The Public-Private Sector Dialogue on Mining Governance in Ghana series

Position Paper on:

“Improving Governance of Artisanal and Small-scale Mining Sector in Ghana”

Implemented by:
The African Center for Economic Transformation (ACET) in partnership with the Australian Government
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This working paper, *Improving Governance of Artisanal and Small-scale Mining Sector in Ghana* seeks to discuss key issues relating to regulating access to minerals in the artisanal and small-scale mining (ASM) sector, how small scale miners could co-exist with the large scale mining sector in mutually beneficial arrangements, protecting workers rights and impediments to enforcing globally accepted environmental practices in the ASM sector.

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Improving Governance of Artisanal and Small-scale Mining Sector in Ghana

1. Introduction

In Ghana, as in many parts of Africa, mineral extraction by artisanal and small-scale mining (galamsey in local parlance - to wit “gather them and sell”) remains an important developmental issue. The sector makes important contributions to the development process, but at the same time produces various negative social and environmental effects. For mineral-rich Ghana, Artisanal and Small-scale Mining (ASM) is an age old business which produced about 36 per cent of total world gold output between 1493 and 1600\(^1\), making the country the largest gold producer at the time.\(^2\) According to the Minerals Commission, the ASM sector contributed more than a third of Ghana’s annual gold production in 2012. There has been no official census nor enterprise surveys therefore the exact numbers are not known, but guesstimates are that the number of people directly involved in the sector could be well in excess of one million. And the primary triggers behind these numbers are the ease of entry and the lack of alternative livelihoods in most of these areas where we find artisanal mining.

Despite the employment and income contributions and the prospects that ASM operations hold for local inclusive economic growth, there have been growing concerns about the absence of properly defined, or the abundance of improperly defined, guidelines and regulations. ASM conjures images of illegality, tax evasion and avoidance, unsafe operations and negative environmental impacts. From pollution and destruction of various water bodies and farm lands to increased use of firearms, increased number of foreigners illegally involved in ASM and mine accidents, there is the perception that the prevailing governance regime is weak and failing or has already failed the sector. Further, the ASM sector and its operators continue to pose significant existential challenge to the Large Scale Mining (LSM) sector by way of invading their concessions. These concerns and challenges raise important questions about the sustainability of Ghana’s gold mining sector as a whole, but more importantly the ASM sector which ironically holds significant prospect for more inclusive economic growth.

It is in response to these challenges that an Inter-Ministerial Task Force was established by the President of Ghana in May 2013 in an effort to “bring sanity into the mining sector”. Further, an Amendment Bill to the Minerals and Mining Act (Act 703) was introduced in Parliament in September 2014 with the aim of increasing the penalty units for operators who flout the law as well as offering the Executive the power to confiscate equipment used in illegal mining activities. Almost two years on, the task force seems to have made modest gains. The number of foreigners directly engaged in the ASM sector has fallen and some heavy duty equipment seized by the task force. Suffice to say that these reported gains must have been short-lived because the core challenges of the ASM sector remain, with some stakeholders (including operators) worried that the sector seem to be returning to where it used to be prior to the setting up of the task force.\(^3\)

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\(^1\) Akabzaa, T and Darimani, A., 2001 “Impact of Mining Sector Investment in Ghana: A Study of the Tarkwa Mining Region

\(^2\) Ben Aryee et. al (2003) provide a historical perspective of artisanal small-scale mining Ghana.

\(^3\) An interview with Edward Akuoku. He is an executive member of an Accra-based Artisanal and Small-scale Mining Africa Network (ASMAN) and PRO for Solar Mining, an ASM firm based in Obuasi. Owners are said to be making payments at the
Against this background, this study reviews the ASM sector and the governance frameworks within which it operates. The focus of the paper is on gold and diamond artisanal and small scale mining and we will use two case studies to throw light on cross cutting issues within the mining sector. The case studies shall focus on the socio-economics impact of ASM activities, the specific instances of their operations, the potential environment effects, the interactions with local authorities and national regulators, the source of inputs and financing, their price determination and marketing, challenges and corporate social responsibility, and finally the prospects of the sector. The conclusions and recommendations will be relevant to other ASM mining activities such as salt mining, sand wining and quarry. The paper will address the questions below and provide specific actionable recommendations.

- How can the Ghanaian authorities harmonize land tenure systems with the need to regulate access to minerals in the ASM sector, and translate this into a coherent regulatory framework?
- How can ASM and Large-Scale Mining (LSM) in Ghana co-exist in a mutually beneficial arrangement?
- What is the nature of the current ASM value chain in Ghana and how can it be best regulated to ensure protection of worker’s rights and delivery of fair value to citizen traders and to the State?
- What are the current impediments to enforcing globally accepted environmental (social and physical) management practices on Ghana’s ASM?

1. ASM in Ghana: Significance and Modus Operandi

The socio-economic significance of ASM in Ghana can be seen both at the local and the national levels. A visit to any of the regions or communities in Ghana where ASM activities are widespread such as Dunkwa-on-Offin in the Central Region, Obuasi and Amansie in the Ashanti Region, Tarkwa and Prestea in the Western Region and Konongo in the Eastern Region reveals the community level socio-economic significance. In these regions and communities, ASM activities along with farming, represent the key growth pole activities with strong linkages to other sectors in the local economies. As a dominant occupation in these communities, most residents earn a living either by working in the farm or on the mining site. These in turn support other economic activities such as trading, food vending, housing, and other related livelihood activities.

