WORKING TOGETHER
How large-scale mining can engage with artisanal and small-scale miners
WORKING TOGETHER

How large-scale mining can engage with artisanal and small-scale miners
For many people the term “mining” is associated with large-scale operations based on state of the art technology. However, artisanal and small-scale mining activities (ASM), which use techniques that have changed little since ancient times, continue to provide a source of direct or indirect employment to over 100 million people. There is no doubt that ASM has a legitimate and significant role to play in the social and economic development of many countries.

ASM and large-scale mining (LSM) often operate side by side. Large mining companies have been engaging with artisanal miners and their dependants through general community development programs for some time. However, the particular sustainable development challenges of ASM – including security, human rights and relocation programs – need specific consideration.

The fact that much of ASM activity occurs outside regulatory frameworks – whether illegal or not – can also present significant challenges for companies and regulators. There can be significant tension between ASM miners and their own governments – with companies caught in the middle. In recent years there has been increasing interaction between artisanal operators and companies that has not always been positive.

This document has evolved out of a growing sense that more mutually beneficial engagement between mining companies and ASM operators is needed. For this to happen, “good practices” need further definition and further sharing across companies.

In this spirit, the ASM-LSM guidance note brings together for the first time a number of approaches and tools for companies to engage with ASM. It is put forward as a pilot, fully recognizing that further testing and gathering of good practices with companies is needed – activities that will be taking place over the next eighteen months.

This guidance was developed through a partnership between Communities and Small-Scale Mining (CASM), the International Finance Corporation’s Oil, Gas and Mining Sustainable Community Development Fund (IFC CommDev) and the International Council on Mining and Metals (ICMM). The close collaboration of these three organizations has allowed input from a range of stakeholders, resulting in a richer document that presents a balance of different perspectives.
The relationship between large-scale mining (LSM) companies and the artisanal and small-scale mining (ASM) sector is often poorly understood and has been troubled by a general mismatch of expectations, which has led to mistrust and conflict in some cases. In the absence of effective engagement, LSM companies can find themselves facing delays in project development or impacts on production as they respond to ASM concerns or actions.

ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGL</td>
<td>Abosso Gold Fields Ltd</td>
</tr>
<tr>
<td>ASM</td>
<td>artisanal and small-scale mining</td>
</tr>
<tr>
<td>CASM</td>
<td>Communities and Small-Scale Mining</td>
</tr>
<tr>
<td>DRC</td>
<td>Democratic Republic of the Congo</td>
</tr>
<tr>
<td>EBRD</td>
<td>European Board for Reconstruction and Development</td>
</tr>
<tr>
<td>EITI</td>
<td>Extractive Industries Transparency Initiative</td>
</tr>
<tr>
<td>GMP</td>
<td>Global Mercury Project</td>
</tr>
<tr>
<td>GRI</td>
<td>Global Reporting Initiative</td>
</tr>
<tr>
<td>ICMM</td>
<td>International Council on Mining and Metals</td>
</tr>
<tr>
<td>IFC CommDev</td>
<td>International Finance Corporation’s Oil, Gas and Mining Sustainable Community Development Fund</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labour Organization</td>
</tr>
<tr>
<td>IPEC</td>
<td>International Programme for the Elimination of Child Labour</td>
</tr>
<tr>
<td>KEM</td>
<td>Kelian Equatorial Mining</td>
</tr>
<tr>
<td>KPCS</td>
<td>Kimberley Process Certification Scheme</td>
</tr>
<tr>
<td>LPI</td>
<td>Landowner Partnership Initiative</td>
</tr>
<tr>
<td>LSM</td>
<td>large-scale mining</td>
</tr>
<tr>
<td>MDGs</td>
<td>Millenium Development Goals</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>monitoring and evaluation</td>
</tr>
<tr>
<td>NGO</td>
<td>non-governmental organization</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>PJV</td>
<td>Porgera Joint Venture</td>
</tr>
<tr>
<td>RAP</td>
<td>resettlement action plans</td>
</tr>
<tr>
<td>RJC</td>
<td>Responsible Jewellery Council</td>
</tr>
<tr>
<td>SAESSCAM</td>
<td>Service d’assistance et d’encadrement du small-scale mining</td>
</tr>
<tr>
<td>SROI</td>
<td>Social Return on Investment</td>
</tr>
<tr>
<td>SSMP</td>
<td>small-scale mining permits</td>
</tr>
<tr>
<td>UNEP</td>
<td>United Nations Environment Programme</td>
</tr>
</tbody>
</table>
ASM activities occupy a spectrum from small, informal subsistence activities through to organized formal small commercial mining activities. This guidance document addresses the spectrum of ASM activities, although most examples are specifically related to artisanal-scale activities. Likewise, LSM covers a wide variety of enterprise, and what is deemed small to medium-scale mining in one country may be considered large-scale mining in another.

This document is designed to help LSM companies identify the nature of ASM activities being undertaken in their operating regions and subsequently to use this understanding to identify appropriate models for engagement with artisanal and small-scale miners. It is intended for LSM companies engaging with ASM miners; as such, while governments and ASM miners seeking guidance are encouraged to use the guidance document, they may find an LSM focus in the approach. Case studies have been used to demonstrate experience and approaches adopted in differing contexts, from exploration agreements in the Philippines through to resettlement programs in the Democratic Republic of the Congo (DRC).

The focus of this document is on how to appropriately manage relationships with ASM and create a secure environment for company operations and surrounding ASM. Many of the tools and approaches defined in this guidance document support collaboration and promotion of ASM. In some cases, however, there are factors that an LSM company cannot manage in isolation, such as organized crime, forced labour or violence, and these must first be addressed by relevant stakeholders before broader co-habitation can be achieved.

Recognizing this reality, the guidance document also covers the management of security and conflict in LSM-ASM relationships.

An international approach has been taken for this document. ASM considerations vary widely across regions, and recognition of a regional context should come into play when applying the suggested approaches or tools.

This guidance document has two sections, the first of which provides an overview of ASM and the business case for engagement between ASM and LSM. Through understanding the type of ASM activity occurring near their mining concessions and the drivers behind it, LSM companies can be in a position to determine how to use the tools and approaches for engagement described in the second section. While there is no single panacea for managing challenging ASM-LSM relationships, this document provides what is considered the best guidance available in this arena.

The International Council on Mining and Metals (ICMM), the International Finance Corporation’s Oil, Gas and Mining Sustainable Community Development Fund (IFC CommDev) and Communities and Small-Scale Mining (CASM) have partnered to develop this guidance document, reflecting the need for a multi-stakeholder approach to the topic and the relevance of LSM and ASM engagement to meeting business and development goals.
OVERVIEW OF ARTISANAL AND SMALL-SCALE MINING

Figure 1: Artisanal and Small-Scale Miners Around the World

Source: Reproduced from CASM website, http://www.artisanalmining.org
Large-scale mining company encounters with artisanal and small-scale mining are increasing. This is due to the growth of ASM as well as the fact that companies are increasingly operating in remote regions of developing countries, where ASM is more likely to be present.

Globally, ASM employs many millions of people, with artisanal and small-scale gold mining employing 15 million people alone. It is believed to provide a livelihood for over 100 million, almost all of whom live in developing countries. Interaction between LSM and ASM can take a variety of forms, from violent confrontation requiring security protocols to protect assets through to co-operative support between the two operators, targeting social development and poverty reduction through mineral development. The optimal engagement approach between LSM and ASM is entirely dependent upon the operational setting of the business, the social context in which it operates and the business drivers for both parties to engage.

There is no formal definition for ASM, but it is broadly understood to refer to mining activities that are labour-intensive and capital-, mechanization- and technology-poor. Attempts to define ASM activities on the basis of human resources, production, capital and revenue have all proved impossible due to the wide variety of minerals mined and the heterogeneity within the sector.

ASM incorporates both formal and informal activities, where informal activities also include those that operate outside the legal framework of the host country (often referred to as “illegal” mining).

ASM plays a key role in the mineral economy, where it is estimated to contribute over one-sixth of global non-fuel mineral output. Figure 1 highlights the scale of ASM activity around the world.

ASM is pivotal in alleviating poverty, increasing community capital and diversifying the local economy in many rural regions of the developing world, primarily because it is viable in areas with minimal infrastructure where other industries could not function.

The relatively high wages in ASM, compared with agriculture and construction, act as a lure for financial and social independence in many communities. ASM also often provides employment for retrenched workers from large-scale mines. It is estimated that women account for as much as a third of the sector and are involved in all activities associated with ASM in various parts of the world.

1 Telmer, 2008.
3 A mapping exercise for ASM miners around the world can be found at http://www.artisanalmining.org/index.cfm?page=page_disp&pid=8238.
5 Hilson, 2002.
6 Ibid.
While ASM encompasses a broad range of activities, most artisanal and small-scale miners live in poor rural areas of developing countries, without formal training in mining and often with low levels of education and relatively high rates of illiteracy. ASM can increase local purchasing power, increase demand for locally produced goods, contribute to foreign exchange earnings, reduce rural-urban migration and allow exploitation of mineral deposits unviable for larger operators. It has the potential to be a viable economic sector for developing countries. It also brings diversity into rural economies by stimulating other economic sectors such as the communications and manufacturing sectors.

Figure 2: The “Vicious Cycle” of ASM

Low returns
Low production
Low potential savings
Inability to meet HSE standards
Inability to invest in tools and equipment
Low revenue from mining

Source: Adapted from ILO, 1999

This positive contribution towards poverty reduction and economic development can also be marred, however, by poor environmental practices, low levels of health and safety in operations, the spread of communicable disease, heightened security risks to neighbouring communities and operations, child and forced labour, inequitable distribution of benefits in communities and an illegal trade in minerals that results in no generation of tax revenue and hence limited delivery of government services.

1.1 Types of Artisanal and Small-Scale Mining

Artisanal and small-scale mining is a widely varied sector. Various attempts have been made to categorize types of small-scale mining, with “seasonal, permanent, shock-push and rush artisanal and small-scale mining” as defined by Weber-Fahr et al. (2001) being the most widely quoted. In this guidance document, different modalities of small-scale mining, building upon those defined by Weber-Fahr, will be used. While the types of ASM outlined here provide broad categories for the activity, it should be noted that in most cases a combination of these categories will occur in any given artisanal and small-scale mining location. Each of these types of ASM can be legal, informal or illegal. In identifying how to engage with ASM miners, companies should first identify the general form of ASM activity they are engaging with and afterwards give consideration to the legality of the activities. Through understanding the nature and the drivers of any ASM activity near an LSM operation, LSM companies are better placed to determine how to use the tools and approaches provided in this guidance document.

