



# **ARTISANAL and SMALL SCALE MINING FORMALIZATION STRATEGY**

*Note: The Ministry of Mines and Petroleum appreciates the efforts by the Adam Smith team who drafted the first version of this strategy in 2011. However, the strategy has been updated, it is still open to further consultation.*

1<sup>st</sup> December 2018

---

Ministry of Mines and Petroleum  
Islamic Republic of Afghanistan

## Table of Contents

Acronyms .....	1
BACKGROUND .....	2
ASM Baseline Study.....	3
TOOL #1: Baseline Study on ASM.....	6
TOOL #2: Define Roles and Responsibilities of Relevant Government Ministries and Structures .....	13
TOOL #3: Provide Commercial Restructuring Options to Current ASM Business Operations.....	15
TOOL #4: Incentivize Unlicensed ASM to Apply for Mining Rights .....	19
TOOL #5: Develop procedures for ASM licensing (artisanal and very small scale).....	21
TOOL #6: Regulatory Review and Policy Development.....	22
TOOL #7: Establish an Effective Monitoring System for ASM.....	23
TOOL #8: Develop a Communications/Outreach Strategy .....	24
TOOL #9: Provision of Technical and Financial Resources to MoMP .....	26
TOOL #10: Suggest MOMP Practices and Mechanisms to Facilitate Licensing Process for ASM and Capturing of Revenue from ASM Products .....	27
TOOL #12: Develop Government Sponsored Funding and Mine Development Technical Support Options for ASM.....	30
Summary of recommendations outlined through the 12 ASM Formalization Strategy Tools .....	31
Annex 1 .....	32

## Acronyms

ACCI	Afghanistan Chamber of Commerce and Industry
AGS	Afghanistan Geological Survey
ANSA	Afghan National Standards Authority
ASM	Artisanal and Small-scale Mining
EIDF	Extractive Industries Development Framework
EITI	Extractive Industries Transparency Initiative
ESMP	Environmental and Social Management Plan
ESIA	Environmental and Social Impact Assessment
FPIC	Free Prior and Informed Consent
ICMM	International Council on Mining and Metals
IDLG	Independent Directorate of Local Governance
ISO	International Organisation for Standardization
MoCI	Ministry of Commerce and Industries
MoEW	Ministry of Energy and Water
MoF	Ministry of Finance
MoHIA	Ministry of Hajj and Religious Affairs
MoIA	Ministry of Interior Affairs
MoIC	Ministry of Information and Culture
MoLSAMD	Ministry of Labour, Social Affairs, Martyrs and the Disabled
the Ministry of	
MoMP	Ministry of Mines and Petroleum
MoPW	Ministry of Public Works
MRRD	Ministry of Rural Rehabilitation and Development
NCE	Northern Coal Enterprise
NEPA	National Environmental Protection Agency
NMP	National Minerals Policy
NPP	Nation Priority Programme – Extractive Industry
OHSAS	Occupational Health and Safety Assessment Series
PCD	Provincial Coordination Directorate
QEIT	Qualified Extractive Industries Taxpayers

## BACKGROUND

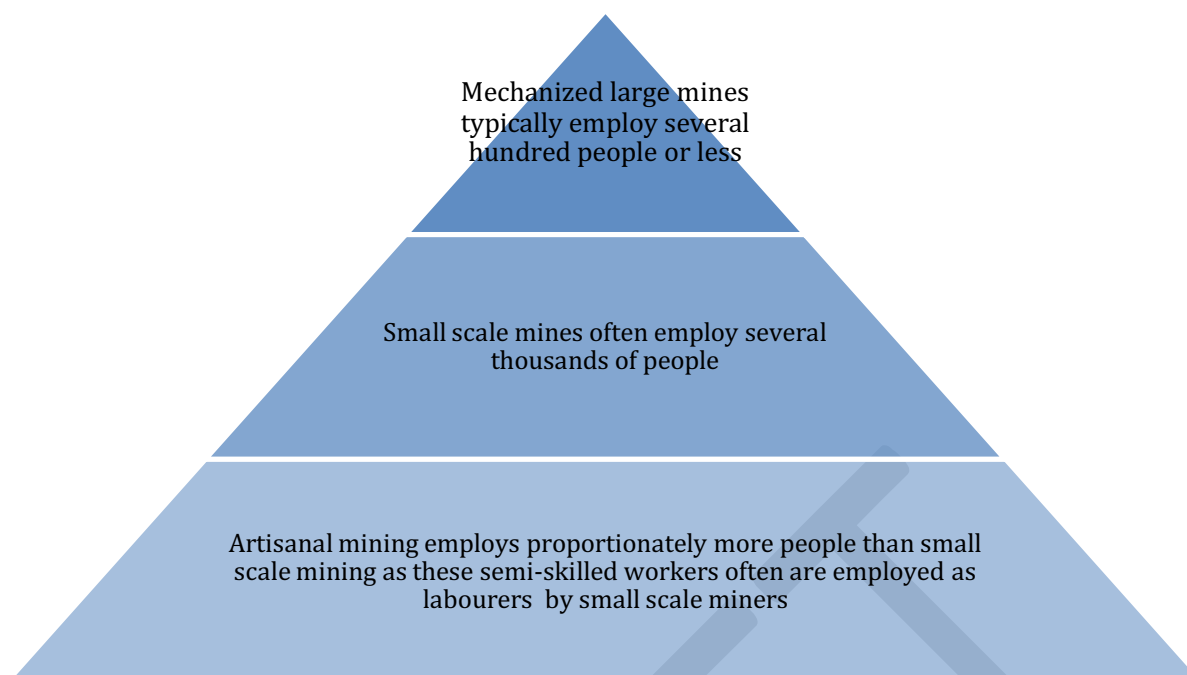
Ministry of Mines and Petroleum (MoMP) is the government agency responsible for policy development, regulating and promoting the mining and hydrocarbon sectors in Afghanistan. Since 2003, MoMP has been engaged in institutional and legislative reform of its mining and hydrocarbon administration regime. The intention of the reforms is primarily to develop the extensive and varied mineral resource wealth with the potential resource value in the trillions of dollars.<sup>1</sup> The Government of the Islamic Republic of Afghanistan (GIROA) has expressed its aspirations for the development of its mineral resources through Afghanistan National Peace and Development Framework (2017-21), Extractive Sector Roadmap and the 7 years implementation plan of the roadmap (Extractive Sector NPP). It is believed that the key to long term economic sustainability in Afghanistan lies in the development of the country's mineral sector. There is widespread consensus that the development of the mineral resource sector in Afghanistan is the most likely source of large-scale wealth creation that can be exploited and used to reconstruct the country after decades of under-development.

Considering the economic contribution of the artisanal small scale mining, GIROA is seeking to formalize the ASM activities in Afghanistan. The lack of foreign capital into Afghanistan's mineral sector may be attributed to a range of factors, including government policies, security problems and general lack of accessibility. This has meant that some types of mineral resources that lend themselves to smaller scale methodology have been extracted locally. Historically and traditionally in Afghanistan, there has been a small scale, community-based approach to the extraction of a range of decorative, semi and precious stones, as well industrial and construction materials - the kinds of minerals that can be exploited easily without access to significant capital and that have required little infrastructure or access to sophisticated mining or processing technologies.

Artisanal and small scale mining (ASM) is recognized worldwide as a response to rural poverty – to a lack of local economic development, and especially where residents lack education or trade skills that would increase employment possibilities or encourage urban migration. ASM usually employs many more people than large-scale mining, given that employment in industrial level mines is often restricted to a relatively low number of skilled and professional types of personnel (recognizing that in certain countries with deep-level mining that does not lend itself to mechanization such as are found in South Africa, for example, large numbers of semi-skilled workers are employed).

---

<sup>1</sup> This figure is somewhat controversial and still remains to be validated (through focused and extensive exploration activities)



### 1. **ASM Baseline Study**

There has been little research into the ASM sector in Afghanistan. There is no baseline study available that has determined the actual number of ASM active in various parts of the country, what minerals they are mining and the extraction and processing methods being used. Hence, much of the discussion regarding the problems and solutions around the ASM sector has been driven by third-party information based on a few known case studies and suppositions about what is happening on the ground. A baseline study should be done as a pilot project in one province for all kind of informal mining activities in that province.

For example, it is known that in Badakhshan province, the extraction of lapis lazuli is largely undertaken by unlicensed miners, although there is a “registry” process that occurs through the provincial MoMP office where dealers take the product to be weighed and valued prior to shipment to Kabul and then on to export. A royalty rate is charged by the provincial MoMP at this point in the export/transportation process and paid by the dealer on the product. Many small operations engaged in mining construction materials throughout the country such as sand and gravel are also unlicensed. These operations are required to stop at government mandated “checkpoints” where a fee is charged on the unlicensed product. Otherwise, these companies are operating outside the MoMP licensing system.