The economic importance notwithstanding, the negative impacts of ASM are also evident and well documented. Among them there is the involvement of under-aged children and a large number of young women in much of the activities with negative effects on their health and education. While there is as yet any systematic documentation, the long-term negative health effects due to exposure to mercury can be considerable. Around the communities within a radius of 20 kilometres of Obuasi the local politicians have launched a campaign against children who drop out of school to engage in mining. The dominance of young girls as carriers at mine sites are predictors of teenage pregnancy and their vulnerability to HIV/AIDS. Secondly, there are heavy environmental tolls on ASM communities as these miners disregard environmental protocols with deadly effects. Third, revenue collection both at various Regional Coordinating Councils and retrieving their equipment. The payments are expected to be used for reclamation, yet there do not seem to be any reclamation taking place and it is unclear how the monies being collected will be accounted for.
the local and national levels is complicated “by the informal structures that seem to govern the ASM sector, by the large numbers involved, and by the structures of the artisanal mining value chain. Informality means that miners cannot be easily identified and traced for tax purposes”.

At the national level, the contributions of the sector to the national output and foreign exchange earnings are worthy of note. While the numbers and claims are always difficult to verify partly because of the informal nature of their activities, the relative contribution made by ASM to national gold output has increased steadily from less than five per cent in early 1990s to almost 35 per cent in 2012 (Figure 1).

![Figure 1: Percentage of ASM Gold Production in National Output](image)

Source: Minerals Commission

Same development can be said of foreign exchange contribution. Unlike large scale mining (LSM) which retains significant proportion of foreign exchange earnings, far greater proportion of foreign exchange earned by the ASM is returned home. As a matter of fact all the foreign exchange earnings by the ASM sector is returned to the country and when ASM operators need to import some equipment, they procure foreign exchange from the open market just as virtually all other economic agents in the country do.

**Modus Operandi**

ASM activities have evolved over the period. Starting from merely gathering gold bearing rocks from the earth’s surface through to digging for such substances with hand tools such as axe and shovel, today much of ASM activities are heavily mechanized. Like mechanized LSM activities, ASM operations can be categorized into two: surface and underground. The surface type is of two types: those that take place on or along water bodies (alluvial) and those that take place farther away from water bodies. The surface mining type usually involves the use of relatively more water in the recovery process. Chinese-made Changfeung, a processing plant has become popular in surface type operations. The underground method involves sinking a deep hole in the earth to extract gold bearing substances. At

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the level where the gold is actually mined, the pit is wider and can accommodate hundreds of people. The deep holes are supported with logs and other tree cuttings. Relevant images are presented in the appendix.

Over the past decade, a number of changes have taken place in the ASM sector with regards to operations. One such change has to do with the scale of operations (now on larger tracts of land) along with increased activities on or very close to water bodies. This has led to significant water pollution with adverse consequences on nearby communities and those farther downstream. Three main rivers in Ghana severely affected by this development are River Offin, River Birim and River Pra and their tributaries. Related to this development is the increased use of dangerous chemicals such as mercury and cyanide in the processing of gold ore. Most of these activities, as indicated earlier are undertaken outside of the regulatory framework. Health and safety conditions in these mines continue to deteriorate. In the case of underground mine, the scale (or the depth and increased size of pit down the hole) and manner in which tree cuttings or logs are arranged at the inner walls of the hole to safeguard it from possible collapse are some major changes that have taken place. One such mine operated in the early 2000s in Obuasi could accommodate about 500 miners at a time.5

Some changes that have taken place are common to both types of operation. For example, the involvement of foreigners (and the number of foreigners involved), largely operating surface mines against the law. The involvement of foreigners has been evolving over the period. From the provision of financial resources, through to the provision of equipment (on rental basis and other related arrangements), they are now directly involved in mining activities clearly flouting applicable laws in the sector. At a national stakeholders’ forum in Accra in 2012, the Minister remarked that “activities of foreign illegal miners had taken on a new dimension because they carried weapons and security dogs to terrorise locals who dared to challenge them”. Worse, they operate close to local communities with the support of traditional leaders, landlords and farmers.

In all the nine mining districts where the Minerals Commission operates district offices, there are associations or co-operatives of ASM operators. There also exists a Ghana National Association of Small Scale Miners (GNASSM). These associations and co-operatives, however, appear not to have been able to engage policy makers in substantive ways the way the Ghana Chamber of Mines (of the mechanized LSM sector) does. The Chamber has deeper engagements with policy institutions (as well as other arms of government including parliament) and is therefore able to bring some influence to bear on issues of policy and law. With most ASM operators operating illegally, it is not surprising that they have not had much engagement with government institutions. Focus of these associations and co-operatives have usually been on self-help and sometimes knowledge sharing, and very little of engaging public institutions.

2. ASM in Ghana: Governance Framework and Challenges

The current governance framework within which ASM operators conduct their activities (or more appropriately are supposed to conduct their activities) was established as part of the mining reforms in

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5 This was reported by Mr Nabari, one of the first leaders of an ASM association established in Obuasi in late 1990s.
late 1980s. Those reforms, starting with the 1986 Minerals and Mining Law (PNDC Law 153), were aimed at “modernizing” and “liberalizing” the mining sector⁶, and were skewed largely in favour of mechanized LSM and the attraction of foreign capital into the mining sector with generous incentives. The reforms created an alternate regime to move the ASM sector from operating as “illegal” entities in an informal economy to a formal one.