---

The categories of ASM are as follows:

- **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.

- **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.

In addition to these five types of ASM, ASM activity also occurs in phases: an initial rush, steady state operation and decline. Engagement approaches appropriate to working with ASM miners depend on the phase of activity being encountered, with engagement being most challenging during the rush phase.

Much of ASM in the world is deemed illegal and operates informally, either in the sense that it is carried out without ownership of the mineral title or the product is sold through the black market, thus evading national tax regimes. The issue of the legality of ASM has received considerable attention and focus in the past two decades. Many countries do not recognize this form of mining within their mineral codes and, as such, ASM miners by definition work outside the legal framework of the country, such as in Burkina Faso. In other settings, ASM is formalized and permits/titles are awarded by the state, but the costs, resources and time involved in gaining a permit make it difficult for often illiterate miners to register their claims. In many cases, ASM miners have paid someone a fee for a licence or the right to work, even where the legal system does not recognize such permits or rights. This can result in ASM miners trespassing on LSM concessions.
1 OVERVIEW OF ARTISANAL AND SMALL-SCALE MINING

This guidance document makes the distinction between criminal activities occurring on the periphery of ASM activity and the legality or informality of the ASM mining activity: criminal activities can occur in any economic sector, regardless of legal status, and as such need to be considered independently from the nature of the ASM activity.

The guidance document uses the following definitions of legal, informal and illegal ASM, trespassing and criminal activity:

- **Legal ASM**
  Country legislation will in most cases determine the legality or otherwise of any mining activity. Legal ASM is recognized through the provision of artisanal or small-scale mining permits.

- **Informal ASM**
  This is defined as mining undertaken outside the legal framework of the country (also referred to as extra-legal activities; see Siegel and Viega, 2009). Informal mining may still apply a system of recognized property rights, but these are not recognized within the country’s national laws. Where informal mining involves targeted illegal acts, such as criminal activities, this is referred to as “illicit” informal mining.

- **Illegal ASM**
  As noted, country legislation will in most cases determine the legality or otherwise of any mining activity. Illegal ASM is defined as ASM undertaken without government approval. This includes ASM activities on a concession where exclusive mining rights have been ceded to an LSM company by the government.

- **Trespassing**
  This is defined as any individual in a restricted area or on private property without permission. Mining concessions are large and often have many communities living on them, hence an individual should not be considered to be trespassing by virtue of being on a mining concession per se. It is the responsibility of the mining company in collaboration with the government to demarcate and communicate restricted areas to neighbouring communities and ASM miners.

- **Criminal Activity**
  This is any activity deemed illegal under the laws of the country, which may include theft, sabotage, vandalism of company property and assault of company staff and community members. Criminal activities can occur (and unfortunately do occur) in any economic sector and independently of being artisanal, legal, illegal or even large-scale.

In working with ASM miners, the key to a good relationship lies in understanding the drivers for the individuals to conduct the activity; only when this is understood does legality become relevant.

1.2 Key Stakeholders in LSM-ASM Interaction

A number of key stakeholders are associated with ASM activity and its relationship to LSM companies, including government authorities (national and local), national regulating agencies for the mining industry, international pressure groups, non-governmental organizations (NGOs), donor organizations, international governmental agencies and host communities. Governments are responsible for the maintenance of law and order; as such, their role in the management of criminal activity, in particular, associated with ASM activity is critical. NGOs and donor organizations are increasingly playing a role in building capacity and developing alternative livelihoods in ASM communities and in many cases provide good partnering opportunities for LSM companies.

Engagement with ASM stakeholders should start with exploration and be maintained throughout operation and into the planning for mine closure.
1.3 Mapping of Key Issues Affecting ASM

The appropriate form of engagement with ASM is also complicated by a number of specific concerns and issues surrounding ASM activities. Like any other business, ASM activities can only be undertaken where the operating costs of finding, mining, processing and selling the mineral found are less than the price received for the product. Legal, health, safety and environmental considerations have often been seen as a cost to the business, thus requiring a higher grade or a greater volume of mineralization to be mined to return a profit. “Ore” is that mineralization that can be economically mined. The definition of ore is thus different for each operation, and in many cases, but not all, ASM can define lower grades of material as ore by having limited fixed costs and adapting their take-home incomes accordingly. Lower labour costs and avoidance of the health, safety, environmental and legal costs associated with LSM and with good practice also contribute to the lower grades some ASM miners exploit.

Identifying the issues that affect or reflect the ASM activities in a specific location will help inform LSM of the types of engagement strategy that will deliver the best results in that setting. At least six issues need to be considered: scale, environmental damage and related health impacts, occupational health and safety, security threats, child labour and gender equity.

1.3.1 Scale

ASM encompasses activities involving as few as two or three part-time miners working a region and as many as tens of thousands of miners at a site working shifts to produce as much ore as possible. Engagement mechanisms for one scale of activity will likely be unsuitable for the other; hence different approaches are required. In larger ASM operations, a hierarchy often exists within the workers, changing the dynamic for engagement further.

1.3.2 Environmental Damage and Related Health Impacts

River pollution through increased sedimentation, erosion, acid rock drainage, air pollution from roasting of ores, deforestation, use of mercury and other chemicals, and other poor environmental practices are often associated with ASM, in particular with gold mining. ASM can modify aquatic systems through silt accumulation or constriction of water reservoirs. The combination of additional siltation and increased exposed areas can lead to flooding and acid rock drainage or the production of acid-forming material. Environmental damage is often a by-product of ASM, as miners commonly lack the resources, knowledge and/or the requirement to operate in an environmentally sensitive manner. Due to the informal nature of much ASM activity, regulators have little ability to influence environmental performance.

Poor environmental performance also has knock-on effects for health – for instance, flooding of abandoned pits or lands adjacent to waterways can increase the net area of standing water and thereby contribute to increased incidence of malaria and other mosquito-transmitted diseases. Poor sanitation in camps and squatter settlements can also lead to water contamination, resulting in the spread of diseases such as cholera and typhoid.

The environmental and health impacts of greatest concern around ASM are caused by the use of mercury by gold miners. Mercury is added to ground ore, forming an amalgam that can be easily separated. The amalgam is then heated, burnt or dissolved to remove the mercury and leave a gold residue. The United Nations Industrial Development Organization estimates that 1,000 tons of mercury are released into the environment each year from this sector, a third of which are atmospheric emissions. In addition, large quantities of mercury-laden wastes can remain on the land and in water bodies at mining sites.

---

9 Telmer et al., 2006.
11 MMSD, 2002. See also Telmer and Veiga, 2009.
OVERVIEW OF ARTISANAL AND SMALL-SCALE MINING

The mercury used has significant environmental and public health impacts. In many areas miners inhale mercury vapour during the heating process, with detrimental impacts to health. Sometimes there are simple alternative and safer methods available to miners to process gold, but mercury is so often used by gold ASM communities for a number of reasons. These include its ease of use, the independence it affords the miner (one person can use it effectively), high effectiveness under field conditions, accessibility, low cost, facilitation of precise transactions, generation of quick capital (one day for processing), its use to divide profits, lack of awareness of its risks and (for indentured miners) lack of choice of an alternative.

Many initiatives have been established to address the use of mercury in ASM. These include the Global Mercury Partnership of the United Nations Environment Programme (UNEP) and the Global Mercury Project (GMP). The overall goal of the UNEP Global Mercury Partnership is to protect human health and the global environment from the release of mercury and its compounds by minimizing and, where feasible, ultimately eliminating global anthropogenic mercury releases to air, water and land. This is being achieved through supporting a number of partnership areas, including mercury management in artisanal and small-scale gold mining.

The GMP was established in 2002 and is working in six countries – Zimbabwe, Lao PDR, Tanzania, Sudan, Brazil and Indonesia – introducing cleaner technologies, training miners, developing regulatory mechanisms, strengthening governance and building the capacity of local laboratories and health authorities to monitor mercury pollution. The GMP is jointly supported by the Global Environment Facility and the United Nations Industrial Development Organization.

In February 2009, agreement was reached to develop a legally binding treaty on mercury through the UNEP Governing Council, with one of the six targeted areas within the treaty focusing on mercury use in ASM. As mercury distribution is restricted, miners may turn increasingly to the use of cyanide, which will generate new environmental concerns.

Technical solutions to this challenge have traditionally relied on the distribution of mercury retort stands, but new technologies such as the iGoli mercury-free gold extraction process and the “Sika Bukiya” mercury-free furnace developed in Ghana are also becoming more widespread.

1.3.3 Occupational Health and Safety

The fatality rates in ASM are up to 90 times that of LSM in industrialized countries (Hinton, 2007). The high levels of health and safety risks for ASM miners have several causes: the informal and unregulated nature of much ASM activity means it operates outside the scope of legislation or enforcement on health and safety issues; the costs of protective equipment, from helmets and dust masks through to guarding shields in front of operating blades, may be cost-prohibitive for ASM miners; technical expertise in stress analysis in underground workings is typically absent, leading to a higher incidence of unpredicted rock falls; and even where miners have introduced more-mechanized equipment and techniques, it is common for complementary safety measures to be overlooked.

ASM is also often associated with negative health impacts, including substance abuse, alcoholism, increased HIV/AIDS and sexually transmitted disease prevalence due to large predominantly male squatter camps in the case of “influx” ASM, and occupational health impacts due to poor working conditions and limited resources. Occupational health problems can include silicosis, noise-induced hearing loss and muscular strains from heavy lifting.
1.3.4 Security Threats

The security situation around ASM activities can be highly unstable, particularly in the cases of "influx" and "shock" ASM. In these situations, the rapid increase in population often overpowers existing legal or traditional security structures in communities. It is common for prostitution and theft of minerals to accompany the development of large mining camps. The combination of different types of ASM activity (as described earlier) can make it challenging to identify leaders and representatives for each of the groups with whom communities, law enforcement and LSM companies can engage.