By contrast, very little is known about the gemstone sector except that the mining of these stones often occurs in areas such as Nuristan and Jalalabad where security issues prohibit involvement by the MoMP (in terms of regulating, monitoring activity, etc.), and Badakhshan.

In Afghanistan, ASM can be divided into several major groups:

1. Licensed small scale mines that are engaged formally in mining decorative stones and industrial/construction materials;

2. Unlicensed artisanal and small scale mines that are engaged on a family or individual basis mostly in mining construction materials, precious and semi-precious stones and work for licensed miners or on their own; and

The purpose of this document is to focus on the latter segment of the ASM population active in Afghanistan – the informal miners who are outside the formal system of the mining regulatory framework.

### **1. Who Becomes an Artisanal or Small Scale Miner and Why?**

Since little is known about the ASM sector in Afghanistan, policy makers attempting to make decisions about the direction of the sector need to rely on research undertaken on ASM operating in other parts of the developing world. While there is a huge appetite in Afghanistan at this point in time for specific and concrete recommendations on how to formalize the sector, unless there is a deeper and more informed understanding of the motivations, aspirations and challenges of the artisanal and small scale miner, these recommendations will be built on a shallow base. By understanding the nature and drivers of ASM activity in a particular area (and these can vary across the country), the MoMP will be better placed to formulate strategies and tools to deal with the different types of ASM.

#### **Traditional**

Most often seen in areas where gold and other precious metals have been known to occur for many generations, this mining is considered a key component of traditional livelihoods. Mining skills and/or rights may be passed down through families, and the activity may include the majority of family members. In these areas, mining often plays the same role for a community that agriculture does in other regions; as such, its role as a source of income requires recognition.

#### **Seasonal**

ASM is often used as a secondary means of livelihood support, tied into the agricultural seasons. In these situations, miners often balance the risk in mineral and agricultural sectors by conducting both activities on a seasonal basis. In some cases, this requires significant migration away from agricultural lands to seek mineral wealth and is conducted by individual members of a family group; however, it also occurs in a limited geographical area where family members work together to balance the work requirements of agriculture and mining.

#### **Permanent Co-habitation**

In areas with long-term large- and medium-scale mining taking place, ASM communities can develop a form of permanence, often working in abandoned areas, in tailings dams or downstream of the larger operations. The ASM miners in this category will often come from nearby communities or take up permanent residence there and a long-term relationship between ASM and large-scale miners can be achieved. This type of mining can pose huge risk to environment, and should be restricted.

#### **Shock**

Drought, economic collapse, commodity price fluctuations, conflict, retrenchment from mining parastatals, unexpected commercial mine closure and other forms of shock can

drive a significant number of people into ASM. The shock may be economic or geographic in nature, compelling people into ASM out of a need to derive a new income. Shock ASM is often seen in areas where major structural changes occur to the formal mining industry, resulting in significant unemployment.

### Influx

When new mineral areas are discovered and the mineral type lends itself to small-scale excavation, transport and sale, opportunistic in-migration or an influx of ASM miners is seen. In many cases the influx occurs quickly; many thousands of individual miners can appear in a matter of months. In some areas the miners end up effectively working in groups for mineral buyers, while in other places it is a largely individual pursuit. In most influx cases, typically male miners first arrive in the region and establish squatter camps near the exposed mine workings. It is not uncommon for influx ASM to merge into a form of permanent co-habitation ASM over time. Influx and shock types involve child labour and need to be restricted and banned.

Each one of these categories of ASM can be legal (formal) or non-legal (informal) and overlapping in type. It is not uncommon to find several types of ASM in a given area at any given time. In addition to the various types of ASM, there are also phases within an ASM activity: the initial rush phase where many miners come into an area at once based on a “find”; a steady phase of mineral extraction; and then decline of the activity.

Since there is no baseline study undertaken on ASM in Afghanistan, it is difficult to ascertain the patterns/categories of ASM activities as per the above breakdown of categories of miners. If more information were available on ASM mining patterns related to mining specific commodities, it would be easier to formulate tailored approaches related to how the formalization process would be implemented. For example, if miners are located for a long time in one place, the strategy around capturing these operations into a provincial ministry registry and providing extension services (support) would be different than the strategy targeted at more impermanent miners (“*Influx*” or “*Shock*” category”) who migrate to a specific area following announcements of a particular “find”, i.e. a category of ASM found more probably in gemstone mining.<sup>2</sup> It would seem that most ASM involved in mining semi-precious stones and construction materials in Afghanistan stay in the same area for an extended period of time. Much of this mining, however, is seasonal in nature, as ASM often supplements farming income. These miners appear to be permanent members of the community and therefore fall under the “*Traditional*” and “*Seasonal*” type of ASM miner, or the “*Permanent Co-Habitation*” category where mining occurs next to established medium scale operations. Strategies related to the outreach program that will need to be implemented to inform miners about the formalization strategy will need to take into account the seasonal nature of the mining activities.

A central question that policy makers in Afghanistan should pose when determining what types of policies, procedures and legislation should be put in place to rationalize the ASM sector is whether ASM should be encouraged to stay in one place and learn how to mine one deposit in a more economically and responsible way.

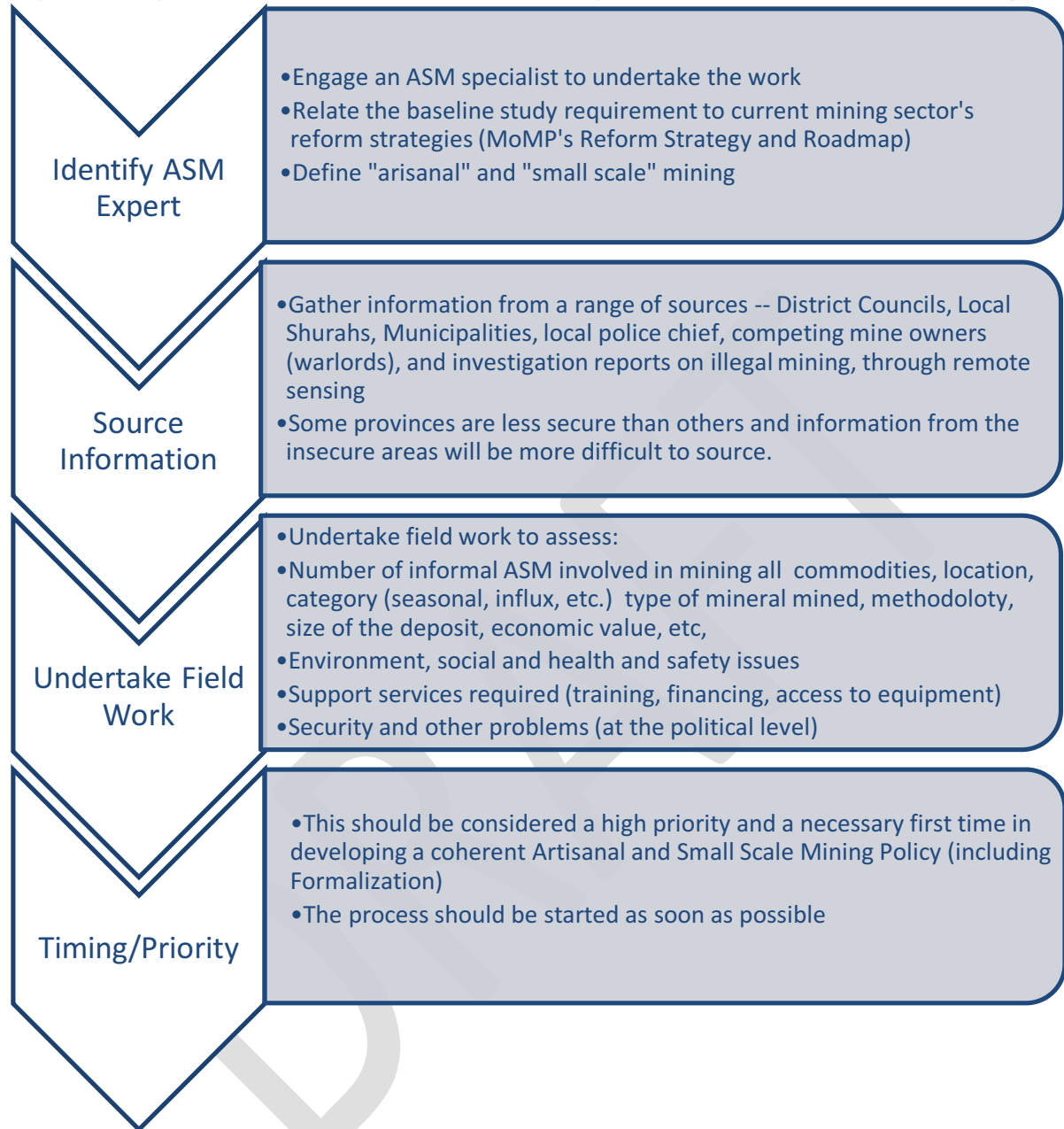
---

<sup>2</sup> There are a number of gemmology specialists who have been engaged in the gemstone industry in Afghanistan for many years, and information on this sector could inform specific policies on gemstone mining.