In 1989, three laws were passed in relation to the ASM sector. The first was the Mercury Law (PNDC Law 217) which repealed the 1933 ban on mercury, which had been at the heart of the illegal characterization of the ASM sector. The law granted licenced ASM operators the right to buy “a reasonable quantity of mercury” and use them in a manner that respects “good mining practices”. This was followed by the 1989 Small-Scale Mining Law (PNDC Law 218) which aimed at formalizing and legalizing the ASM sector and hopefully to ensure that ASM operators respect “good mining practices”. The third law was the 1989 Precious Minerals Marketing Corporation Law (PNDC Law 219) which established a government agency and charged it with the responsibility of buying gold from the ASM sector. Thus, a fairly robust framework was created to govern the sector. This framework, despite difficulties in addressing challenges in the sector, is identified as best practice by United Nations Economic Commission for Africa⁷.

PNDC Law 218 provided for the establishment of District Small-scale Gold Mining Centres (Clause 8) and charged them with the responsibilities of registering ASM operators, monitoring operations, providing training and submitting reports to the Minerals Commission. In the conduct of these activities, the centres were to be supported by Small-scale Mining Committees, which comprised of representatives of key institutions at the local level. The committee is chaired by the District Chief Executive and currently includes the following members: District Officer (at the Small-scale Gold Mining Centre) and one representative each from the relevant District Assembly, relevant Traditional Council, Inspectorate Division of the Commission and the Environmental Protection Agency. Further, the Small-Scale Mining Project (SSMP) was initiated soon after these laws had been passed and tasked with the provision of requisite institutional support to the ASM sector. Designed to be implemented collaboratively by four government agencies (Minerals Commission, PMMC, Mines Department and Geological Survey Department), only the Minerals Commission continued to work on the project, with the rest abandoning their responsibilities a couple of years into the project on grounds of lack of resources⁸. In 2006, PNDC Law 153 (amended in 1994) and PNDC Law 218 were combined into the Minerals and Mining Act (ACT 703).

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The entire governance framework for the ASM sector has not been successful in moving the ASM sector into the legal framework because the sector is dominated by those operating outside the established legal framework. Even the implementation and regulation of those operating within the established legal framework have not been smooth. In recent past, some stakeholders (including ASM operators and ASMAN (Artisanal and Small-scale Miners Africa Network)) have requested regulatory agencies (especially the EPA) to extend their regulatory nets to cover their activities. The agencies (MC and EPA) do not seem responsible for the activities of dominant ASM sector which operates outside the legal framework.

Several factors explain the near failure of the regime to regularize the ASM sector. Chief among these is the licensing regime (largely indifferent from that of mechanized LSM) which has been described as burdensome and overly time-consuming. In addition, the licensing procedure of the ASM sector can take a year or more to complete. Some support the view that licensing is bureaucratic and an important reason why most operators in the ASM sector have not been moved onto the legal framework. According to some ASM operators, obtaining an environmental permit alone (one of several steps to become legal ASM operator) usually takes several months and sometimes over a year.

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Box 1: Typical Licensing Procedures for an ASM Operator

The very first step to securing permits and licenses for an ASM operator is the location of a site and procurement of site plans covering the area. Unlike LSM operators who can procure reconnaissance and prospective licenses (to confirm the feasibility of an area), the ASM operator skips these steps and obtains site plans covering the area where he or she plans to undertake mining activities. This is very important in understanding the conduct of the ASM operators. The site plans together with business registration documents and completed application documents are then submitted to relevant district office of Minerals Commission. Inspection is undertaken by the Minerals Commission district officer and documentation checked for completeness.

The relevant District or Municipal Assembly is then notified and a request placed for a publication to be made at the Assembly regarding the proposed project for a period of 21 days. If “no objection” is raised over the project then the process moves to Accra. In the meantime, the proponent must initiate a process of procuring Environmental Permit by registering the proposed project at the office of the Environmental Protection Agency (usually at the region), which then goes through screening and then Environmental Impact Assessment processes set in. The Minerals Commission awaits response from the EPA and if both agencies are satisfied, then the process moves to the Ministry of Lands and Natural Resources for a license to be issued upon the recommendation of then Minerals Commission.

Once issued, the license is supposed to be returned to the district office (through the Minerals Commission) where the application process started but it usually takes months and sometimes years for the license to be sent to the district office. Prospective ASM operators therefore make the follow ups at the various institutions in Accra themselves, which add to the frustrations. Thereafter, mining permit must be procured from the Inspectorate Division of the Minerals Commission before mining operations can legally begin. All these now take up to 12 months or more in many cases, against the three months that the process is designed to take.