The security situation is influenced by the value of the mineral being mined, its transportability and the involvement of commercial buyers. In some cases, the military, paramilitary groups or other armed forces become involved in ASM activities; mined materials may be traded for weapons and supplies, or miners are simply required to pay a portion of the returns from mined materials to the military as an informal tax. In other situations, the wealth associated with high-value minerals promotes the use of force within ASM groups to protect their individual workings both from competitor ASM groups and external stakeholders, such as LSM companies. Where disputes occur over the ownership and access rights for minerals, security infringements – ranging from petty theft and nuisance vandalism to armed confrontation on the site of mineral workings – can occur.

_A mercury pour, Indonesia, 2009_

Photo credit: K. Telmer
1.3.5 Child Labour

ASM also often involves considerable numbers of children. Children typically work in mines to help their parents and to supplement family income in order to buy basic food and clothing items.\(^{18}\) Child labour is typically closely linked to poverty, and while the 1999 International Labour Organization (ILO) Convention 182 identified child labour in mines as one of the worst forms of child labour, it is unlikely to cease unless access to education improves and alternative opportunities for income generation and poverty reduction exist in impoverished mineral-rich locations.

1.3.6 Gender Equity

Women are estimated to account for more than 30 per cent of the world’s artisanal miners, and in Africa this figure is closer to 50–60 per cent.\(^{19}\) Women’s direct responsibilities in ASM range from processing activities such as crushing, grinding, sieving, washing and panning to amalgamation in gold mining. It is less common for women to own mining concessions or to act as mine operators, buyers or sellers of minerals or equipment operators. Women typically function in multiple capacities, with both direct and indirect roles in ASM, such as panning for gold and working as a cook or sex worker.\(^{20}\) Gender equity and the under-representation of women in ASM organizational structures remains challenging.

The role of women in ASM is most evident in traditional, seasonal and permanent co-habitation ASM. As ASM sites expand, the role of women commonly tends to diminish. Experience in the Democratic Republic of the Congo indicates that where women have the opportunity to undertake different livelihood activities, this reduces the number of children working in ASM mines.\(^{21}\)

1.4 Business Case for Engagement

The motivation for LSM engagement with ASM will vary in almost all operating circumstances, but it is likely to fall into at least one of the following broad categories: risk minimization and security, managing reputational risk, maximization of community development opportunities, pressure for corporate accountability and maximization of company benefit such as exploration benefits and improved mine closure planning. While the topic is not covered in this document, for LSM engagement with ASM to be successful, consideration also needs to be given to the business case for ASM engagement with LSM.

1.4.1 Risk Minimization and Security

Incursions onto LSM mining leases, increased crime in communities surrounding LSM activities as ASM grows, staff time spent managing conflict, safety hazards and accidents related to ASM activities, work stoppages, and impacts on resettlement and community development programs – all these have costs for LSM companies and have led companies to engage with ASM miners to minimize the risks associated with ASM in their operating environments. Where relations between LSM and ASM activity are tense, engagement with ASM can be a key ingredient in risk mitigation strategies for companies.

Where ASM and LSM activities occur in close physical proximity, ASM can generate health and safety concerns for LSM companies. ASM tunnels and shafts in LSM open cut pits can cause unpredicted ground collapses and alter the effects of blasting. Where ASM miners use the same underground workings as LSM companies, the safety of all workers can be compromised by a lack of understanding of safe operating procedure, such as not smoking in gaseous or confined areas, or by the failure from either LSM or ASM to adequately clear an area before using explosives. In these situations, technical assistance programs improving safety practices may provide an ideal opportunity to minimize risk for LSM companies while also providing a platform for engagement between LSM and ASM.

\(^{18}\) MMSD, 2002.
\(^{19}\) Hinton, Veiga and Beinhof, 2003.
\(^{20}\) Ibid.
\(^{21}\) Perks, 2009.
Young workers, Ghana, 2009

Photo credit: K. Hayes

Women’s business, Democratic Republic of the Congo, 2008

Photo credit: K. Hayes
1 OVERVIEW OF ARTISANAL AND SMALL-SCALE MINING

Increased security in the form of enhanced security forces (both company employed and those provided by the state to protect national assets), patrolled fences and the provision of weapons to security forces have all been used to control these risks. Used in isolation, however, these methods have rarely yielded positive results. Without engaging ASM communities and empowering local communities to manage immigration if ASM miners are not from local communities, the motivations for security threats can be misinterpreted, and problems can escalate rapidly. Once security threats are minimized, opportunities for more positive engagement can emerge.

1.4.2 Managing Reputational Risk

Unregulated ASM can pose significant reputational risks for LSM companies. Incidents related to child labour, environmental damage, illegal activities and human rights abuses may have nothing to do directly with the mining company but take place on or in the vicinity of the LSM concession. These incidents can quickly be picked up and broadcast by pressure groups, and this can affect corporate reputations.

Environmental damage derived from ASM activities can be mistakenly attributed to LSM companies, potentially resulting in reputational damage and in some cases in environmental liabilities being associated with the LSM company, reducing support for the LSM company within the local community.

Reputational risks related to health and safety concerns are also often the catalyst for voluntary engagement with ASM miners in LSM projects. As noted earlier, fatalities are 90 times more common in ASM activities than in LSM. Programs to improve access to personal protective equipment, assist in rescue efforts when rock failures occur and promote change in the mining and refining methods to reduce environmental impacts are just some of the initiatives that LSM companies have undertaken to improve the performance of ASM mining and protect their corporate reputations at the same time.

1.4.3 Maximizing Community Development Opportunities

ASM miners, their (legitimate) representatives and communities are at the heart of any engagement strategy. Artisanal miners can often be a part of the local community and drivers of the local economy, with families who depend on the income earned from mining. Even where ASM miners are not from the host communities, recognition of the community development needs of the miners can minimize potential conflicts between communities and the miners over community development resource allocations.

As such, ASM engagement is an important aspect of a company’s community development strategy. Community development is in effect a reciprocal process – by helping communities to develop themselves in a sustainable manner, a mining company is simultaneously helping its own business to succeed. The connection between poverty alleviation and ASM can mean that social, even philanthropic, investment in artisanal mining activities in the mine-impacted region can effectively support local community development, and the economic dependence on large-scale mining can be mitigated.

1.4.4 Pressure for Voluntary Corporate Commitments

The growing number of corporate accountability campaigns and voluntary initiatives related to sustainable development may motivate companies to take a more proactive stance on ASM engagement. Large companies are often signatories to international codes of conduct and operating standards on the environment, human rights, transparency and corporate responsibility. As an example, the International Council on Mining and Metals in its position on mercury commits corporate member companies to “participate in government-led partnerships to transfer low- to no-mercury technologies into the ASM sector in locations where ICMM companies have operations such that livelihoods are enhanced through increased productivity and reduced impacts to human health”.

ASM high-grading inside LSM open pit, Indonesia, 2009

Photo credit: K. Telmer
1.4.5 Maximizing Company Benefit

Companies can directly benefit from engagement with ASM in a number of additional ways.

- **Exploration Benefit**
  While the legal frameworks in many countries support the exploration and development rights granted to LSM companies, over and above any activity undertaken by ASM, the situation on the ground often presents a different reality, with geologists trying to evaluate the mineral potential of a region in among ASM activity. This can work to the benefit of geologists, allowing superior assessment of mineral potential than mapping alone would provide, and a number of companies have used ASM activity as part of their target selection criteria for exploration. Seeking to explore in ASM areas can also be made challenging by the difficulties in gaining access and by potentially hostile relationships with ASM miners.

Developing a relationship with the ASM workers or the ASM hierarchy in this setting can be critical to gaining and retaining access to exploration licences and a local social licence to operate.

- **Mine Closure Planning**
  In many precious metal deposits, in-migration of new artisanal miners or expansion of existing artisanal activities is likely to occur when a mine closes. Miners may rework tailings that have been left behind, work areas of lower grade that were deemed uneconomical for the large-scale mining operation or work river streams that contain alluvial mineralization downstream of the deposit. Through engaging with ASM miners prior to closure and involving them in the closure planning process, innovative approaches to rehabilitation that benefit both the legacy of the LSM company and the livelihoods of ASM miners can be identified.
1.5 Guiding Principles, Conventions and Codes

The legal framework guiding ASM and the interaction between ASM and LSM varies significantly from country to country. There is no international legal framework specific to ASM, but there are a number of elements of international conventions and codes that are highly relevant to the operation of ASM mines. While in many cases these codes and conventions contain principles best implemented by the ASM miners themselves, companies working with ASM miners need to be aware of the context in which they operate. In some cases, the codes apply directly to companies.

Relevant codes and conventions include:

- the ILO International Programme for the Elimination of Child Labour (IPEC) and the associated ILO 182 Worst Forms of Child Labour Convention;
- the Voluntary Principles on Human Rights and Security;
- the Global Compact; and
- the ILO Declaration on Fundamental Principles and Human Rights at Work.

In addition to these broad conventions and codes, a number of mining industry initiatives, performance standards for multinational companies and industry codes are relevant to the interaction between LSM and ASM. A description of these codes, conventions, initiatives and standards is included as Appendix 2. While not all of these refer to artisanal mining specifically, they all provide guidance on social, environmental and economic conditions around the ASM sector. An overview of the relevant aspects of these codes and standards is provided in Table 1.

### Table 1: Codes, Conventions, Standards and Guidelines and ASM

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ASM (specific mention)</td>
<td>✔ ✔ ✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Human rights and security</td>
<td>✔ ✔ ✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Environmental</td>
<td>✔ ✔ ✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Health and safety</td>
<td>✔ ✔ ✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Child labour</td>
<td>✔ ✔ ✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Gender</td>
<td>✔ ✔ ✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Resettlement and relocation</td>
<td>✔ ✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Transparency of payments, anti-corruption</td>
<td>✔ ✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>and good governance</td>
<td>✔ ✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Community development and engagement</td>
<td>✔ ✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

Source: Adapted from Wardell Armstrong, 2007
OVERVIEW OF ARTISANAL AND SMALL-SCALE MINING

Miner Coming Home from Work, Siguiri, Guinea, 2007

Photo credit: E. Wall
Identifying the appropriate mode of engagement between ASM and LSM, and the approaches and tools to assist that engagement, is best achieved once the nature of the ASM and the desired relationship is determined. This guidance document promotes proactive engagement between the two sectors, and the approaches and tools outlined in the following sections are intended to achieve mutual benefit for both parties.

Before identifying the options for engagement, it is first necessary to understand the type of ASM activity being undertaken.