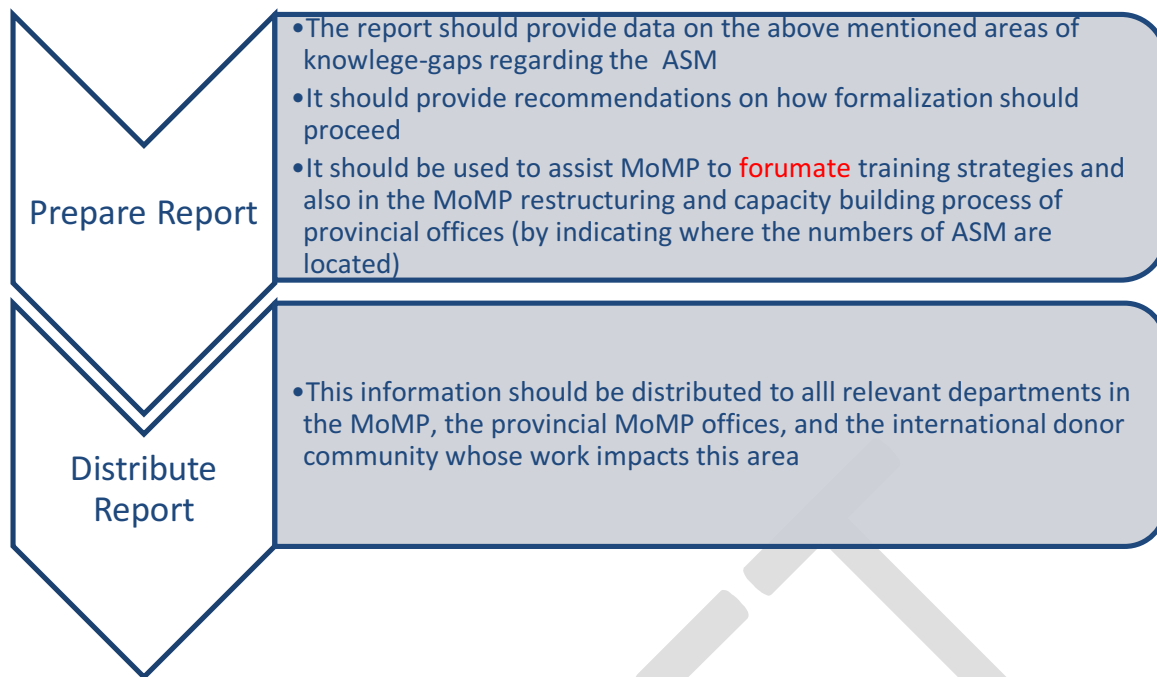
## ASM Formalization Strategy

### TOOL #1: Baseline Study on ASM

Objective: To provide an informed basis for the development of an ASM Formalization strategy







## 2. Why formalize artisanal and unlicensed small scale miners?

Basically, informal mining is illegal mining, besides that it does not generate revenue to the government of Afghanistan. With 40% of the world's population living in poverty, global numbers of artisanal and small scale miners are on the rise. Compared to incomes generated by other forms of rural economic activity such as subsistence or small scale farming, ASM produces 3 to 5 times the income (Siegel and Veiga, 2009). However, the sector is dominated by large numbers of people engaged in informal activity, bringing with it serious social and environmental problems. Therefore, the sector has undergone scrutiny and criticism by international civil society groups, mostly due to issues such as child labour, gender-related abuses, worker exploitation and lack of environmental protection or rehabilitation.

Recently, the focus of the international debate on ASM has shifted from criticism and national government attempts to eradicate the activity to the recognition that ASM can be both a stepping stone to greater rural industrialisation as well as a viable answer to poverty.

The key issue is the formalization of informal ASM through rights recognition. Researchers and scholars who have been involved in and studied extensively the ASM sector worldwide, have agreed that "legal and transferable titles are essential to organize and transform this informal industry...and must be understood as a prerequisite to change behaviour and transform...underprivileged people into citizens" (Veiga and Beihoff).

However necessary formalization of the ASM sector might be, there are different opinions as to what "formalization" when applied to this sector means. In some countries where property laws are defined in such a way as to leave the issue of "rights" for miners in some state of uncertainty, the answer is to develop a legislative framework for ASM. The second meaning of formalization refers to the process of organizing, registering and

tracking mining activity. Formalization then becomes a kind of government intervention strategy where contact is made with miners who have remained “hidden” for various reasons to undertake their mining activities outside the country’s economic mainstream. For Afghanistan, the latter type of formalization is more applicable in the shorter term.

Formalization confers formal rights on miners – the right to land, the right to access minerals, the right to mine. This formal title gives miners an asset with which to gain access to capital against which micro-loans can be financed. With legal title, miners are more likely to capitalize operational improvements, provide a legal basis for support from the donor community, encourage joint ventures with large scale mining projects, enable assistance from government and most importantly, grow into medium sized mining ventures.

For the local, provincial and national governments in Afghanistan, there are many drivers behind the decision to formalize ASM. Firstly, since mineral resources are owned by the people of the country, revenue deriving from their exploitation should be received by governments who are acting on their behalf. There is significant loss of revenue currently from the informal mining sector, both in unrealized tax revenue from operations that are selling their product domestically for more or less fair value, but are not declaring income; and from the mining and exporting of semi and precious stones.

Communities are losing the economic benefits of the extraction of the mineral resources that are located close to where they live. With much of the mining revenue captured by illegal means, the communities are losing access to tax and royalty revenue. This additional revenue into extremely underdeveloped areas that lack roads, social infrastructure and private sector investment would go a long way in addressing development needs of rural Afghanistan.

Also, in keeping with the GIROA’s objective to attract foreign investment in large-scale mining, investors will be more attracted to a jurisdiction where small-scale mining is already well regulated. Negative social and environmental problems as well as inter-community conflicts would be reduced. Government is hoping to reduce cross-border smuggling of ASM products (particularly gemstones and semi-precious stones) as a result of its formalization strategy. If this sector remains largely informal, it risks being ‘captured’ by warlords or cartels from neighbouring countries, allowing most of the output to slip across the border to Pakistan and other neighbouring countries, along with the associated profits and potential foreign-exchange earnings. If, on the other hand, informal miners can sell their output in regular local markets at a fair price (that is higher or equal to what they are able to get by illicit trading), the profits will stay within the county. This compares to foreign owned mining companies that often repatriate profits to their countries of origin.

In fact, fiscal benefits could be greater with ASM production than with large-scale mining, especially over the short to medium term.

Additionally, there are poverty drivers in play that are influencing government’s impetus to formalize. If the rationalization of ASM leads to greater rural industrialization (which it should if undertaken properly) through the growth of artisanal mines that are supported (through government extension services and funding programs) to grow into smaller mines which then can become medium sized ones, economic growth will be the

result. It has also been noted that investors are looking for opportunities to invest in some ASM projects, particularly gemstones. Without a clear idea of where the current mine operators are mining, it is impossible for potential investors to identify them and offer investment support.

Lastly, the problematic security situation in many part of rural Afghanistan is exacerbated by the domination of criminal or political elements that may be benefitting financially from mineral products to support their activities. Formalization of the sector and especially introduction of a modest certification scheme that would identify the origin of ASM products would go some way to reducing illegal activity. This would result in a safer work environment for the miners themselves, and remove the threats against them if they wish to register.

In this discussion of formalizing ASM, it is useful to note that ASM operating within the developing world has its own “governance” process internally – groups formed by associations, cooperatives, families, clans or tribes can exist as a mini-government system in remote areas where access to mineralized areas is determined and allocated, conflict over land is negotiated, equipment is supplied or removed, and “taxes” are paid to the most powerful members of the community. This is especially true when the ASM type of mining is deemed traditional or permanent co-habitation – the categories of ASM involvement outlined earlier in this document where there is a semi-permanent quality to the ASM environment.

For the Ministry of Mines and Petroleum officials who are charged with regulating the sector and injecting a formal system into this type of entrenched informal governance system, the challenges are real. If the Mines Ministry is able to achieve better control over the mining through licensing, it will be able to discharge its duties better (including providing assistance to miners) and with less interference from individuals who hold personal power and who are mining for personal gain.