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9 Aryee, BNA, Ntibery, BK, and Atorkui, E., 2003 “Trends in the small-scale mining of precious minerals in Ghana: a perspective on its environmental impact”, *Journal of Cleaner Production*, vol. 11, no. 2, pp., 131-40
10 Ntibery, B. K., 2001 “Small-scale mining of Precious Minerals in Ghana: A Strategy to Improve Environmental Performance” thesis submitted in partial fulfilment of the requirement for the Masters of Science in Mining Engineering, Kwame Nkrumah University of Science and Technology, Kumasi.
Apart from the licensing requirements and lack of institutional support, the conduct of LSM operators and other state actors has been noted as further reason most ASM operators continue to operate outside the established framework. It is sufficient for them to get a cooperating traditional authority. There are reports that some of the areas offered to LSM operators as concessions are already being mined by ASM operators, usually those operating outside the framework and therefore without license.\textsuperscript{11} The moment such areas are leased out to LSM operators, it is difficult (in fact impossible) for ASM operators to secure a license. Further, the concessions of LSM are normally large in size and immediately deprive indigenes who are previously farming on the lands (in addition to occasional mining activities). Many of these farmers turn to undertake mining activities (usually on concessions belonging to LSM) for livelihood. Promises to recruit these farmers by LSM operators are usually not honoured, especially beyond the mine construction phase. Finally, there have been instances where concessions licensed and being mined by ASM operators have been technically handed to LSM operators.\textsuperscript{12} In the case of other authorities such as traditional rulers, politicians and public servants (especially key personnel in the Police Service), they have been reported in the media to be providing cover and various support to illegal ASM operators.\textsuperscript{13}

The effects of these have been major expansion in the largely unregulated ASM sector. With their activities largely unregulated, many of the environmental impacts are not mitigated. This has led to the proliferation of abandoned pits causing havoc in mining communities. There has been minimal care and maintenance conducted on the pits amidst security officials occasionally “chasing” the operators. Related to this is frequent collapse of the mines/pits. Also the number of foreigners directly involved in mining activities and the conduct of activities on river bodies (and related pollution of such resources) has negatively affected the reputation of the sector and overshadowed the potential socio-economic benefits, especially the increase in the use of arms by operators and rising levels of conflicts between operators and communities, and LSM operators.

3. Case Studies: ASM Activities in Dunkwa-on-Offin and the Tributer System at Akwatia

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<th>Box 2: Characteristics of ASM Operators</th>
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<td>The study consulted ASM in the Dunkwa-on-Offin and Akim Oda Mining Districts. Akwatia is within the jurisdiction of Akim Oda Mining District. Respondents were mainly owners or principal decision makers of Small Scale Mining Enterprises that specialise in gold or diamonds. Out of the 18 mining enterprises that were administered with a questionnaire, 59% were owners, 23% were workers and 18% were co-owners. Seventy-five percent of the co-owners were in a partnership that had no more than 3 partners and 25% were in a partnership with more than 10 people. In terms of education, 35% obtained elementary education whiles 41% had a secondary education and 24% were above the secondary level. The respondents are very experienced in the small scale mining business as 94% had been in small scale mining for over 3 years and 6% has had between one and three years’ experience. With respect to the economic activities of the communities visited, 61% of the respondents indicated that the key livelihood activity was small scale mining, whiles 28% ranked farming, and 11% ranked distributive trading as the most pervasive activities in the communities. The survey results about financing, on production, pricing and marketing are provided in the appendix.</td>
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Further suggests that such conduct by traditional authorities must be stopped as part of efforts to deal with challenges in the ASM sector. Apart from traditional authorities, some politicians and public servants have been reported to be supportive of some illegal ASM activities in the country, obviously in return for personal gains.
ASM in Dunkwa-on-Offin-Gold

The Dunkwa District ASM Office is one of the seven districts offices created by the Minerals Commission to manage and promote ASM activities in the country. It is reported that over 300 ASM licenses have been processed through the office and most of them are active. At the same time, between 3000 and 5000 people are believed to be engaging in illegal ASM activities in the jurisdiction. Dunkwa-on-Offin is one of the districts with most extensive alluvial mining since most parts of the jurisdiction is characterized with alluvial gold mineralization. The prevalence of illegal small-scale mining in this area of the country has also been attributed to the highly bureaucratic and time consuming processing regime (See Box 1) that applicants must go through to get a license.

Whilst most of the ASM operators in this area have not bothered to initiate the process towards acquiring a license, others reportedly begin the licensing process but discontinue along the line (especially after publication at the Assembly of the proposed project – with or without objection). Of the pool of owners and principal decision makers pooled in the survey about 83 percent described the process as too long. The Minerals Commission Officer at Dunkwa also cited the low educational level of most ASM operators as another impediment. For example some miners are unwilling to even register a firm for the sole purpose of mining. Rather, they “borrow” business documents of friends and relatives to start but when asked to rectify that, they usually do not return to the office.

Besides licensing, access to land and associated land conflicts remains a major impediment to ASM development in Dunkwa. Increase in reconnaissance and prospecting activities by large-scale mining operators has meant that more and more prospective ASM operators find it difficult to identify good place to apply for and mine. Meanwhile, growing population and high youth unemployment in the area have also meant increasing demand for land for other purposes, especially farming. Although the Minerals Commission has blocked out substantial amount of areas (in the Dunkwa jurisdiction and other parts of the country) solely for ASM activities, inadequate (or lack of) geological information about the viability of those areas make them less attractive to ASM operators.

