection, monitoring the mine-sites and implementation of terms of the contract need better inter-ministerial coordination. Enforcing contract clauses, mine inspection and providing security, needs timely help and support of the MoI. Transparent revenue collection requires sound coordination of efforts between the MoF and MoMP. At the same time, technological advancement, effective communication, and proper coordination between the ministry and its provincial directorates are of essential importance for the development of the sector.



## CONCLUSION

According to the MoMP, Afghanistan is the home to more than three trillion dollar worth mineral reserves. Afghanistan's economy is hugely dependent on foreign aid without proper institutions and foundations in place. On the verge of drop in foreign aid, the mining industry can inject millions of dollars into the domestic revenue stream. Unemployment soars in Afghanistan, poor people remain vulnerable to all kinds of shocks, endemic poverty forces the poor to join terrorist groups, the small amount of domestic revenue increases Afghanistan's dependency on foreign aid and impacts negatively on the political and economic stability of the country. Given the challenges existing ahead of the government, naming: corruption, insecurity, lack of capacity, poor human capital, lack of funds, no roads and infrastructure in place, and decreasing level of foreign investment, the government with proper measures and a will to develop the sector can give a big push. Most of the problems and challenges existing can be catered with proper policies and strict monitoring of the mining sites.



# RECOMMENDATIONS

Proper management and development of the mining sector remains of vital importance for the government. Poor management, illegal mining, huge corruption at the MoMP is reinforcing the process of Afghanistan becoming a resource curse country. Unless proper measures are taken, there will be no value addition to local infrastructure development and central government revenue collection. It needs concrete efforts by the MoMP, other relevant ministries, and international partners to address mineral resource management.

## MoMP and other Relevant Ministries

- Centralize the process of tendering contracts for all kinds of mine until provincial directorates are capable of awarding and monitoring the process of contract implementation efficiently.
- Inclusion of civil society members in the process of tendering contracts and monitoring contract implementation.
- Proper coordination between MoF and MoMP, both at the ministerial and provincial level for revenue collection and with the Mol for monitoring and inspection of mine sites.
- Accredit mining companies that can apply for the bid based on their experience, capacity, machinery and human and financial capacity by a non-governmental, neutral agency with the presence of civil society and international organisations.
- Tender both small and big scale mines. Work on a transparent recruitment process for the MoMP staff. This will allow fresh talents to enter the ministry.

## International Organisations Supporting the MoMP

- Providing funds to the ministry conditional on certain criteria inclusive but not limited to fighting corruption, transparent process for tendering the contracts, proper and timely inspection of mine-sites and transparent recruitment process.
- Help the ministry with capacity building and consultation on big scale mines contracts. Capacity building programmes should be conducted at provincial directorate level as well.



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