The introduction of a government-mandated “formalization” regime for ASM in Afghanistan should be embarked upon by MoMP officials who have an understanding of the various aspects of the ASM sector that present challenges to government objectives around formalization.

**Table 1: Process and benefits of Formalization**



### 3. Challenges to Formalization

While formalization of the ASM sector is a desirable outcome for Afghanistan, there are a number of challenges that characterize the circumstances and environment of the country that must be considered when embarking on this objective. Even in the most stable of regimes, formalization is not always easily accepted by either the miners or the State. For the government, formalization will mean an increased role in exerting authority and rule of law in local areas where ASM predominates. Facilitating formalization will be costly, especially in a jurisdiction such as Afghanistan where there is so little infrastructure in the provincial directorates of the Ministries of Mines and Petroleum. For miners, legalization represents an enormous departure from traditional ways of mining outside the formal system for decades and without either services or requirements from the State. Hence, it is critical for government to understand that formalization is a process not a product. Generally, and common across many jurisdictions that have tried to formalize ASM, it is recognized that the best construed formalization strategy will not work if the following three conditions are not met:

1. **Government Lacks Will, Resources or Capacity:** In Afghanistan, the shift from owner/operator to regulator/administrator is normally expressed through the government's relationship to large scale mining. However, a similar shift on a different scale is required to enable government to move into a position of regulator, monitor and enforcer of ASM – a sector that it has viewed with mixed feelings. On the one hand, communities that are suffering extreme poverty and

lack of government services such as schools, hospitals and transportation infrastructure, may be allowed to mine whatever they are able to produce locally (i.e. lapis lazuli in Badakhshan) without interference from government.<sup>3</sup> This mind-set will need to change for government, communities and the miners if formalization is to prove successful in this province and others like it.

2. Unlicensed Miners Perceive Formalization as a Threat: If the process of formalization is not undertaken effectively, artisanal and small scale miners who have been successfully mining outside the mainstream legislative framework may recede even further into the hidden recesses of inaccessible parts of the country. ASM is notoriously difficult to locate, especially when road transportation networks do not cover areas where the mining is taking place. Therefore, the miners to a large extent must want to be convinced that entering the formal system is going to benefit them in a way that will increase their economic returns and contribute to a rise in their standard of living (includes fear of armed conflict and confiscation of property, better working conditions, more security of employment, better access to services, etc.).
3. Miners Cannot Afford Costs or Meet Conditions of Formalization: If the cost of licensing and/or tax payments and any other costs associated with formalization are too high, informal miners will resist entering the mainstream system. The policies governing formalization must take into account the cost/benefit structure of the ASM sector in question – i.e. it will be different for various commodities (gemstones, decorative stones, industrial minerals, etc.). Agreement between MoMP and MoF is required to reduce the tax amount for those who formalize their firms.

In addition to these three core requirements for formalization to succeed, there are other challenges specific to the Afghanistan context that must be addressed. These include:

- Confusing mandates of different government structures in terms of allowing mining to occur and collecting taxes and royalties from mining activities
- Insufficiently developed legal and regulatory framework that lacks a clear and streamlined process for ASM licensing (Current complex and lengthy administrative process (mine application and approval process))
- Lack of clear definition of “artisanal” and “small scale”
- Lack of public awareness of the legal framework – on the part of the ASM, communities and some government officials
- Lack of employment opportunities in rural areas where there is little economic development or alternative livelihoods available to replace artisanal mining
- Security problems that impede the MoMP’s efforts to gain access to sites to check whether mines are licensed – some mines are dominated by warlords, etc.
- Insufficient MoMP staff, equipment, vehicles for MoMP to undertake monitoring

---

<sup>3</sup> In areas where there are no economic alternatives to informal ASM, government may allow the population to mine with minimal regulation (in some cases, the mines are registered but do not possess formal licences)

- Road infrastructure (lack of) sometimes impedes accessibility to mines
- Problem with law enforcement agencies' ability to implement their mandate with regard to controlling criminal activity related to illegal mining
- Inability of government to provide necessary essential services to ASM such as electricity, access to explosives, and other types of basic assistance
- Illegal construction of houses on mineral rich land that effectively stakes a proprietary claim over the land
- Lack of modern technology that can be useful in detecting and investigating illegal mining

DRAFT

## ASM Formalization Strategy

### TOOL #2: Define Roles and Responsibilities of Relevant Government Ministries and Structures

**Objective: To develop a cooperative, mutually beneficial approach to the formalization of the ASM sector**



#### 4. Objectives Related to Formalization of the ASM in Afghanistan

The Ministry of Mines and Petroleum has developed objectives related to formalization of the artisanal and small scale mining sector in Afghanistan. These have been expressed in the Reform Strategy that have been formally adopted by the GIROA and that will guide the direction of the Ministry for the next seven years period.

The Reform Strategy of MoMP states the following with regard to the ASM sector in Afghanistan:

Another Ministry mandate is to collect non-tax revenue from extractives activities. It is intended that the Ministry will collect this revenue in a transparent and effective manner through improved infrastructure and reporting/accountability processes and formalization of the ASM sector.

In order to further catalyze the sector, the Ministry will formalize the ASM sector and establish a conducive business and investment climate that will include promoting exports, establishing more transportation corridors and targeting investment.

Therefore, the following objectives should be considered to guide the process of formalization of the ASM sector Afghanistan:

1. To bring the artisanal and small scale miners currently operating mines without licenses into the formal licensing system. (For example, to encourage the currently unlicensed artisanal and small scale miners to go voluntarily to the nearest provincial Ministry of Mines and Petroleum office and apply for a license that covers their current area of mining operations).
2. To identify ways to communicate with the currently unregulated artisanal and small scale miners. (For example, through the development of a communications/outreach strategy to inform artisanal and small scale miners about the process of formalization. Such a strategy would include the benefits of being licensed and would focus on access to training, finances, equipment that would accompany the holding of a formal mineral rights title or permit to mine).
3. To provide the necessary legal and institutional framework to facilitate the formalization of ASM process. (For example, ensuring that the provincial Ministry of Mines and Petroleum' offices have the necessary financial, infrastructure and human resources to handle the additional responsibility of regulating (licensing and monitoring) ASM).
4. Increase the mineral revenue of current ASM operations by restructuring business operations and finding new ways for ASM and communities to partner with larger scale mining.



## ASM Formalization Strategy

### **TOOL #3: Provide Commercial Restructuring Options to Current ASM Business Operations** – Pick one province as a pilot project

**Objective: To restructure current ASM mining to achieve better economies of scale, and techniques and technology and to derive more locally owned revenue from mineral assets**



### **5. Challenges Related to Formalization for the ASM in Afghanistan**

The challenges listed below refer to the miners firstly in terms of what services they need to become fully operational and move from lower levels of mining (artisanal) to more sophisticated levels (small scale). This transformation is necessary to ensure that the ASM sector contributes to the industrialization of the mining industry in Afghanistan, particularly in the rural areas. This future industrialization ideally should address issues related to quality of life issues arising from poverty and lack of economic opportunity.

There are also challenges for the MoMP. It must enhance its human resource, technical, and infrastructure capacity to enable it to administer the ASM sector, most of which is currently unregulated and outside the formal mineral title mainstream system.

## **Challenges for ASM**

### **Lack of Employment Opportunities**

In the rural areas of Afghanistan there is little industrial development and therefore few employment opportunities, particularly for semi or unskilled labour. Therefore, many people are driven to ASM through lack of viable alternatives. Some research does indicate, however, that for high value minerals (gold, precious stones, etc), daily payments for ASM for these products can be significantly higher than for the other obvious rural subsistence activity, farming.

### **Uninformed Public and ASM**

Due to low levels of education and high levels of illiteracy, many people in the rural areas are unaware of the laws and regulations governing the country's mining sector (at all levels of mining). Therefore, there is a lack of understanding about legalization processes and the consequences of not legalizing (penalties, Islamic rulings – harem, etc). As noted elsewhere in this document, ASM has been conducted informally for many years, based on generational passing down of information regarding mineralization areas, techniques, traders, and trading routes, etc. The approach has been one of community based mining with familial, tribal and geographical patterns well established and outside the formal legal system.

### **Lack of Access to Technology and/or Mining Equipment and Poor Mining Methodology and Understanding of Mineral Extraction Techniques**

Artisanal and Small-scale Mining is largely undertaken by individuals who lack technical training in mining. Hence, concern has been expressed that valuable deposits are being destroyed through ASM activity that is not informed by technical mineral extraction understanding. The most basic level of artisanal mining involves non-mechanized or semi-mechanized operations. More information is needed regarding specific equipment requirements for precious and semi-precious stones, construction materials and other minerals extracted by ASM.

At the artisanal level, equipment includes picks and shovel and access to explosives; and for panning, sluice boxes, spades, crowbars, etc. These operations are very basic and revenue is limited to the subsistence level.