As noted earlier, there are five different forms: traditional, seasonal, permanent co-habitation, shock and influx ASM. Each of these can be legal or illegal or exist in the informal sector. In identifying how to engage with ASM miners, and which approaches and tools to apply, companies should first identify the general form of ASM activity they are engaging with, and afterwards give consideration to the legality of the activities. The decision tree in Figure 3 can be used as a summary of the five forms of ASM, as described in Section 1.
Once companies have identified the general form or forms of ASM activity they are seeking to engage with, a series of approaches and tools should be considered to improve that engagement. (See Table 2.) Many of the approaches and tools presented in this section will be familiar to the large-scale mining audience, and a number have been presented in previous guidance documents.

The tools and approaches presented here are not ranked in order of merit, as the priorities and associated merit will depend on the specific ASM-LSM operational situation, as identified during the diagnostic process (see Tool 2.1).

Figure 4 considers the generic applicability of the tools and approaches against each stage of the LSM life cycle. Each tool and approach is listed only once against the first stage of the LSM life cycle where it is likely to be applicable:

**Figure 4: Anticipated Point of First Applicability of Tools and Approaches in LSM Life cycle**

- **Project Concept/Exploration**
  - Stakeholder Engagement

- **Feasibility Studies**
  - ASM Baseline Survey/Socio-Economic Assessment
  - Resettlement Action Plan for ASM Miners
  - Alternative Livelihood Programs

- **Construction**
  - Community Development Using Participatory Planning Methods
  - Technical Assistance Programs
  - Regularization/Formalization
  - Organization
  - Conflict Resolution
  - Managing Security to Respect Human Rights – Voluntary Principles

- **Operation**
  - Workforce Awareness – Contractor Inductions
  - Employment of ASM Workers
  - Establishment of an ASM Department
  - Segregation of Mineral Concession
  - Purchasing Programs for ASM Mineral Products
  - Mine Closure Planning

- **Decommissioning and Closure**
  - Implementation of mine closure plans
Each approach and tool has been developed in a stand-alone fashion to make it simpler for practitioners to progress directly to the intervention most relevant to their needs and situation.

Table 2 provides an indication of potential applications for the tools and approaches defined in this guidance document; however, applicability should be revisited in each situation.

<table>
<thead>
<tr>
<th>APPROACHES AND TOOLS</th>
<th>Traditional ASM</th>
<th>Seasonal ASM</th>
<th>Permanent Co-habitation</th>
<th>Shock ASM</th>
<th>Influx ASM</th>
<th>Illegal/I illicit ASM</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASM Baseline Survey</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stakeholder Engagement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community Development Programs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical Assistance Programs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Formalization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternative Livelihood Programs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resettlement and Relocation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchasing Programs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment of ASM Workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contractor Inductions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Segregation of Mineral Concession</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managing Security</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflict Resolution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASM Dept on LSM Minesite</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closure Planning</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitoring and Evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

23 Cells shaded in bright purple are assumed to be applicable for the majority of cases, while those in lighter shading need to be considered in each specific circumstance.

24 Any of the five types of ASM can be “illegal”. “Illegal ASM” is included as a category in this table to indicate when tools should or should not be considered in different legal settings.
2 DIAGNOSTICS, APPROACHES AND TOOLS

2.1 ASM BASELINE SURVEY/SOCIO-ECONOMIC ASSESSMENT

The objective of the ASM socio-economic assessment is to gather information on the ASM activities occurring near the planned/existing operations of a mine. This information will be used to inform the engagement approach adopted by the LSM company with artisanal and small-scale miners. It will specifically address the following considerations:

- The type of ASM activities being undertaken (traditional, seasonal, permanent co-habitation, shock or influx), the legality of the activity and the minerals being mined;

- The commercial aspects of the ASM activities – where is the mineral being sold and to whom;

- The number of miners and dependants engaged in these activities;

- The role of these activities in the economic livelihood within surrounding communities;

- The environmental, social, health and safety implications of the ASM activities;

- Leaders within the ASM communities with whom the company can engage in the future; and

- Key roles within the ASM community.

PURPOSE

For companies to identify the appropriate method of engagement with ASM miners, they must first understand the type of ASM activity they are engaging with. This tool will help companies undertake that assessment. Once the type of ASM is understood, companies will be able to define a management approach applicable to their specific needs and situation.

WHEN TO USE THIS TOOL

All LSM companies seeking to work with ASM should apply this tool. The assessment can address current ASM activities, those that have occurred in the region in the recent past and predictions of future ASM activities depending on the product type being explored for or mined in the location. It will include consideration of the characteristics of ASM in the region and more broadly across the country or countries, depending on the location.

HOW TO USE THIS TOOL

The specific methodology for conducting an ASM socio-economic assessment will need to reflect the conditions at the location of the planned or existing large-scale mining operation. The following methodology is proposed as a starting point for adaptation to local settings.
Engage with the community development, security and exploration/mining teams to undertake an initial internal review of the ASM activities. The following questions could be considered:

- Was ASM activity present before the commencement of the exploration/mining activity?
- Is the ASM activity escalating, declining or stable?
- Has the company engaged with ASM miners to date? On what basis (e.g., security concerns, loss prevention, community development programs, stakeholder engagement programs)?
- Does the exploration/mining team know the grade of the mineralization being mined by the ASM miners? Have the ASM reserves been estimated, and how long can ASM activity continue?
- Does the community development team have a sense of the community involvement in the ASM activity? Are the miners from the region, or have they migrated to the area?
- Are the drivers for ASM well understood in the area – e.g., is there a tradition of mining in the local population, are high metal prices prompting an expansion of the ASM activity or has worsening poverty triggered a greater reliance on ASM mining?
- What is the approximate size of the primary and secondary economies associated with ASM activities?
- What are the obvious risks to the company, and what are the drivers for engagement with ASM?
- What are the obvious risks to the local community?
- What are the obvious risks to the ASM miners from their current practices?
- What are the drivers for ASM miners to engage with LSM?

This initial review will highlight some of the key gaps that need to be addressed by experts through the socio-economic baseline and will build company ownership of the assessment process.

Using any information gained from Step 1 on the grade of mineralization being mined, and the geological understanding of the region held by the LSM company, conduct an assessment of the extent of mineralization available for mining in the area for ASM miners. This assessment will involve the following elements:

- A review of the geological maps to identify all potential mineralized areas that meet the basic grade and access requirements for ASM miners and that are not included in the LSM mining plans. The review should also consider areas that are included in the LSM plans, including tailings dams, to identify risks of incursions. This would be best carried out by the LSM geologists.
- Using the geologists’ knowledge of the mineralization, and observations from community development team members, identify the modes of processing, sale and transportation used by the ASM miners.
### Step 3

Review the legal standing of ASM activities in the country. This will be best achieved through consultation with the Department of Mines and Energy (or equivalent) to:

- Understand the formalization process within the country for ASM mining.
- Determine the availability of studies, examples and experts on ASM in the region or country.

### Step 4

Appoint a specialist familiar with ASM to engage with regional administrators and community leaders to understand the role of ASM within the local economy and the nature of the activity. The following specific questions could be addressed:

- How long have ASM miners been mining in the area? Did ASM precede or supersede the LSM activities?
- Where the mining is formalized, do ASM miners apply for licences locally? Is there a mining warden for ASM miners who would have records of licences granted and an estimate of the number of miners working in each area?
- What is the relationship between the ASM miners and the local communities? Are the ASM miners predominantly from the local communities, or is there an influx of miners coming from other regions or countries?
- Outside of ASM mining, what are the key economic activities in the area? Is ASM used as a risk mitigation activity against agricultural failure?
- Does the regional administration have a particular viewpoint on ASM activities in the region? Is this in line with the national government sentiment or legal framework for ASM?
STEP 5

Use the specialist to engage with those directly involved in the ASM sector to undertake a stakeholder mapping exercise. ASM miners are often in the best position to help companies develop early relationships with ASM mining communities operating in the area and can play a key role in undertaking the ASM baseline survey. This exercise seeks to identify the power relationships, interconnectedness, dependence and other relevant social connections relevant to the local ASM sector. The stakeholder mapping process could include the following steps:

- Brainstorming of known stakeholders associated with ASM activities, using the table below as a checklist.
- Networking with ASM miners, ensuring an adequate representation from all sectors of the ASM activity, to review and expand the stakeholder map.
- Checking with LSM colleagues and ASM representatives to ensure the stakeholder map includes all key stakeholders. This may be best addressed through asking, “whose support or lack of it might significantly influence planned engagement with ASM miners?”

### CHECKLIST OF POSSIBLE STAKEHOLDERS

| ASM operators | ASM miners  
|---------------|-------------
|               | ASM processors, including people involved in crushing, grinding, sieving, panning, amalgamation and amalgam decomposition  
| Buyers        | Buyers of mineral product, potentially represented by local agents with weighing scales  
| Financiers    | Individuals or organizations who supply equipment or financial support to ASM operators to carry out their activities  
| Co-operative or association structure leaders | ASM miners may be operating through a co-operative or association structure  
| Government regulators and mines inspectors | Local, regional, state and/or national agencies  
| Government officials | Local, regional, state and/or national officials  
| Other industry actors | Other companies operating within the same region, potentially also affecting ASM miners in the region  
| International organizations or initiatives | Industry associations that may have a viewpoint or endorsed an approach to working with ASM miners  
| Communities | International organizations that focus on or coordinate ASM or related activities, such as UNEP’s Global Mercury Partnership or Communities and Small-Scale Mining  
| Specially affected groups | The local community near the ASM activity  
| Advocacy groups | The local community near the LSM operation, if this is different  
| Other civic organizations | The regional community  
| Internal | The regional community  
|               | Indigenous peoples affiliated to or affected by ASM or LSM activities  
|               | Children or forced or bonded labour working in the ASM operations  
|               | Human rights, health and safety, social justice, environmental and community-based organizations operating in the area or in the country with an interest in ASM or the LSM companies’ activities  
|               | Churches, trade and labour unions, charitable organizations and NGOs working on community development, capacity building or other overlapping programs in the region  
|               | Employees, contractors, shareholders, management and boards of directors  

Working Together: How large-scale mining can engage with artisanal and small-scale miners
STEP 6

Where possible, co-ordinate a meeting with representatives of the ASM community. In cases where artisanal and small-scale miners are cautious of meeting representatives from the LSM company, the specialist should co-ordinate an independent smaller meeting with a group of ASM community members. This smaller meeting would not include company representatives. Both approaches will benefit from working with community representatives to build trust between the groups. The meeting should include representation from miners, women, young people, buyers and transporters of the product. The following questions could be addressed:

- What are the different roles each of the represented groups play in ASM?
- What is the mining experience held within the group?
- How long is the history of ASM within this group of miners and within the area more generally? Which phase of ASM activity is being undertaken: initial rush, steady state or decline?
- What are the key motivations within the group for undertaking this often high-risk activity?
- What are the average yields from mining per week and the prices paid for the mineralization, and how does this correspond to family income where ASM is being conducted by family groups?
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:

- Conduct interviews where possible with ASM workers and ask for their estimate of the workforce size involved in ASM activities. 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.
- Where mining is formalized or semi-formalized, collect records from regional ASM offices.
- 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.
- Combine the above with grades and extraction estimates to triangulate a reasonable estimate of the number of ASM miners, where possible.