The Minerals Commission is considering a number of interventions to respond to these challenges. For example, there is a plan to introduce interim permit to allow mining to begin prior to actual license being granted. This interim license is likely to be issued when local level processes (including obtaining a “no objection” after the project is published at the Assembly) are completed and the application process is awaiting final approval from Accra. The commission is also considering collecting geological information about the blocked out areas and establishing plant pool. However, but it is unclear when these initiatives will be implemented.

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14 The number of illegal small-scale miners must be taken with caution. This is because of the highly mobile nature of these miners (both geographically and occupationally).
15 Elsewhere (especially parts of Eastern Region), another important challenge is growing resistance to ASM activities, largely on account environmental consequences of ASM activities. Asamang Tamfoe and Mmoseaso are two of such places. At Asamang Tamfoe for example, a former chief of defence staff together with other residents of the community and adjoining areas have fiercely resisted ASM activities in their environs.
Finally, Precious Minerals Marketing Company (PMMC) and other entities licensed to purchase gold from ASM operators can work with external entities such as FairTrade to begin adding premium to gold produced in accordance with applicable laws and regulations. The competitive nature of gold purchasing business (in Dunkwa and other parts of the country) coupled with the fact that a large percentage of the gold output from ASM end up with these entities makes the case for their involvement and to use pricing and institutional mechanisms to promote sustainable ASM activities.

**ASM and LSM Cohabitation: The Case of Diamonds at Akwatia**

When the Ghana Diamond Company was sold to the Great Consolidated Diamond Ghana Limited (GCDGL) (an indigenous company) in 2011 (following a mine closure in 2007), there were high hopes that the once vibrant Akwatia Township will be returned to its past glories. Though that is yet to happen, as the GCDGL is yet to hit the ground running, its decision to revive a cohabitation arrangement (the tributer system) has had some positive effects. Besides the job opportunities, the tributer system has turned a potential conflictual relationship that characterizes ASM and LSM operators in most parts of the country into a mutually beneficial co-existence at Akwatia.

Though the tributer system is not new to the mining sector in Ghana, many LSM operators who are battling ASM operators on their concessions have shied away from considering it, let alone designing one suitable to their circumstances. With increasing promotional activities by the Minerals Commission and the granting of various licenses (reconnaissance, prospecting and mining), along with increasing youth unemployment in mining areas, there is the risk that conflicts between LSM and ASM operators may worsen if there are no innovative interventions.

At Akwatia the tributer system works this way. First, individuals interested in working on a concession must apply to the company which is the license holder. Payment (goodwill) for a tributer concession depends on the size of land (and the perceived or actual richness of the area) that will be transferred to the individual. Mining takes place under the supervision of the licensed company. The contractual arrangement is that all diamonds produced be sold to the company. A portion of the output is then retained by the tributer. This is a relatively simple arrangement, but even the supervision of the license company, success depends on the sincerity of the ASM operator.

Some of the miners surveyed were positive about the arrangement, noting that in its absence, the risks of invasion and encroachment by ASM operators would have been very high. “Now that there is an arrangement that can enable anyone interested to mine, there is no need engaging in illegal mining”, one of the workers said.

4. Managing ASM: Continental and Global Responses

The challenges that confront the ASM sector are clearly widely recognized and there are several international conventions and protocols that provide frameworks for addressing them. Many of these conventions address specific aspects of the multifaceted challenges confronting the sector. The recently adopted Africa Mining Vision (AMV) provides a more holistic approach to optimizing the potentials of the sector (while addressing the various challenges it faces). The AMV itself acknowledges other conventions and protocols and urge member countries to implement them. Further to the AMV is the ECOWAS Mining Directive which also acknowledges existing protocols and conventions related to mining (including the ASM sector).
Apart from the continental and regional regimes and other reforms underway, there are also a number of international conventions and protocols that implicate ASM activities. Four of these that are worthy of considerations include Certification Schemes, conventions and protocols on chemicals (particularly mercury and cyanide), United Nations Convention on the Worst Forms of Child Labour, and relevant ILO conventions and guidelines (on workers’ rights, health and safety, and child labour). On certifications schemes, the Kimberly Certification Scheme (which the Government of Ghana has signed onto and applies mainly to diamonds), Fairmined Gold, and Fairtrade Gold are worth noting. It may also be useful for Ghana to consider a certification scheme for purchasing gold from ASM operators that can help improve their activities, especially with respect to environmental management and health and safety conditions at various mines.

Fairtrade gold certification scheme, for example, has a framework for certifying miners who adhere to four identified standards, namely strengthened miners’ organizations, improved working conditions (broadly defined to include elimination of child labour), freedom of association and collective bargaining, and responsible use of chemicals. Certified miners get a premium from Fairtrade. The premium is even bigger for Ecological Gold (gold that has been extracted without the use of chemicals and with strict ecological restoration requirements). In Ghana, this will involve the PMMC (other companies licensed to purchase gold) collaborating with Fairtrade International which leads to the licensing of artisanal or small-scale miners.

On the production aspect of ASM activities, a number of efforts to minimize or phase out the use of dangerous chemicals (such as cyanide and mercury) have been put in place at the global level, though largely unenforced in Ghana. These include the Minamata Convention on Mercury (which Ghana signed in 2014) and the UNEP’s Global Mercury Partnership. Still on production, the ILO has several conventions and guidance that relates mining and ASM activities. The following are relevant considerations going forward:

- Safety and Health in Small-scale Surface Mines Handbook
- Safety and Health in Mines Convention (Convention 176)
- Worst Forms of Child Labour Convention (Convention 182)

5. Questions for Discussion

(a) How can the Ghanaian authorities harmonize land tenure systems with the need to regulate access to minerals in the ASM sector, and translate this into a coherent regulatory framework?