At the fully mechanized stage, large equipment such as excavators, dozers, front-end loaders, etc, are used. At this level, more workers are employed and joint ventures can be organized with larger scale mining operations to provide access to capital that will expand the business.

### **Lack of Access to Financing and Inability to Grow Companies into the Next Level (i.e. particularly from artisanal to small scale)**

When mining is unregulated, miners are outside the formal legal title system and cannot gain access to various types of support including financing. One of the objectives of the formalization strategy is to increase the miners' access to funding. These could take the forms of government loans or assistance with access to micro financing facilities currently existing. This access to financial support to enable ASM to move into the next level of mining is one of the strongest incentives that can be put in place to encourage a voluntary approach to legalization.

### **Environmental Degradation**

Environmental damage caused by artisanal and small scale mining can be quite significant and has caused many non-governmental organizations and governments in developing world countries to turn against this level of mining activity.

When an economic mineral resource has been identified, the miner must prove that he is competent both technically and financially to recovery the ore profitably and with due regard for mining and environmental management.

In Afghanistan, environmental requirements for ASM are not yet developed. Whether the scale of the mining project is artisanal, small scale or large scale, there must be standards met that deal with potential air, soil, dust, noise and water pollution from the activity.

A few examples of the environmental problems caused by unregulated ASM in Afghanistan include disruption of river flows caused by removal of large stones from river beds; landscape deterioration and dust pollution caused by mining of construction materials; lack of rehabilitation of holes caused by diggings that pose a danger to humans and to animals and damage caused by explosives.

Damage by river diversion can be extensive and not only pollute the river through increased siltation, but also affect the stability of the foundations of bridges or roads located close to the water systems. Tunnelling or excavating can cause damage to the physical environment and pose a health and safety hazard, particularly when constructed around areas where there are children.

Non-mechanized mining may not cause extensive environmental damage except when there are large groups of miners mining at one location. When mining is finished in one area, the area should be filled in as soon as possible. Vegetation should be planted and encouraged to grow in areas that were once natural sites. If farming occurred in mining areas, the land should be levelled and rehabilitated to the quality it was pre-mining.

### **Social Dislocation**

The sudden inward migration (rush) of individuals into an ASM site where a valuable commodity (gemstone) has been found can have a number of negative social effects. The provision of services in a community may be strained (increased demand for electricity, water, sanitation). If sufficient housing is not present, there can be transient structures set up that may end up forming a permanent “town”. Individuals from outside a particular community may not be welcome if the community has a defined culture or ethnic tradition that risks being compromised by “outsiders”. There can be an increase in social problems that include diseases, violence and substance abuse if a sudden increase in population is not well managed.

### **Health and Safety**

There is currently little regard for health and safety issues related to ASM. There can be many hazards inherent in the construction of unregulated mines. These are most commonly related to either the mechanized or non-mechanized digging process which can result in ground and rock instability. In addition, accidents can be caused by lack of training in use of equipment. ASM health problems are most commonly respiratory in nature, due to air pollution and lack of protective equipment.

### **Security and Lack of Access to Mine Sites**

Currently, officials within the MoMP have indicated that visits to some artisanal mine sites for the purposes of investigating the level of unlicensed activity, or even to inspect a mine under contract, can be hampered by security concerns. The mine may be under the control of a “warlord” or other groups that are using the production and sale of the materials to fund armed conflict or simply to benefit financially one or two powerful individuals.

The formalization strategy will have to take into account issues related to security but this factor alone should not stop the strategy from being implemented. The communications/outreach strategy that will be developed to inform ASM of the formalization

objectives of the government, the process for becoming licensed and the benefits of complying will include strategies to encourage ASM to approach the provincial MoMP voluntarily.

### **ASM Security Issues Including Confiscation of Property and/or Intimidation of Armed Groups**

Artisanal and small scale miners who are mining informally can be subject to intimidation by armed groups that may include confiscation of a mine site and associated infrastructure and property. Miners may be fearful that their mining activity may be taken away without warning, leaving them with no compensation for mining equipment or access to a mineral area. Sometimes miners are threatened by warlords or other powerful individuals running mining operations in a particular area if they try to become legalized. The informal miners are also charged fees payable to these owners/operators that they have no control over and that are arbitrarily set.

If the ASM sector were brought under the management of the MoMP, the ministry is developing security strategies that would be implemented in partnership with other agencies such as the Ministry of Interior. In this regard, although the enforcement aspect may fall under the Ministry of the Interior, the MoMP officials could provide information and training to the security officers to enhance their ability to identify illegal mining.

### **Barriers to Entry (Changing the Entrenched Ownership Patterns)**

It may be very difficult for new entrants into the ASM sector to gain access to minerals and to a market. In many instances, the mines are controlled by community leaders, family or ethnically based, or otherwise closed to new entrants.

## ASM Formalization Strategy

### TOOL #4: Incentivize Unlicensed ASM to Apply for Mining Rights

**Objective: To provide incentives for the currently unlicensed ASM to enter the MoMP legal framework**



### Limited market access and unfair pricing for ASM products

Since most of the ASM activity occurs outside the legal framework, the markets for the products are necessarily limited. While prices of ASM products related to construction building or decorative or semi-precious stones may be somewhat standardized, prices related to gemstones will vary according to supply, demand and market limitations within the illegal trading framework that governs the sale of gemstones. It is common for the artisanal miners to be exploited by unscrupulous traders/dealers who know that the miners may have no choice but to sell their products at whatever price the dealers may decide.

There is an application process for the artisanal and small-scale mining, as per Article 29 of the 2018 Minerals Law, through which the applications for these artisanal and very small scale mining applications can be streamlined and processed expeditiously.

According to Article 29 of the 2018 Minerals Law, the Ministry shall decide based on the decision of the High Economic Council whether to accept or reject an application for artisanal and small-scale mining.

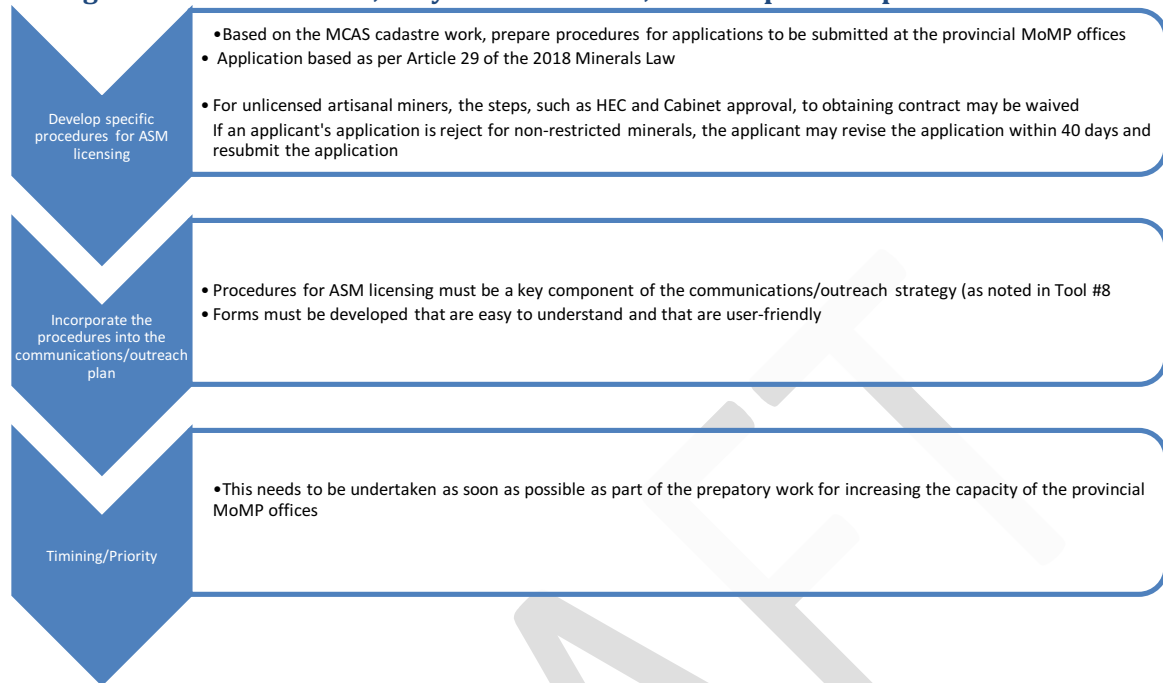
According to Article 16 of the 2018 Minerals Law, unlicensed mining is illegal. And, Article 75.1.1 states that any artisanal or small scale miner who mined without official mining license can apply for mining license only if another eligible person does not have a license for that mine.