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 ASM miners.
2 DIAGNOSTICS, APPROACHES AND TOOLS

STEP 8

Use an impact assessment methodology to identify the future consequences of the planned or existing LSM activity on ASM activity in the area. Resources to assist with this assessment are provided at the end of this tool. Considerations should be given to the physical, economic and social consequences for ASM activities.

STEP 9

Co-ordinate a second meeting with ASM representatives and, where relationships allow, regional administrators to reflect upon the understanding of the ASM activity gained from the site visits and discussions conducted. Topics for discussion could include:

- Identification of the most challenging aspects of ASM work, and how these challenges could be reduced.
- Identification of the opportunities and constraints for engagement between LSM and ASM. This should identify opportunities for partnership and co-operation between LSM and ASM sectors as is appropriate, and it may include any number of the tools and approaches outlined in this guidance document.

STEP 10

Use the understanding gained from the ASM baseline survey, engagement with ASM stakeholders and the review of drivers to inform the development of a management strategy for LSM engagement with ASM.

INDICATIONS OF SUCCESS

- Development of a management strategy to address LSM-ASM engagement specific to the operation.
- Commencement of formal engagement between LSM and ASM.
HUMAN RESOURCES REQUIRED

To undertake an assessment of this nature would require a sociologist/equivalent professional familiar with ASM to be on site at the project location for at least 10-14 days. An independent expert familiar with ASM mining coming from a technical background can also gain improved access to ASM miners and conduct this assessment. This time period would allow for follow-up meetings with community members, regional administration, national agencies and the ASM miners themselves as needed. In smaller ASM workings, this ‘time frame’ could be significantly reduced.

Sample terms of reference can be found at http://commdev.org/section/_audiences/business#Sample_TOR

RESOURCES

Stakeholder engagement is an umbrella term encompassing a range of activities and interactions over the life of a project, which can include:

• Stakeholder identification and analysis;
• Information disclosure;
• Stakeholder consultation;
• Negotiation and partnerships;
• Grievance management;
• Stakeholder involvement in project monitoring;
• Reporting to stakeholders; and
• Management functions.  

Engagement with ASM stakeholders, including government authorities regulating ASM activity, is essential for companies seeking to build a constructive and co-operative relationship with this group. Activities undertaken by a company with the knowledge or participation of ASM miners stand a far greater chance of success than activities undertaken independently. Stakeholder engagement spans a broad spectrum, as illustrated below:

In the often high-pressure context of getting a project up and running, interacting with stakeholders where there does not seem to be any urgent need can be a low priority, but if a conflict or crisis does arise, the absence of established relationships and channels of communication puts the project at an immediate disadvantage in trying to manage the situation and typically requires higher expenditure to resolve the problem.

All companies seeking to work with ASM miners should undertake effective stakeholder engagement activities. Successful stakeholder engagement starts with exploration and continues for the life of the operation. That being said, it is never too late to start to engage. When companies are dealing with conflict situations with ASM miners, sustained dialogue between both groups will be essential to minimizing the conflict and moving towards a more peaceable working relationship in the future. The appropriate level of engagement between a company and ASM miners will vary depending on the local situation.

Taken from IFC, 2007a.
Adapted from IFC, 2007a.
IFC, 2007a.
### STEP 1

**HOW TO USE THIS TOOL**

Identify the ASM stakeholders, including representation from all the facets of the ASM activity, including miners themselves, buyers, washers, crushers, transporters, landowners (where different from miners) and government authorities regulating ASM activities. Please refer to Tool 2.1 for more information on stakeholder identification.

### STEP 2

**HOW TO USE THIS TOOL**

Disclose information relevant to the ASM community to pave the way towards a trusting relationship. This is of particular relevance when companies are commencing exploration activities in areas with existing ASM activity. Consideration should be given to the management of expectations within the ASM community in the information shared. Information that could be disclosed might include:

- Project plans, distributed through public consultation meetings when a project is in the development stages.
- A brief outline of the company if exploration activity is being undertaken.
- Security policies and practices implemented on the site.
- Newsletters providing updates of company activity, including updates on licences being applied for and planned areas of work for the next 12 months, etc.

### STEP 3

**HOW TO USE THIS TOOL**

Establish and maintain two-way dialogue between ASM stakeholders and the company. This may require the establishment of a formal engagement mechanism, such as an ASM committee, or it may be an informal arrangement if the groups are small and if contact on a regular basis is likely. When access is simpler to one group of ASM miners than another [for example, legal miners and informal miners], the relationship between the LSM company and the first group may be used to influence the second group. The nature of all consultation should be defined and agreed upon by the stakeholder group. Ensure that feedback on topics discussed in the past is given to the stakeholder group and acknowledge progress that has been made by all stakeholders that is relevant to the working relationship – e.g., if the ASM miners have succeeded in securing microcredit access, this should be celebrated.
Where conflict exists, consider the role of negotiation with ASM stakeholders. More information on negotiation skills can be found in the resources identified at the end of this tool and in Tool 2.14. Care needs to be taken to ensure the ASM stakeholders can adequately participate in these negotiations if they are to proceed (ensure the stakeholders can speak on behalf of the broader group). All negotiations should be undertaken in good faith.

Develop and implement a grievance management system that all ASM stakeholders have access to.

**INDICATIONS OF SUCCESS**

- Establishment of an engagement approach that has buy-in from all stakeholders and offers an open and transparent means of communications between LSM and ASM.

**HUMAN RESOURCES REQUIRED**

A professional mediator may be appropriate when engaging with ASM miners in a conflict setting. Success has been seen using this approach in Latin America when engaging with ASM workers.

**RESOURCES**


ASM Miners, Mindanao, Philippines, 2008

Photo credit: E. Wall

ASM in the river, Wau, Papua New Guinea, 2008

Photo credit: E. Wall
"Community development is the process of increasing the strength and effectiveness of communities, improving people’s quality of life, and enabling people to participate in decision making to achieve greater long-term control over their lives", according to ICMM.28

Community development programs are considered sustainable when they contribute to the long-term strengthening of community viability. Effective private-sector community development projects build upon the activities of governments, taking care not to assume the roles and responsibilities invested in governments.

PURPOSE

LSM companies can target community development projects to support ASM miners. A broad range of projects can be defined as community development efforts, and this tool provides guidance on how an LSM company can go about working with ASM community members to identify the appropriate development projects in a participatory manner and to develop a partnership to implement them.

In a typical mining project, the better the social performance of a company, the better the financial returns. Where communities, including ASM miners, stand to benefit from a project succeeding, there is an incentive to help the company progress, and they will often work proactively to help companies overcome obstacles that could adversely affect the mining or exploration project. Security risks can also be reduced as the outcome of contributing to a more stable, healthy and independently economically prosperous community.

WHEN TO USE THIS TOOL

Building on the ASM socio-economic assessment described in Tool 2.1, the specific community development initiatives that will benefit both the ASM community and the LSM company in terms of community relationships and commitment to sustainable development will vary considerably, depending on the local setting. This tool is specifically recommended for LSM companies seeking to engage with traditional, seasonal and permanent co-habitation ASM miners, as it is more likely that these groups of miners will form a significant and relatively stable part of the local community, and poverty alleviation opportunities may exist by working with these groups. Community development projects can also be generated with shock and influx ASM miners, although these are more likely to take the form of technical assistance programs, as discussed in Tool 2.4.

28ICMM, 2005.
HOW TO USE THIS TOOL

The appropriate community development project will be identified through extensive engagement with the ASM groups, the local communities (where they differ) and in some cases local government authorities, using participatory planning approaches.

STEP

1

Identify priorities for community development projects within ASM stakeholders using “participatory approaches”. Participation is the process through which stakeholders influence and share control over development initiatives and the decision and resources that affect them. Promoting participation helps to build ownership and enhances transparency and accountability, resulting in more effective community development projects. Participatory techniques (or methods or approaches) generate constructive collaboration among stakeholders who may not be used to working together, often come from different backgrounds and may have different values and interests. Participatory approaches can also be effective where literacy and education levels may be low or where there is conflict or complexity around a specific issue and there is a need to build consensus. They will typically include the following elements:

- A series of open meetings with the ASM mining stakeholders, to frame the project identification and development process.
- Semi-structured interviews where more detail is required.
- Focus group discussions.
- Preference ranking (this could include preference ranking of challenges faced by ASM communities, ranking of importance and urgency of specific development projects, etc.).
- Mapping and modelling (using community members to develop the maps and models).
- Seasonal and historical diagramming (this may be particularly relevant when working with seasonal ASM communities).