The 1992 Constitution identifies three different entities who own lands, namely the state, stools/skins, and families/individuals. The Constitution further provides that all mineral resources irrespective of where they are found (though most are beneath the soil) are owned by Ghanaians but vested in the President in trust for the people. The President, therefore, has the power to develop (or extract) mineral resources through public institutions, private institutions or both. Stools/Skins and families or individuals ownership are therefore only restricted to surface custodial and user rights. Owners of the land do not have authority and access to the mineral resources. When minerals are found and the right to develop
them granted to an entity, that entity’s economic interest in developing the resources found supersedes those of the land owner or any other use to which the land is being put to. However, prompt and adequate compensation must be paid in lieu of denying either the land owner or lawful occupant access to the land also during the period of mining.

Prior to the 1986 Minerals and Mining Law and the 4th Republican Constitution that effectively established the framework above, land owners (mainly stools/skins/chiefs and families) authority in the granting of minerals rights. The arrangement had its own challenges in addition to the potential to worsen inequality and cause conflicts. While the current framework has worked quite well in the LSM sector, its application in the ASM sector (where the right to mine must effectively be given by the Minister, representing the President) has been fraught with various challenges. The situation in the ASM appears to be a fusion of the previous and current frameworks, where some land owners (largely chiefs) are reported to have given “authority” to extract minerals found beneath their soil, contrary to legal provisions. This is largely as a result of historical experience, number of people involved in ASM, ignorance of the law, and general challenges in enforcing laws and regulations in the country. Further, there are some land owners who also resist mining activities, especially ASM, contrary to the law. Such resistance obviously challenges the state’s ownership of mineral resources beneath the soil.

How can Ghana reconfigure the existing land tenure system and the regulatory regime for the ASM sector to enable effective regulation and management of the sector? There is need for a national debate on the matter with obvious implications for the ownership of the surface rights of lands where mineral resources are discovered. Should they belong to the state? Must the state take steps to compensate and resettle owners or occupants? And therefore what roles must be played by the state, beyond this involvement? Further, the role played by land owners and affected communities in managing activities of ASM operators must be enhanced and made more meaningful than has been the case. The influence that land owners (particularly chiefs) as well as other opinion leaders and Assembly Members hold and their vast knowledge of what goes on in their communities must be optimized through increased involvement in regulation and management of the sector. Currently, these stakeholders are either involved illegally in activities of ASM or are unconcerned by ASM activities yet faced (helplessly) with the consequences of these activities. These stakeholders must be increasingly involved in the existing regulatory framework through the District Mining Committees (DMC), for example. The DMCs themselves must be more functional (and where non-existent, be established) and their roles in the existing framework together with district offices of MC must be enhanced. The regime must also encourage (or require) land owners and affected communities to have equity stake in ASM operations, to whip up their interest in responsible ASM activities.

16 In Eastern Region, there are a number of communities that have effectively resisted any form illegal small-scale mining on their lands, reflecting the influence held by the leadership and ordinary members of the communities to stop illegal small-scale mining. This sharply contrasts indications by state institutions such as MC, EPA and district assemblies that they do not have resources to stop illegal small-scale mining activities.

17 Several reports in the mass media allude to illegal involvement of certain land owners (especially chiefs) in ASM activities. In Dunkwa in the Central Region, a certain chief physically prevented officials of the recently established inter-ministerial taskforce from entering the community and therefore areas where illegal ASM activities were taking place. It is good to note, also, that there are reports of some state officials who illegally engage in ASM activities.
(b) How can ASM and Large-Scale Mining (LSM) in Ghana co-exist in a mutually beneficial arrangement?

Much of ASM activities in Ghana and many parts of the world affect LSM activities in different and complex ways. Harmonizing relationship between ASM and LSM is crucial not just for the sustainability of their activities but also to optimize contributions to the economy (both local and national). Though much of the relationship between ASM and LSM has been conflictual, there have been a couple of experiences that show how ASM and LSM can co-exist in a mutually beneficial arrangement. The case of diamond mining in Akwatia is instructive. Further, other studies have shown how ASM and LSM can co-exist in a mutually beneficial arrangement and provide critical requirements necessary for the co-existence. Another case in point is the decision by Goldfields to adopt a “live and let’s live” model that ceded portions of its concession (informally) to ASM operators. Even though the company eventually evicted the operators because of challenges encountered, lessons learnt can be used to design mutually beneficial co-existence arrangement. Anglogold Ashanti also supported a group of 10,000 miners who were allowed to work on a section of the Obuasi concession (informally).