DRAFT

## ASM Formalization Strategy

### TOOL #5: Develop procedures for ASM licensing (artisanal and very small scale)

**Objective: To provide a streamlined licensing process for artisanal and very small scale mining that will be efficient, easy to understand, and simple to implement**



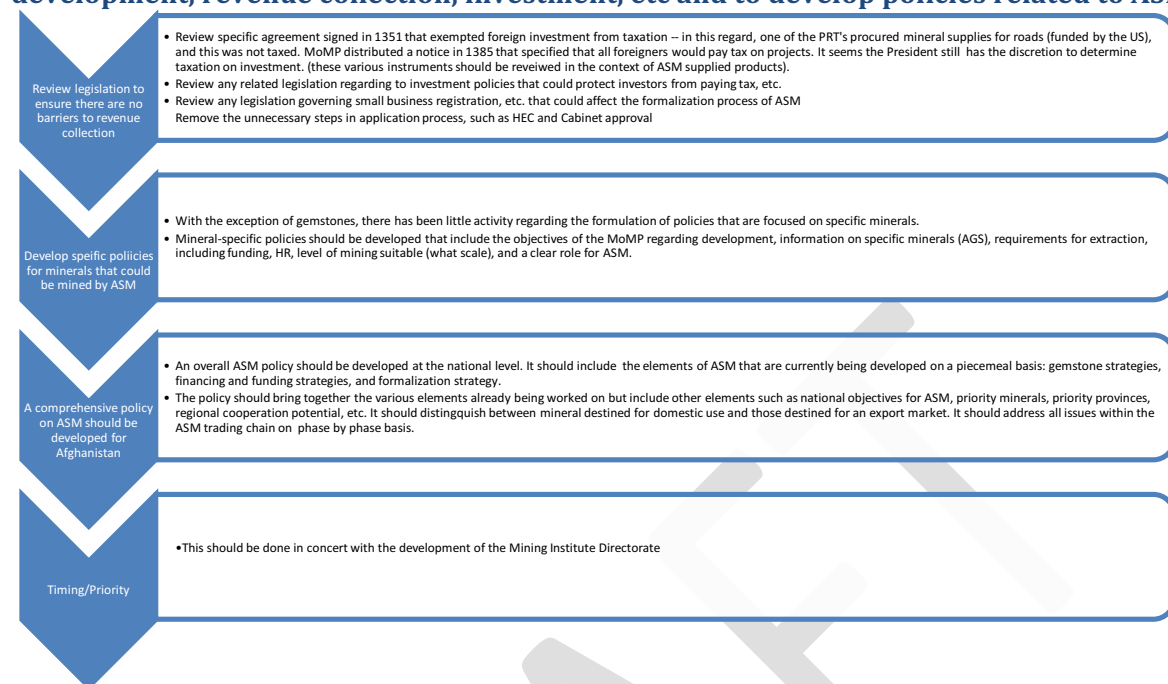
#### 6. Development of policies related to specific minerals

With the exception of recent policy development directed toward gemstones, there are no specific policies that focus on group of relevant minerals depending on mineral and extraction type available to be developed through artisanal and small scale mining. The license time should be dependent on mineral and extraction type. There should be mineral-specific policies developed that include a clear, forward-thinking role for the ASM sector. These policies should include general objectives regarding development of the sector. They should include: location of minerals, potential for development, financing requirements for this development (some minerals are less costly to extract – especially alluvial minerals), human resource requirements, technical training and equipment support requirements. There should also be timelines attached to each aspect of the policy objective.

## ASM Formalization Strategy

### TOOL #6: Regulatory Review and Policy Development

**Objective: To review legislation to determine if there are any legal barriers to ASM development, revenue collection, investment, etc and to develop policies related to ASM**



#### 7. Development of a monitoring function that is dedicated to ASM

Formalization means licensing previously informal miners to bring them into the mainstream regulatory framework of the Ministry of Mines and Petroleum. One aspect of formalization is support services, and the other is monitoring to assess the extent of illegal activity and to enforce the Ministry's policy on formalization. Therefore, there is an enticement part of formalization but also an aspect of enforcement. There has been a very limited monitoring process undertaken by the Inspection Department to date, and what has been done focuses almost exclusively on construction materials. Monitoring functions should also include health and safety, and environmental compliances.

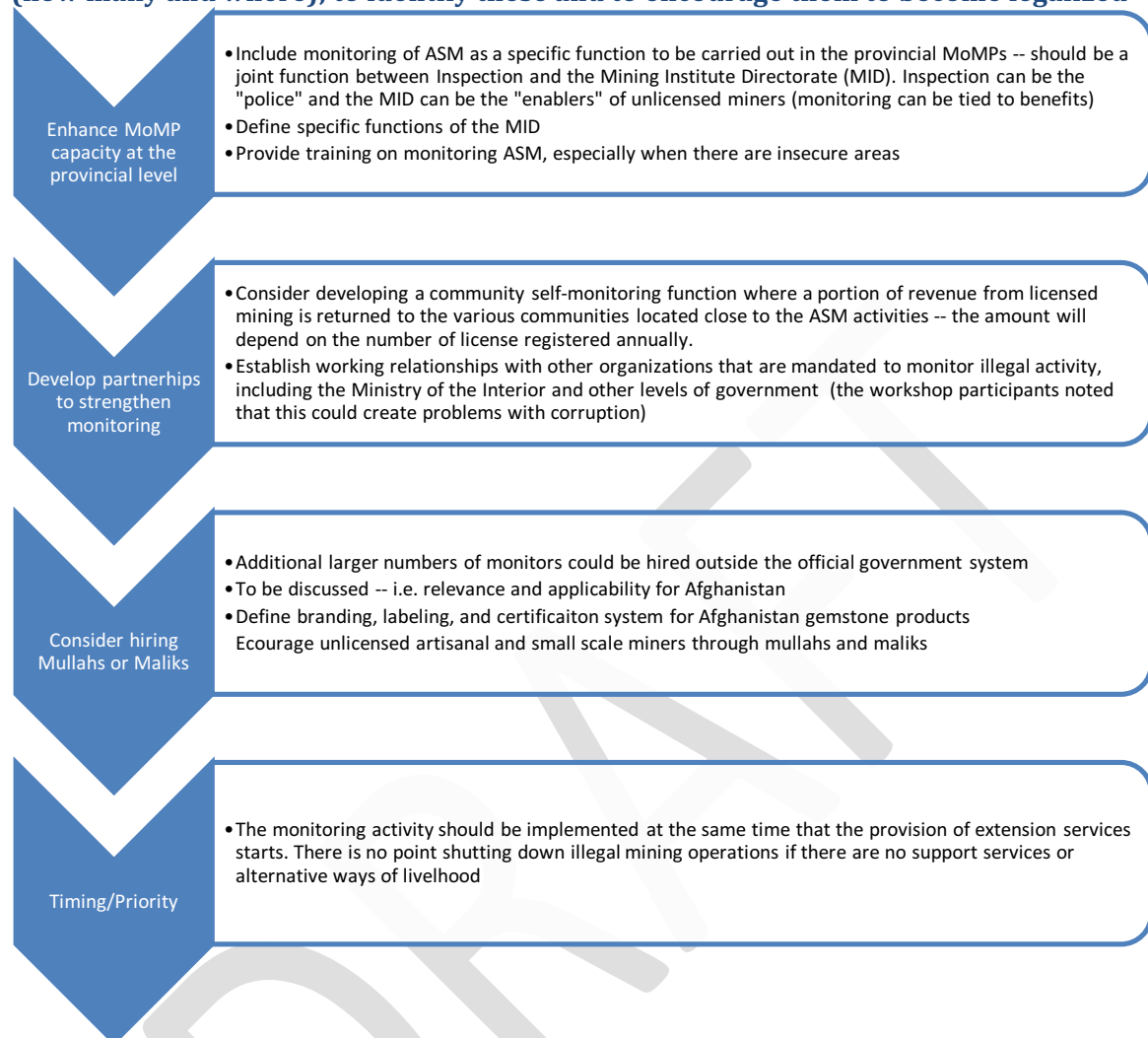
If the MoMP wants to be thorough in its approach to formalization, it will have to consider new ways of monitoring the mining areas to ensure that the mining that is taking place is licensed. Therefore, it would be useful to consider new approaches on how to conduct this part of the formalization process, especially in difficult to access areas (due to poor transportation networks, lack of security, criminal domination, etc) through remote sensing.



## Formalization Strategy

### TOOL #7: Establish an Effective Monitoring System for ASM

**Objective: To monitor the level of activity undertaken by unlicensed ASM miners and (how many and where); to identify these and to encourage them to become legalized**



### 8. Development of a Communications/ Outreach Strategy

After the regulatory system has been amended to include a more user-friendly approach to ASM licensing, and when the MoMP has developed the capacity to handle large numbers of ASM applicants in provincial offices, the next step in formalizing ASM is to communicate with the miners about the process. Given that this is usually quite a difficult group to find (they have a natural tendency to avoid representatives of the legal system, whether they are security police or officials of government ministries such as MoMP), strategies for reaching this group must take into the covert nature of their activities.