28 World Bank, 1996.
30 IFC, 2007a.
2 DIAGNOSTICS, APPROACHES AND TOOLS

<table>
<thead>
<tr>
<th>STEP</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Develop a hierarchy of desired projects generated by the ASM stakeholders through the participatory approaches used, and review this list with ASM stakeholders in an open meeting.</td>
</tr>
<tr>
<td>3</td>
<td>Agree on the selection of community development projects to be implemented, including agreement on the timing for the implementation and the contributions being made by each group of stakeholders. For example, ASM stakeholders may need to contribute their labour while the LSM company contributes materials and specialist expertise, etc. Any number of projects may be developed; the following list highlights some that have been successfully developed in participation with ASM communities:</td>
</tr>
<tr>
<td></td>
<td>• Establishment of microcredit facilities accessible to ASM miners. Access to microcredit can help ASM miners purchase equipment that increases their production and often improves the safety and environmental impacts of their activities, such as mercury retort stands and pumps.</td>
</tr>
<tr>
<td></td>
<td>• Assistance with gem polishing and the development of a market stall to draw attention to the products where the product may be of interest to a tourist or passing trade.</td>
</tr>
<tr>
<td></td>
<td>• Safety improvements through options such as technical assistance in mining, provision of personal protective equipment, provision of training in safe work practices or provision of the services of a mining engineer and geologist to guide the development of new workings within ASM areas (see Tool 2.15 for more detail).</td>
</tr>
<tr>
<td></td>
<td>• Support in the formalization process for ASM. Through helping ASM miners to become part of the formal economy through development of cooperatives or associations or small business entities, companies may be supporting local community development, government revenues and possibly a reduction in the social problems that can accompany quickly expanding informal ASM activities (see Tool 2.5 for more detail).</td>
</tr>
</tbody>
</table>
STEP 4

Ensure continued involvement of the community members who are affected by the project. When working with ASM miners it is important to ensure representation from all of the groups within an ASM community. Over and above the anticipated male workers, this may include women, young people, the elderly, widows, minorities, recent immigrants and other vulnerable groups.

STEP 5

Ensure the community development activities identified for the ASM stakeholders are integrated into the broader community development agenda and local government plans for the communities surrounding the mine or exploration activity.

INDICATIONS OF SUCCESS

• Documented and agreed community development plan for the ASM community indicating priorities, schedule, budgets and responsibilities.

HUMAN RESOURCES REQUIRED

Participatory approaches to community development need to be undertaken by practitioners of this field, using community members as facilitators. These approaches will likely take longer than if decisions on projects are taken by the LSM independently. However, projects identified and implemented in a participatory manner stand a greater chance of being community-owned, independent and sustainable. Once the priorities are identified, the appropriate implementing person or entity will depend on the type of project being implemented; it could include LSM employees (such as geologists, community development specialists, logisticians), NGOs, community-based organizations or partnerships with donor bodies operating in the area.
Tanzania recognized the importance of artisanal mining as a means of poverty alleviation in 1997 through the Tanzanian Government Mineral Policy. This has provided the framework for Barrick Tanzania to partner with the government in embarking on an initiative to assist and facilitate the transformation of the artisanal mining activities around its operations in Tanzania into regulated, productive and sustainable small-scale mining operations. Although the initiative is not yet sufficiently mature to demonstrate long-term results, it provides an interesting model for engagement.

**APPROACH**

Seven key work streams were identified: stakeholder engagement, mobilization, access, technology, funding, implementation and gold marketing. Stakeholder engagement and mobilization programs were intended to build a “common sense of purpose” among the ASM miners, Barrick employees and the relevant government authorities. The access programme focused on transferring access to land and mineral rights to ASM miners, while the technology aspects were dedicated to identifying health, safety and environmental practices that could improve ASM operations. It was necessary to identify funding sources to develop sustainable ASM operations, and the combination of these work streams culminated in the development of a “model mine” concept. The gold marketing work stream has been identifying fair trade gold purchasing schemes that could buy the ASM miners’ production in the future.

**RESULTS**

The North Mara site was selected to pilot the “model mine” initiative. An ASM committee has been established and a baseline socio-economic survey of the ASM activity around North Mara was conducted, as well as a detailed technical site investigation. From the latter it was realized that the value of mineralization, as mined by the ASM, including salary withdrawals, etc., would exceed US$2 million. Within the North Mara ASM co-operatives, 1,513 miners were employed, of whom 540 were women.

Barrick Tanzania and the Government authorities, in co-operation with the North Mara ASM co-operatives, set about facilitating the “model mine” project. Using the findings from the baseline study and technical investigations, the following principles were agreed:

- No use of mercury.
- One model mine per co-operative.
- No exploitation of women or children.
- Legal compliance.

For the model mine to be developed, a number of health and safety risks first need to be reduced, and environmental practices need to be improved. To achieve this, an investment of US$1.7 million will be required, including a shared gold recovery plant, support for mining logistics, infrastructure, safety and security support. To manage the project implementation, a third party will be engaged to make sure that the technical as well as the legal aspects are addressed appropriately and to ensure transfer of knowledge. It is expected that the model mine would pay back this investment within two years, and the monies returned could be added to a revolving fund available to the next co-operative seeking to develop a model mine.

*Source:* P. Rweyemamu, ASM Manager, Barrick Tanzania
2.4 TECHNICAL ASSISTANCE PROGRAMS

Technical assistance programs cover a wide range of activities and support that an LSM company or partner might extend to a group of ASM miners. LSM companies usually possess a wealth of skills and expertise that they can share with ASM miners.

Programs can include improvements in health, safety and environmental practices; improved mining and processing techniques; facilitation of access to processing plants or markets; and business development assistance. Technical assistance represents a proactive form of engagement, and at its core it is about education and innovation.

PURPOSE

Technical assistance programs can be of particular value to an LSM company when the reputation of that company may be linked to the activities of the ASM miners. By improving the working conditions, environmental performance and organization of neighbouring ASM miners, companies can protect their own reputations and greatly assist ASM miners at the same time. It can also be a key part of building relationships between LSM and ASM.

WHEN TO USE THIS TOOL

Technical assistance programs can be used in almost all settings involving LSM and ASM working together. There may be additional challenges in providing programs to miners operating without a legal permit, but plenty of examples exist where this worked successfully.

HOW TO USE THIS TOOL

This tool provides a series of types of technical assistance that may be applicable to the operational situation a mine is experiencing. In order to determine the applicability of these forms of assistance, the following steps should be taken.
2 DIAGNOSTICS, APPROACHES AND TOOLS

<table>
<thead>
<tr>
<th>STEP</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Review the ASM activities taking place within the &quot;catchment&quot; of the LSM site.</td>
</tr>
<tr>
<td>2</td>
<td>Identify challenges ASM operators are facing (such as safety concerns, etc.) and the opportunities the miners see for improvements by engaging with representatives from each aspect of the ASM process.</td>
</tr>
<tr>
<td>3</td>
<td>Consider the comparative advantage in knowledge held by the LSM company and identify technical assistance designed to meet the challenges and opportunities identified that the company would be in a good position to implement. Programs that are best managed outside of the company by contractors or consultants should also be identified.</td>
</tr>
</tbody>
</table>
Select technical assistance programs to support or implement, giving consideration to the following points:\(^{32}\)

- Technical and environmental measures should be adapted and tested in collaboration with ASM miners, ideally in a step-wise manner.
- People often overestimate their capacity to handle complex equipment. Experience has shown that success is more likely where proposed technologies are simple, inexpensive and easy to operate and maintain. It also increases the likelihood that the technology will be disseminated and replicated elsewhere.
- The miners’ current practices and capacity should provide a baseline for assessing the appropriateness of introducing new technologies (e.g., the move from panning to jigs may be too drastic a change, whereas a well-designed sluice may be a more effective alternative).
- It is often easier to improve on a process already in place than to introduce new processes.
- A new technology should lead to both environmental and economic improvements.
- The introduction of technology improvements should be supplemented by sensitization, education and training of miners and long-term follow-up.

Identify opportunities for “train the trainer” style interventions, potentially working with government agencies and/or NGOs in the region who are working with ASM miners to build their capacity. Different models for encouraging innovation may also be welcomed in communities, such as developing competitions, challenges, puzzles, etc. using the X PRIZE Foundation’s philosophy of "revolution through competition"\(^{33}\) to tap into the community’s own creativity.

**INDICATIONS OF SUCCESS**

- Increased engagement between ASM and LSM following successful implementation of a mutually beneficial technical assistance project.

\(^{32}\) Adapted from Wortruba, 2003.
\(^{33}\) See http://www.xprize.org
CASE STUDY – SUPPORTING SAESSCAM IN THE DEMOCRATIC REPUBLIC OF THE CONGO

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.

Sources: Pact Congo, 2007; CASM, 2008c
### EXAMPLES OF TECHNICAL ASSISTANCE PROGRAMS

**Safety and Health Assistance** – Where ASM activities occur in close proximity to LSM activities, engineering assistance to improve the structural foundations of mine shafts, emergency recovery in the event of accidents, provision of personal protective equipment, training in different processing techniques with lower exposure to hazardous chemicals or access to health clinics at the LSM operation can be appropriate.

**Mercury** – Numerous initiatives exist to reduce reliance on mercury in gold processing through changes to the process, including use of gravity circuits, mercury retort stands and mercury-free furnaces. The direct involvement of mercury in the revenue of gold ASM miners – combined with the potential reputational risk it can cause to LSM companies when it is used on their concessions and the existence of cost-effective improvements in ASM practices to improve mercury usage – can make the use of mercury a good entry point for developing a functioning relationship with ASM communities. This relationship can then be expanded to include other issues.

**Global Mercury Project** – LSM companies can look into supporting or expanding the technical assistance projects of groups such as this one.

**Processing Services** – The value returned from mining carried out by ASM miners is often compromised by their limited access to processing plants. LSM companies can support pilot processing plants that improve the health, safety and environmental impacts of processing while also improving the returns experienced by the ASM miners, thereby improving livelihoods.

**Microcredit** – As LSM activities scale up, the livelihood divide between LSM-employed community members and ASM miners can become highly exaggerated. In some cases the provision of microcredit to ASM miners allows them to innovate and expand their activities and to seek opportunities to increase their livelihoods similarly.

**Occupational Health and Safety Handbook** – The ILO developed a handbook on safety and health in small-scale surface mines that provides many useful tips for artisanal and small-scale miners. The publication and distribution of this handbook may help small-scale miners understand the nature of the risks they are exposed to and how to reduce their exposure and mitigate the impacts of certain activities. The handbook can be found at [http://www.ilo.org/public/english/dialogue/sector/papers/mines/handbook.pdf](http://www.ilo.org/public/english/dialogue/sector/papers/mines/handbook.pdf)

**Community Health** – The sudden influx of ASM miners combined with an influx of LSM workers in a remote region can lead to significant community health concerns. These can include increased rates of sexually transmitted diseases, changed exposure levels to vector-borne diseases such as malaria and dengue fever, changes in nutrition, changes in water quality and availability, and the possibility of a reduction in overall food availability as populations increase. LSM companies can work with local communities and ASM groups in addressing these shared challenges through support for community health services in communities, capacity building programs for government health staff posted in the area, support for the development of new wells and establishment of peer group education services targeting lifestyle diseases.
### Regularization/ Formalization

Regularization and formalization refer to the processes of bringing ASM activities into the formal [legal] economy. The demand for formalization of ASM activities reached a peak in the 1990s, when it was felt that without this step nothing could be achieved to improve the social, health, safety or environmental conditions of this sector. Formalization policies have been seen as the means by which governments could enable ASM to join the formal economy, thus helping to alleviate poverty and contribute to integrated rural development.