There is a widespread understanding that a more sustainable approach to the often conflictual relationship between LSM and ASM is accommodation and LSM, ASM state institutions and traditional actors working together to deepen their understanding of the potential benefits of organized mining activities. In some of the examples cited above, the LSM operators do not formalize the arrangement and this has been part of the problem. In order for a particular arrangement to be sustained over a long period of time, it is worth formalizing as indicated by the former Chairman of the National Development Planning Commission. In such arrangement, LSM may opt to buy the gold produced or allow ASM operators to sell the gold to PMMC through licensed buyers. In the past three decades, arrangement that has been applied in gold mining sector allows ASM operators to directly sell to PMMC. In the diamond sector, however, the other arrangement where the LSM operator buys minerals (tributer system) has been successfully applied by erstwhile Ghana Consolidated Diamonds and the current firm operating the mines. In order for any of these arrangements to be effective and sustained beyond formalization, relevant state institutions such as the Minerals Commission and Environmental Protection Agency must be involved. Further, efforts by the Minerals Commission to provide viable lands to ASM operators must be enhanced and moved away from rhetoric as has largely been in the past to reduce the pressure on ceded lands.

(c) What is the nature of the current ASM value chain in Ghana and how can it be best regulated to ensure protection of worker’s rights and delivery of fair value to citizen traders and to the State?

18 Aubynn, A., 2009 “Sustainable solution or a marriage of inconvenience? The coexistence of large-scale mining and artisanal and small-scale mining on the Abosso Goldfields concession in Western Region”, Resource Policy, vol. 34, no. 1-2, pp 64-70

19 Okoh, G A, 2013 “Grievance and Conflict in Ghana’s gold mining industry: The case of Obuasi” Futures, no. 0

20 During the first National Mining Forum organized by the Minerals Commission in 2012, Mr. P. V. Obeng (then Chairman of the National Development Planning Commission) recommended that LSM operators must consider entering into a formal arrangement with ASM operators in lieu of part of their concession, either being ceded completely or given to ASM operators on a tributer system.
The ASM value chain in Ghana (similar to mining industry in general) has three main phases. They are exploratory phase, development and mining, and processing and/or marketing. The second and third phases generate significant economic activities that require proper regulation to ensure that rights are not infringed upon and all stakeholders to these activities are adequately compensated. The MC, EPA and PMMC currently play different roles in managing these two phases. There are also rules and regulations that must be enforced to protect and promote rights and fairness. In order for the ASM value chain to be better regulated to ensure that rights are protected and fairness promoted, then the failure of the current framework must be addressed. Widespread ignorance on the part of most participants in the value chain and high rate of unemployment in the country are two of the reasons accounting for the failure of the current framework. Lack of resources for state institutions and compromises made by state officials are also important reasons. In response to these must be increased education on worker’s rights and existing rules and regulations. Relevant state institutions must enforce applicable rules and regulations.

But one of the challenges facing ASM operators is their lack of marketing skills and the absence of organized markets for their products. Most operators end up being cheated by middle men who buy their output at unrealistic prices and in turn around and sell at high mark-ups. The PMMC must also play increased role in the marketing of ASM outputs. In the absence of organized markets, government will have difficulty enforcing regulations and certification schemes.

(d) What are the current impediments to enforcing globally accepted environmental (social and physical) management practices on Ghana’s ASM

Signatory to and ratification of relevant conventions is the first major impediment to enforcing relevant environmental management practices in Ghana’s ASM industry. And this is the case even in the larger mining industry. A case in point is the ILO Convention 176 (Safety and Health in Mines Convention). This applies to not only large-scale mines but also small-scale mines. In Africa only five countries have ratified the more than a decade-old convention. And this excludes Ghana. The case with the ECOWAS Mining Directive is not much different. Even though the government has gazetted the directive, no visible steps have been taken to ratify the directive or make relevant provisions such as Free and Prior Informed Consent applicable in the mining sector. Beyond signatory and ratification of relevant conventions are the general challenges to law enforcement in the country attributed earlier to factors such as ignorance, high rate of unemployment and compromises on the part of state institutions with the mandate to enforce laws.

6. Conclusion
Ghana’s ASM sector continues to remain very important to the developmental process in a number of ways: job and income creation, as well as sustainable extraction of mineral resources. Yet from looking for areas to work through to acquiring requisite documentation for mining, to sustainable mining, challenges and bottlenecks remain. The process of acquiring a license which ought to take three months take a year or more and is an issue frequently cited by ASM operators in explaining why so many people refuse to obtain a license before starting mining activities. And once ASM operator does

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21 Botswana, Morocco, South Africa, Zambia and Zimbabwe
not have a license state agencies responsible for ensuring sustainable ASM activities do not supervise them. The consequence has been there for everyone to see. Though several initiatives have been identified in response to the various challenges (including the introduction of interim license or permit, geological data collection to support site selection by ASM, and establishment of plant pool), the state of implementation has been very poor. The government is therefore being called upon as a matter of urgency to put in place a mechanism that involves all major stakeholders in the sector to fine-tune existing initiatives as part of reviewing the entire regime.