## ASM Formalization Strategy

### TOOL #8: Develop a Communications/Outreach Strategy

**Objective: To communicate the MoMP's formalization strategy and to outline the benefits of legalized ASM activity (with a view to encouraging voluntary legalization)**



## 9. Structural Changes for MoMP

MoMP has instigated a number of important institutional changes in its 1398 tashkeel including the establishment of an Mining Institute Directorate. A number of capacity building and training requirements have been identified that will need to be addressed before the MoMP provincial offices become fully operational to manage the contracts currently under their responsibility more effectively. The current level of capacity (human resources and infrastructure) in the provincial MoMPs is not sufficient to transform these offices from their current level of limited responsibilities related to monitoring contracts and collecting royalties to a proper licensing, inspection and mineral development function. The regulation of the additional numbers of currently unlicensed artisanal and small scale miners that will be added to the responsibilities of these provincial offices as part of the formalization process will further add to the level of workload and capacity.

Hence a program of training and capacity building is mentioned in the reforms strategy, and will be directed toward building the capacity of MoMP staff located mainly in the HQ and provinces.

The provincial representatives will report to the appropriate Directorates located at MoMP Kabul for technical issues and report to the Director of Mines of provincial offices at an administrative level and technical level when required.

## ASM Formalization Strategy

### TOOL #9: Provision of Technical and Financial Resources to MoMP

Objective: to ensure that MoMP has sufficient resources to manage an increase in numbers of licensed ASM



### 10. Review of current practises of capturing mineral based revenue from ASM activity

**Contracts:** Applies to those mines that are regulated through the contract process. These mines pay royalties (and other applicable taxes) through the requirements contained in the contracts. This method is applicable only to licensed mines where the MoMP has oversight through a negotiated and agreed contract.

**Trading Center:** This organization may be established and intended to provide a clearing house for semi and precious stones. The products must be transported to this company where a valuation is undertaken and a market is provided for the export of these stones. In reality, there is a significant degree of illegal transport of these products across borders (Pakistan, Iran, etc) with resultant loss of government revenue potential.

## ASM Formalization Strategy

### TOOL #10: Suggest MOMP Practices and Mechanisms to Facilitate Licensing Process for ASM and Capturing of Revenue from ASM Products

**Objective: to ensure that the MoMP can provide a streamlined and efficient approach to licensing ASM and that revenue from ASM is captured effectively**

Facilitate easy and streamlined process for ASM licensing

- Introduce license awarding for ASM at the Provincial MoMP level without waiting for a formal legislative change, consider other mechanisms such as Ministry Procedures in the new Regulations for the 2018 Minerals Law.
- For artisanal level, awarding done directly through the Provincial MoMP Mines Director upon technical approval of application and plotting of available land on Cadastre; for small scale, continued involvement of Governor's office (with local ministries involved) but final approval by MoMP provincial Mines Director following Mining Technical Committee (MTC)'s technical assessment and Cadastre land approval

Review the viability of Check Point system

- Phase out the system of check points -- it is recognized as an inefficient way of collecting revenue as it is inconsistently applied, and hence recommended by the Ministry of Finance to replace this form of revenue collection with royalties and license fee revenue derived by formalizing larger numbers of licensed ASM

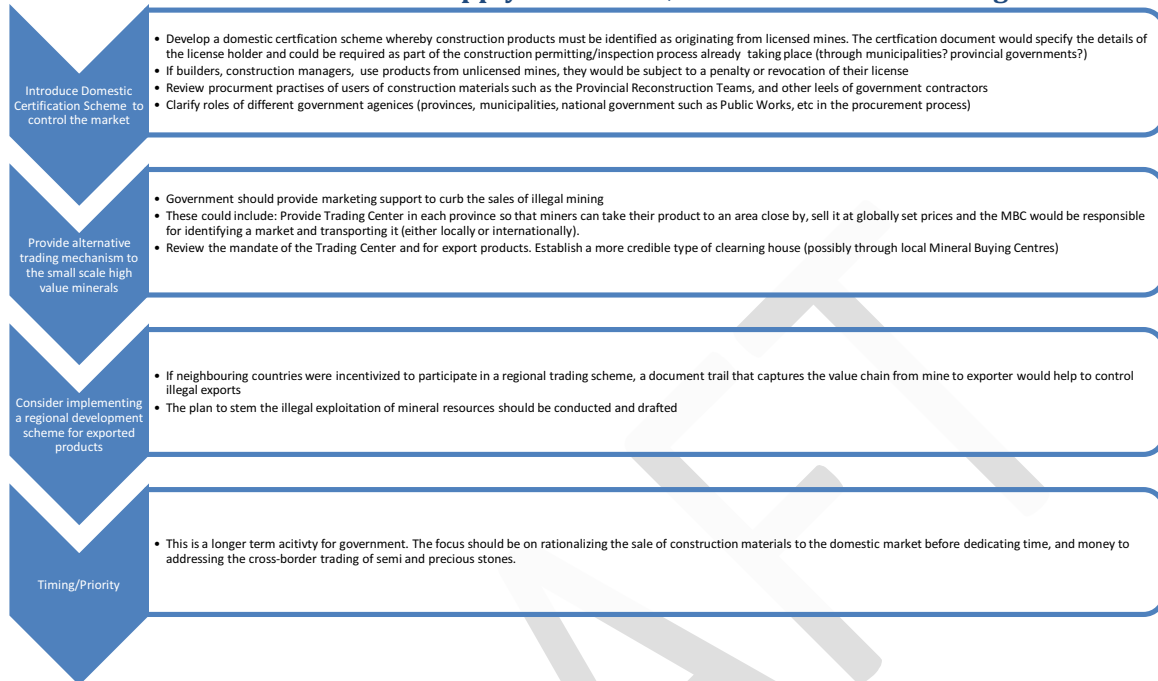
Timing/Priority

- The timing for the implementation of a new ASM licensing system in the provinces will be dependent on the ability of the Ministry to provide the necessary infrastructure and capacity to the provincial offices to enable them to take over this function.
- The removal of a lengthy bureaucratic approval process that has to be finalized in Kabul is a disincentive to unlicensed ASM that may voluntarily wish to become legalized

## ASM Formalization Strategy

### TOOL #11: Develop Documentation Tracking Schemes to Address Weaknesses in the Trading Phase of the Mineral Value Chain

**Objectives: To stem the flow of unlicensed ASM products both domestically (construction materials) and internationally (gemstones, semi and precious stones), to incentivize unlicensed miners to apply for license, and to establish Trading Center**



#### 11. ASM Training Requirements to be delivered by Provincial MoMPs

The DASM officers located in the provinces will be required to provide support services to the artisanal and small scale miners. This support will include the following:

1. **Training in Mining Methodology (mainly extraction techniques):** Currently, informal miners are operating without technical training that include understanding of the deposits they are mining. Without this knowledge, the miners are “high-grading”, that is mining the most available veins of the deposit (there is evidence of this practise in the case of semi-precious stones at least). In the process the miners are destroying the deposit that could be mined for a longer period of time if proper mining methodology were applied to the techniques used.
2. **Training in Environmental Management:** Miners are operating without having undertaken any kind of environmental assessment and accompanying management plan. Although a full-blown environmental assessment/plan of the scale required for large mines would not be necessary for the licensing of ASM, there should still be some sort of assessment of the potential damage caused and a mitigation strategy to ameliorate the effects of the mining on the physical environment and human health concerns, if applicable.
3. **Training in Small Business Management and Development:** Miners need to be trained on the basics of running a small business. This would include budget management, basic