It was also seen as the only way for governments to legitimately engage with the sector so as to address environmental, health and safety impacts. Other justifications include curbing illegal mining and illegal trading or smuggling of metals and mineral products to stop the supply of gold or diamonds to the black market or to fund armed conflicts.

For formalization to be attractive for ASM miners, higher levels of economic growth per person after the process is complete are required in order to cover the administrative costs associated with formalization.

#### Purpose

A strong distinction is made by many companies between legal ASM activities and extralegal or illegal ASM activities. For many companies, the issue of legality can prevent them from proactively working with the miners, as the company may have operating policies limiting engagement with illegal entities in response to the national frameworks within which they operate. By helping informal ASM miners regularize their operations, LSM companies can pave the way for far greater engagement with the miners and can contribute to the broader objectives just described.

#### When to Use This Tool

This tool should be used specifically by LSM companies seeking to work with ASM miners operating informally. As noted previously, the type of ASM activity (e.g., traditional, shock, etc.) is independent of the legality of the activity.

#### How to Use This Tool

LSM companies can work with ASM groups in a number of ways to assist in the formalization process.
### STEP 1
Within the company’s legitimate sphere of influence, place pressure on governments to develop ASM permits in countries where these do not exist.

### STEP 2
Where permitting systems exist but are underutilized, work in concert with government to support the decentralization of permitting offices into rural regions where artisanal miners are more likely to apply for a licence.

### STEP 3
Where the individual scale of workings is too small to warrant a formal licence, work with existing artisanal communities to form co-operatives. The larger entity is more likely to be able to absorb the administrative requirements associated with either an artisanal or small-scale mining licence.

### STEP 4
Where diamonds are produced by ASM miners without a mining permit, assist ASM groups to formalize their mining permits and seek certification that would ensure safer trade relations for the miners and a reduction in the sale of potentially conflict diamonds. Without a mining permit, diamonds cannot be certified under the Kimberley Process. Similar but smaller certification schemes, both ethical and point of origin, are becoming available for other metals.

### INDICATIONS OF SUCCESS
- ASM miners identify benefits associated with formalization sufficient to generate increased numbers of miners operating within the formal sector.
- Increased engagement between LSM and formalized ASM miners, opening opportunities for greater co-operation and co-ordination.
RESOURCES


CASE STUDY – ASSISTANCE WITH REGULARIZATION – MASGAD ARTISANAL AND SMALL-SCALE MINING OPERATIONS, MINDORO RESOURCES LTD, PHILIPPINES

Mindoro Resources Limited (Mindoro) worked to assist small-scale copper miners in Sitio Maybog, within the Mindoro exploration permit, in the Masgad Barangay in Mindanao (Philippines) to form a mining co-operative. Artisanal and small-scale miners have been mining primary and alluvial gold in Masgad for several decades. In early 2008, the discovery of high-grade copper mineralization, combined with high copper prices and a ready export market to China for processing, led to the development of a relatively new phenomenon of ASM mining of high-grade copper ore.

While small-scale mining permits (SSMPs) are available in the Philippines, few ASM mining operations in Masgad were permitted due to the associated permit costs. SSMPs can be applied for within existing exploration licences awarded to LSM companies; however, the consent of the LSM company is required for the SSMP to be approved. When an ASM financier/contractor applied for an SSMP on the Mindoro exploration lease, Mindoro undertook, with local government and the local Mines and Geosciences Bureau, to formalize planned ASM activity on their lease into an ASM co-operative that could assist and regulate mining activities in Masgad. It was agreed that the SSMP would instead be applied for by the company to ensure that it retained some legal control of the ASM activities, and the ASM financier/contractor would be required to develop an ASM co-operative operating in accordance with Mindoro’s social and environmental requirements.

The co-operative was formed, and at its peak approximately 40–50 local ASM miners were operating in the Masgad copper orebodies. Each group within the co-operative had 10–15 members who operated in two shifts. Mindoro and its Philippine partners received a 5 per cent royalty on all production of ore, which in the case of Mindoro’s share of the royalty was used to help to cover the costs of ASM development and monitoring programs. A technical team consisting of a mining engineer, environmental officer and community relations officer was assigned by Mindoro and provided personal protective equipment to co-operative workers and assisted with construction of settling ponds, mini rock dams, compost pits and field toilets. The ASM financier was also influenced to implement a social program, which included extension of water pipelines to nearby villages and a school scholarship program. The team regularly reported to management, implemented the engagement programme and responded to issues in a prompt manner.

RESULTS

Prior to intervention from Mindoro, the ASM conditions were typified by very limited use of protective equipment, poor sanitation, basic mine designs with insufficient use of timbering for supports and indiscriminate disposal of mud/waste materials. After the Mindoro intervention, relations between the ASM miners, the ASM contractor, and local landowners improved significantly. The copper orebody being mined by the ASM miners was exhausted far faster than anticipated, however, causing the cessation of ASM activities in the tenement. Mindoro expects to repeat this pilot as it encounters ASM activity in other exploration areas.

Source: T. Climie, Mindoro Resources Limited
Organization of ASM activity refers to the establishment of a basic organizational structure of the ASM workers. It may take the form of a cooperative or an association, or it may simply involve the appointment of ASM representatives who can speak on behalf of the group.

**PURPOSE**

Independent of the legal status of ASM activities, many operations are highly uncoordinated, with miners working essentially independently or in small partnerships. Stakeholder engagement can be a first step towards organizing ASM communities by creating ASM committees to serve as communication channels.

**WHEN TO USE THIS TOOL**

This tool is recommended for all companies working with ASM, regardless of its form.

<table>
<thead>
<tr>
<th>STEP</th>
<th>HOW TO USE THIS TOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Review the legal frameworks for development of associations and co-operatives in the host country.</td>
</tr>
</tbody>
</table>
2 DIAGNOSTICS, APPROACHES AND TOOLS

STEP 2

Drawing on experience gained through stakeholder engagement activities (Tool 2.2), engage with ASM miners to better understand the existing structure within the mining community and how it might be strengthened. Existing structures may be based upon family connections, groupings coordinated by an ASM financier, etc.

STEP 3

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.

INDICATIONS OF SUCCESS

- Increased ASM miner access to external resources, such as micro-finance and technical assistance programs, improving their capacity to take on more complex technologies or the most costly mining standards to improve conditions.
## RESETTLEMENT ACTION PLAN FOR ASM MINERS

A resettlement action plan is a document in which an LSM company specifies the procedures it will follow and the actions it will take to mitigate adverse effects, compensate losses, and provide development benefits to persons and communities affected by a project.\(^{35}\)

Where ASM activities are occurring in the same area as planned LSM activities, it may be necessary in some cases to consider physical resettlement or relocation of the miners, and elements of the resettlement action plan approach may be applicable.

### PURPOSE

The following tool is intended to help companies facing this situation consider all the alternatives available to them and to provide some guidance on how to carry out a successful resettlement program.

### WHEN TO USE THIS TOOL

The principles outlined in this tool should be reviewed and selectively applied whenever a company is considering the need to resettle or relocate a group of ASM miners. However, as indicated in Table 2, this tool is best suited to the resettlement of traditional, seasonal or permanent co-habitation ASM miners, as the resettlement action plan framework outlined here includes consideration of compensation and replacement of livelihood activities, which may not be appropriate in all ASM settings. If livelihood restoration activities are undertaken, consideration also needs to be given to the level of support the company is affording to non-ASM affected groups.

If resettlement of shock or influx types of ASM miners is required, care must be taken to ensure that effective census data are recorded in order to limit and define the group receiving support for relocation.

---

\(^{35}\text{IFC, 2002.}\)
### 2 DIAGNOSTICS, APPROACHES AND TOOLS

#### STEP 1 HOW TO USE THIS TOOL

Review the following questions before commencing with resettlement plans to determine if resettlement is appropriate.

- **Are there any alternatives to the involuntary resettlement of ASM miners?**
  If physical relocation of miners is required due to siting preferences for mobile pieces of equipment, such as processing plants or office blocks, it may be possible to redesign the planned layout of the mine and avoid resettling ASM miners. If, however, the miners are working the same areas of mineralization as the company plans to develop, there may be no alternative to a relocation program.

- **What type of ASM activity is being undertaken? What has the baseline assessment revealed?**
  The results of the ASM baseline survey will influence the means by which ASM miners are resettled. For example, if the majority of the miners are traditional ASM miners who have been working in the same area for generations, and if ASM activities form the key livelihood activity for the surrounding communities, this would need to be built into the social and environmental impact assessment, and effective economic restoration programs would need to be considered. If, instead, the miners are predominantly “influx” ASM miners, who have moved to the area recently due to news of the mineralization being found by LSM geologists, the company’s long-term responsibility for their livelihoods would be quite different. Consideration also needs to be given to the groups involved in ASM activities that may not be as visible as the miners emerging from shafts at shift change. This could include women washing the mineralization in nearby streams, children cutting and polishing gemstones, elderly community members crushing rocks near their homes, young men travelling to different areas to sell their production and so on.