**Box 3: Can Ghana adopt some aspects of the Mining Governance Frameworks in Liberia, Sierra Leone and Ethiopia?**

Ghana’s governance framework for the ASM sector treats every ASM operator equally, irrespective of scale, technology being utilized and levels of output. This has been cited as partly responsible for the challenges facing the country’s ASM sector. Liberia’s 2000 Minerals and Mining Law distinguish between three classes of mining license (Class A, Class B and Class C). The Class C mining license is given to holders who shall conduct mining predominantly as small-scale operation for a period of one year, renewable for further terms and cover area not more than 25acres. Class B license is issued for a period of five years and mining may be conducted as industrial operation with additional obligations such as submission of production plan for approval. Class A license is issued for a period not exceeding 25 years and mining operations conducted under terms agreed in a Mineral Development Agreement (between the operator and the government). In Sierra Leone the 2009 Mines and Minerals Act separates artisanal miners from small-scale miners, with the size of an artisanal mining license area limited to half of a hectare whilst that of small-scale mining license ranges between one hectare and one hundred hectares. In terms of license duration, artisanal license is issued for a period of one year and renewable for up to three further periods not exceeding one year at a time. Small-scale license is issued for a period not exceeding three years and may be renewed for a further period not exceeding three years at a time. In Ethiopia, the 2010 Mining Proclamation defines ASM operations on the basis of levels of output and mechanization adopted. Artisanal license is issued for a period of three years and renewable for further three years whilst small-scale license is issued for a period of 10 years and renewable for five years.
Appendix: Survey Report

1. Production and Pricing

Most of the miners personally finance their operations (53%) whiles some solicit for funds from friends (41%) and only 5% relied on local banks for their operations. The responses revealed that it is not possible to operate as a small scale miner for twelve months within a year. About 53% of the respondents indicated that they operate between 8-12 months, 41% operated between 5-8 months and 6% operate less than a month within a year. This is mostly individuals with very limited financial resources. The relatively high price of gold suggests that, most of the respondents were mainly into gold production (89%) with some limited small scale miners (11%) in diamond production.

![Figure 1: Output Levels in a “Good Week” and a “Bad Week”](source: ACET Field Survey)

The Miners indicated various output levels based on average estimated output in “a good week” and “a bad week” as indicated in figure 1. The diamond producers revealed that, in a good week they produce about 20-50 carats of diamond and in a bad week they get about 3-10 carats of diamond. In terms of pricing, the majority 59% use the prices given by their local associations. Some are also able to bargain (18%) with the buyers using the world market price of precious metals as the benchmark price. Local Ghanaian buyers and the Precious Mineral Marketing have been the main buyers (41% and 59%).

With regards to further processing of the mineral output, 59% of the respondent were aware of some level of local processing and 41% were of the view that none of their output is processed locally. About 60% of the respondents were not aware of the entity that further processes their output but 30% indicated that they are aware of local goldsmiths that processes their output and 10% also indicated that local jewellers processes their output.

2. Employment

The miners employ a considerable number of workers for their operations on both permanent and temporal basis. Majority of the respondents indicated that, they employ over 10 permanent workers on a full time basis; 39% of the respondents had no temporary workers whiles 28% and 33% employed 5-10 and above 10 temporary workers respectively.

![Figure 4: Number of Workers](source: ACET Field Survey)
workers respectively.

The survey revealed limited women participation in small scale mining. The activities of women are mostly limited to cooking although there are some women who own small scale mining enterprises. 50% of the respondents indicated they employ between 1 and 5 women, 28% employ between 5 and 10, 11% of the respondents employ over 10 females and 11% also don't employ any female on their concessions. The respondents expressed mixed reaction when they were queried on the ease with which the workers could leave their enterprises. Accordingly, 35% of the respondents revealed it is very easy for the workers to quit, 29% indicated that it was easy, 6% were of the view that it’s hard to tell and 29% revealed it is not easy for workers to leave because of the lack of alternative livelihoods in the communities.

### 3. Registration and Licensing

The study captured 94% of the respondents as registered and 6% were not registered. All the gold producers indicated that they obtained their license from the Minerals Commission and the diamond producers obtained their permit from the land owners where they operate.

![Figure 6: License Duration](source: ACET Field Survey)

Few of the miners that have multiple small scale enterprises had licenses that spans over 5 years. The licensing process was a source of worry to the miners. They unanimously (83%) described the process as too long though a minority described the process as reasonable and very short.

### 4. Land tenure and Concession Issues

Access to land continues to be a source of worry to small scale mining activities. Seventeen percent and

![Figure 7: Next Renewal Date](source: ACET Field Survey)

50% of the respondents expressed dissatisfaction (as very difficult and not easy) on the high compensation demanded by land owners for lands for which they have licenses to mine on. Other respondents particularly the diamond miners at Akwatia and Gold Miners that had their own lands or operated on a family land revealed the land tenure system does not give them problems in their operation. They

![Land Tenure System and Operations](source: ACET Field Survey)
accordingly revealed the process as easy (28%) and very easy (6%).

The study also observed that most of the miners (77%) had between 11 and 25 acres of mining concession\textsuperscript{22} for their operations. Twelve percent of the respondents had concessions below 5 acres. These were primarily diamond miners in Akwatia that were given permit by a larger concession holder on a piecemeal basis through their tributary sitem. Lastly 6% also had concessions between 26-50 acres. This is made up of miners that have different Small Scale Mining Enterprises. It must be noted that because all small scale mining enterprises are assigned 25 acres as the maximum allowable concession size, the miners have developed a strategy to register a new company once they exhaust the minerals in their original concessions. Further conversation about the size of the concessions revealed that, 47% were just content with the size of their concessions. But 24% and 29% indicated that it was small and too small respectively.

\textsuperscript{22} The maximum allowable concession size for one small scale mining permit is 25 acres.