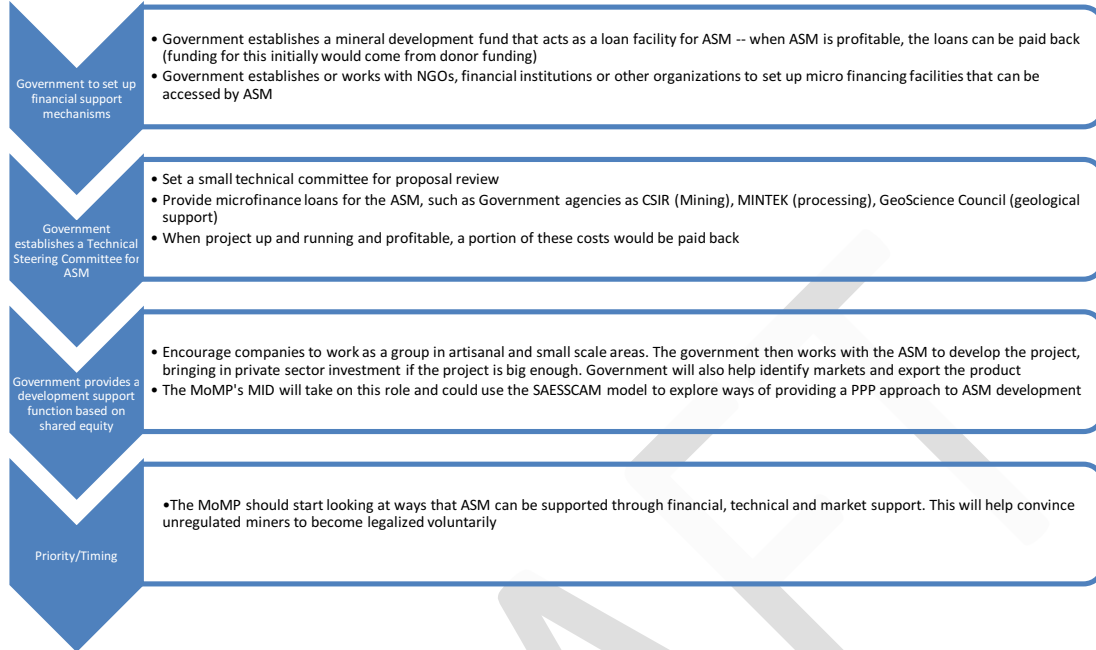
business skills such as estimating costs for extraction versus price of commodity, etc. The training would also include practical considerations that should be applied to “growing” a business, and especially what sort of financial structure and support is needed to move from a basic artisanal level of activity that requires the most minimal equipment to a small scale mining venture that requires a high degree of technology, equipment and human resource capacity.

4. **Training in Gender Awareness:** Many countries support the participation of women in artisanal and small scale mining, beyond the usual level of a support function (this may not be applicable in Afghanistan – this needs to be interrogated). Certainly preliminary research indicates that women wish to be involved in the processing phase of artisanal and small scale mining (cutting and polishing). If female miners are to be encouraged in this country, training will need to be undertaken to sensitize males to the involvement of females, and specific training for females on the kinds of technical training needs articulated above will also be necessary.
5. **Training in Health and Safety:** Miners that are involved in any underground activity need to be trained on issues related to operating in an u/g environment. Any kind of tunnelling activity could produce air pollution (such as dust) as well as create instability in the overhang that could cause accidents. Rock falls are a common consequence of an unstable construction of an underground mine with an exposed overhang. Many accidents in small scale mining are caused by miners coming into contact with machinery or explosives. This includes potential contact with front-end loaders and winches, drills, etc.
6. **Assistance in Accessing Financing:** The ASM officer in the provincial MoMP offices should also provide assistance to the miners in developing proposals to access funding. As this is a function outside the mandate of the MoMP, the officer will need to liaise with other government agencies, the NGO sector and international donors to establish the various funding options that may be available to help capitalize the miner who wishes to improve the performance of his mine. The setting up or coordination with existing micro financing institutions should be facilitated by the MoMP ASM officer. (More detail around ASM funding options are included under the Recommendations section of this report)
7. **Assistance in formation into legal or semi legal entities including cooperatives, associations, companies, etc.** Unorganized ASM can be assisted to organize into some sort of formal group formation. This will enable the state to regulate miners more effectively, possibly lower the cost of application compliance, and provide a vehicle for provision of training and other types of extension services. When organized, these ASM groups can be in a better position to joint venture with medium or larger scale mining operations that may be mining in the same area.

**ASM Formalization Strategy**

**TOOL #12: Develop Government Sponsored Funding and Mine Development Technical Support Options for ASM**

**Objective: To provide funding and other types of technical support to ASM through government support programs<sup>4</sup>**



DRAFT

<sup>4</sup> SAESSCAM (Service d’assistance et d’encadrement du small-scale mining) is the Congolese state’s technical service to assist the ASM sector, which also serves as an extension service provider to the sector. As SAESSCAM is the only state service provider supposed to operate in artisanal mines, it could become an important partnering institution for local ASM reform programs. An international NGO, supported by a number of LSM companies operating in Katanga Province, and various mining industry consulting partners have been working with SAESSCAM to develop a strategy for ASM regulation, strengthening and transition. Programs with SAESSCAM have included training in financial and information management, mine safety, community development and targeted health and gender projects.



## Summary of recommendations outlined through the 12 ASM Formalization Strategy Tools

Formalization is a process – it should be introduced over time, incentivized through extension services, provide better market access and security (mineral buying centres), access to funding and/ or interest free loans underwritten by government. Below is a summary of the recommendations that have been captured in the formalization tools that can be found throughout this document:

1. Extension services – training, access to funding, organization, etc
2. Mineral Buying Centres – to be located close to the point of extraction and run jointly as a PPP
3. Development of a domestic (national) and regional certification process that requires identification of mineral at source. Could distinguish between legal and non-legal mines. Exporters would be required to buy only from certifiably legal mines.
4. Formalization of royalty rates (better than deferring taxes because this inculcates a non-tax paying sort of culture)
5. Guaranteed contracts that would ensure long-term supply to legitimate buyers
6. Assistance in organization, associations, cooperatives
7. Partnerships with District Councils and government development agendas to strengthen community participation
8. Introduce a monitoring function including MoMP, but also involve police and community (as per Sierra Leone’s monitoring of the artisanal diamond mining)
9. Consider licensing one registered company but sharing equity with community so that community becomes part-owner of mine
10. Employment of community members in a medium-scale mine that encompasses a number of smaller, less productive mine sites
11. Government rotating mineral development fund that would supply start-up capital, equipment, access to technology and markets (could be paid back through profits)
12. Consider setting up a government operated Technical Assistance facility that would lend assistance from government agencies (AGS, Engineers, Micro financing, Processing, etc.)
13. Support international donor efforts in micro financing facilities for ASM – licensing tied to provision of micro finance

## Annex 1

### Further details on ASM Formalization Strategy 1: Develop a Baseline Study of ASM operating informally in Afghanistan

Suggestions to the ASM Expert:

Develop an estimate of the number of ASM operators and affiliated workers by conducting a site visit to the ASM workings with representatives of the ASM community. The timing of the visit needs to be carefully considered, as in some ASM sites most of the activity occurs in the night and early morning to avoid detection by security forces patrolling the area and also to allow for communities to work on their subsistence agriculture during daylight hours. One-on-one interviews with representatives of the miners, washers, crushers, buyers, etc. should be planned. Collecting information about any community activity depends upon shared trust with community members. Consideration should be given to who might be most effective at legitimately building trust; in some cases it may be an independent expert, in others it may be company employees. The transparency of the information collection process and feedback on the results gathered are key to maintaining trust. In situations where determining the number of ASM miners may be difficult due to the secrecy or disaggregated nature of operations, the following methods may help in an estimation:

1. Conduct interviews where possible with ASM workers and ask for their estimate of the workforce size involved in ASM activities.
2. Where ASM mining is a traditional activity, these estimates should be triangulated against the number of households and household members claiming to be engaged in ASM activities in a random sample in the nearby communities.
3. Where mining is formalized or semi-formalized, collect records from regional Mines/ASM offices.
4. Where ASM miners are working on a mineral concession held by an LSM company, derive estimates from the number of incursions recorded by the guards stationed around the perimeter of the concession.
5. Combine the above with grades and extraction estimates to triangulate a reasonable estimate of the number of ASM miners, where possible.
6. Where security concerns exist around ASM activities, either through incursions onto LSM mining concessions or community safety, the team should meet with local police, soldiers and/or security forces engaging with the miners on a regular basis. In such a case the methodology for estimating the size of the ASM community should also include a security analysis to ensure the team is protected. The assessment team may experience greater access to the ASM site if they work independently of the state and the LSM company, depending on the legal status of the miners.<sup>5</sup>

### Further detail on ASM Formalization Strategy Tool # 3: Incentivizing unlicensed ASM

Suggestions regarding organization of ASM into cooperatives, etc.

Identify, through dialogue with ASM miners, the chief limitations related to their lack of organization and the best means by which these could be overcome. This may include development of ASM associations, formalization of a co-operative arrangement, etc. The advantages of these approaches typically include:

- Increased working group size and therefore increased production, which may support the development of a small processing centre.
- Improved bargaining capacity, as a collective, with buyers of the products.
- Greater access to financing, including microcredit on the basis of a formal entity rather than individuals making the request.
- Improved working relationships with other stakeholders, including permitting bodies and LSM companies.
- Increased likelihood of receiving support from NGOs and donor agencies.

---

<sup>5</sup> Working Together, ICMM