- **Are there areas of mineralization in other parts of the concession or nearby where the miners could transfer their workings?**
  Depending on the legal framework in a country, it may be possible to relocate the miners to a nearby area within the concession, minimizing the need to physically relocate settlements while allowing access to sufficient mineralization to maintain an equivalent livelihood. In a number of jurisdictions this may not be possible due to LSM legal responsibility for all activities taking place on their concession. In practice this possibility can be made very challenging due to safety considerations where miners, and often their children, walk between various areas of an active mining site. A shortage of geological information can also limit the willingness of companies to hand over areas of the deposit until further exploration drilling has been completed.
If resettlement is considered appropriate following this review, reference should be made to international leading practices for involuntary resettlement (resources are indicated at the end of the tool), and the following basic principles should be applied:

- Engagement with government authorities to determine the rights of LSM and ASM stakeholders in the licence area is essential. Government authorities should be involved at all stages of the resettlement process, and in some cases these authorities will take control of the process. Where this occurs, efforts should be made to influence the government implementers to apply appropriate principles regardless.
- Resettlement action plans (RAPs) will vary significantly in both scope and detail, depending on the local situation. However, they should include consideration of the following elements:
  1. Identification of project impacts on ASM stakeholders;
  2. Identification of all stakeholders with a role in resettlement of ASM miners, which may include government and private security forces;
  3. A legal framework for land acquisition and compensation for physical displacement (if appropriate) and an examination of legal options available to ASM miners to gain secure title if they are to relocate their workings;
  4. A compensation framework if appropriate (this may include consideration for productive work lost due to relocation to new workings or a bridging payment to allow miners time to find new opportunities, etc.);
  5. A detailed budget for the resettlement program;
  6. An implementation schedule;
  7. A description of organizational responsibilities;
  8. A framework for public consultation and disclosure on the planned relocation;
  9. A description of the grievance mechanism in place; and
  10. A framework for monitoring, evaluation and reporting.
- One of the most important considerations in planning involuntary resettlement programs is the minimization of future vulnerability for the resettled population. As such, assisting miners in the pursuit of mining permits for their new working locations could be a major step towards reducing vulnerability.
- A RAP should include consideration for alternative livelihood programs; where this is appropriate in ASM relocations, more detail can be found in Tool 2.8 on this topic.

INDICATIONS OF SUCCESS

- Minimization of unnecessary resettlement of ASM miners.
- Where necessary, resettlement is conducted within expected time frames and budget, while maintaining the LSM company’s social licence to operate.

Adapted from ibid.
### HUMAN RESOURCES REQUIRED

Where resettlement is deemed necessary, a resettlement specialist should be appointed. Depending on the scale of the resettlement, the specialist may require 6–12 months to consult, design and implement a RAP for ASM miners.

### RESOURCES


The queue for compensation payments, Ruashi, Democratic Republic of the Congo, 2007

Photo credit: E. Wall
Ruashi Mining has a copper-cobalt mining project in southeastern Democratic Republic of the Congo. The DRC has an artisanal mining permit scheme written into the Mining Code. Although the area has a history of artisanal mining activity, since 2004 the concession had been experiencing an increasing number of artisanal miners arriving to work the exposed mineralization. Between 2004 and 2007 the number of artisanal miners working in the old pits varied, but it never dropped below 2,000. Peak levels of activity were recorded in January and February 2007, when more than 4,500 miners were reported to be working in the concession. In order for operations to proceed at the Ruashi concession, it was necessary to remove the artisanal miners from the old pit. To achieve this, a resettlement strategy, including income restoration, was needed to ensure a peaceful resettlement.

Following extensive dialogue and consultation, a three-pronged strategy was developed and approved in February 2007:

1. Provision of a transitional support package – This consisted of the equivalent income that miners and buyers would normally receive in a four-month period to afford them the opportunity to find new working sites.
2. Short-term employment opportunities – Short-duration labour-intensive job opportunities at the mine and in various community projects were sought and artisanal miners were given priority.
3. Medium-term alternative economic development opportunities – Ruashi Mining recognized the need to diversify the economic base away from mining and hence supported micro-enterprise and small-scale enterprise development.

RESULTS
The resettlement committee was established in February 2007, and in March identification cards were distributed to miners and buyers as a means of identifying ex-miners who would be eligible for financial transition packages and who would be added to the future employment opportunities database. The financial transition packages started to be disbursed in the end of April, and by May 1 the concession had no artisanal miners digging in it any longer. While this resettlement exercise has been reported to have cost over US$700,000, it also provided the only opportunity for Ruashi Mining to gain access to the concession they had been granted.

SECURITY ARRANGEMENTS
Security considerations were a key concern for Ruashi Mining as there has been a history of violence between ASM miners and LSM companies in the area. Ruashi Mining employed 50 ex-artisanal miners to work in the mine as an unarmed security force. In addition, the company’s private security force (Bras) supplied an additional 25 security workers and the national police provided 150 policemen to assist in the resettlement process. All security workers, including police, were required to uphold the Voluntary Principles during the resettlement process. Due to the planning, engagement and consultative approach adopted, no violence was recorded during the relocation.

Source: Grant Dempsey, Ruashi Mining
Alternative livelihood programs are designed to offer opportunities for individuals and/or families to diversify their income and in some cases move away from specific livelihood activities. ASM is most commonly conducted as a means of livelihood. However, this does not infer it is always a desired livelihood activity, and if alternative livelihood options are available and comparatively gainful, these may be taken up by the miners instead.

**PURPOSE**

Recognizing the livelihood role that ASM plays for many individuals, this tool seeks to help companies identify when alternative livelihood programs could be appropriate and the programs companies could support that may offer an opportunity for miners to leave mining and support themselves through other means.

**WHEN TO USE THIS TOOL**

Alternative livelihood programs will be more successful where miners are only undertaking mining out of necessity or opportunism. Where there is a strong tradition of mining in a region, these programs may have limited chances of success. As such, this tool is recommended for companies working with shock, influx and illegal forms of ASM, although it should be noted that overall numbers of ASM miners may not be reduced in these situations even if alternative livelihood programs are successful. Successful alternative livelihood programs may include incentives for miners to return to their place of origin (particularly in the case of shock or influx miners) and develop enterprises there. Reference should also be made to Tool 2.10 outlining employment opportunities for ASM miners within LSM companies.
### Diagnostics, Approaches and Tools

#### Step 1
Consult with ASM miners on their interest in alternative livelihood programs. The consultation could use the participatory approaches discussed in Tool 2.3 and should include all interested parties as identified through the stakeholder engagement exercise conducted in Tool 2.2.

#### Step 2
Assuming there is interest in the concept, engage with ASM operators and communities to ascertain the “deal breakers” that would influence their decisions to take on a new livelihood option. These are likely to include:

- **Timing** – Would there be a time delay between commencement of an alternative livelihood and receipt of income? In most cases, agricultural livelihoods involve a delay before payment is received.

- **Level of Income** – How would the level of income in this new activity compare with what mining is yielding at present? ASM miners may well be comparing future income from an alternative livelihood activity to “potential” income from ASM activities, even if this is not what they are currently receiving.

- **Debt** – Are high levels of debt locking miners into ASM activities?

#### Step 3
Consider training or services that may be able to support ex-miners in their pursuit of new livelihoods. Examples include:

- Access to microcredit facilities that may enable entrepreneurs to establish new businesses.
- Training in budgeting or management skills to support new businesses.
- Training in agricultural skills, focusing in particular on skills that allow for significant increases in production to help farmers make the transition from subsistence to commercial farming, etc.

Consultation with the miners planning to change livelihoods is essential in the identification of appropriate additional opportunities that the company can provide. A successful training program is likely to require a multi-sector approach to support diversified economic activities within the host community.
STEP 4

To expand the options for alternative livelihoods, appoint a development or linkages consultant familiar with the area to identify alternative income-generating activities. The consultant should develop these alternative options in consultation with the ASM stakeholders. The consultant should conduct a scoping exercise to identify potential livelihood options, followed up by technical studies to identify value-adding practices for existing activities, and/or economic/marketing assessments for new products.

INDICATIONS OF SUCCESS

- Over a sustained period, voluntary transfer of ASM miners to new livelihood activities that provide an acceptable standard of living, potentially reducing the number of ASM miners proximal to the LSM site.
RESOURCES


2.9 PURCHASING PROGRAMS FOR ASM MINERAL PRODUCTS

In a number of locations globally, LSM operations are operating side by side with extensive ASM workings, mining the same minerals. Although companies may choose to purchase mined ore from the ASM miners to support them in their pursuit of a livelihood, some key considerations need to be assessed before commencing a purchasing scheme, and this tool is designed to help projects work through these issues.

**PURPOSE**

The purchasing of minerals from ASM miners can provide a more secure market for these individuals, and in some cases, a higher price. However, it can also bring complicated liabilities to the door of the LSM company and can compromise the downstream economy supporting ASM activities, which may be a key element of livelihood generation in the community. This tool is designed to assist companies in their navigation through the challenges of product purchasing to determine whether it is appropriate in their situation.

**WHEN TO USE THIS TOOL**

The appropriateness of this tool should be assessed using a risk assessment process. All forms of ASM may present unacceptable working conditions, including the use of child, bonded or forced labour, which would limit the capacity for companies to purchase their production due to high-level corporate commitments and reputational risks. Consideration must be given to the legal status of the ASM activity before companies seek to purchase minerals produced by the ASM miners, as purchasing mineralization may have legal ramifications on the operation of the LSM mine. It may be more appropriate for companies to help ASM miners gain access to fair trade markets.

In determining the applicability of this tool, consideration should also be given to the impacts on the secondary economy of purchasing mineralization from ASM miners. See Tool 2.1 for guidance on assessment of the economy associated with ASM activities.
### 2 DIAGNOSTICS, APPROACHES AND TOOLS

<table>
<thead>
<tr>
<th>STEP</th>
<th>HOW TO USE THIS TOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Consider the appropriateness of purchasing ASM production based on the mineral type. Specific challenges associated with purchasing gold and diamonds are as follows:</td>
</tr>
<tr>
<td></td>
<td>• <strong>Diamonds</strong> – While companies should apply similar levels of scrutiny to any mineral supplier, it should be expected that the scrutiny around diamond purchasing will be higher in order to meet the conditions of the Kimberley Process. The Kimberley Process specifically requires that artisanal and small-scale miners selling or trading diamonds have a mining permit or else the diamonds cannot be Kimberley Process certified.</td>
</tr>
<tr>
<td></td>
<td>• <strong>Gold</strong> – The use of mercury amalgam in ASM gold mining remains widespread, and the environmental damage and health impacts of this practice have been written about extensively. Prior to establishing a purchasing relationship with ASM gold miners, companies should review the use of mercury in the ASM workings and may incorporate technical assistance support into the purchasing scheme to reduce or eliminate mercury usage.</td>
</tr>
<tr>
<td>2</td>
<td>Conduct a site visit to identify the working conditions in the ASM operations (see Tool 2.1 for guidance). Consider these conditions in relation to corporate commitments on human rights, health, safety, environmental and labour conditions and to reputational risks posed by these conditions for the company. Poor working conditions do not suggest that a company should not engage with the ASM miners, but rather that the engagement should be coupled with technical assistance to improve conditions. Before establishing a commercial relationship with ASM miners, a company needs to conduct a thorough due diligence, including consideration of the following topics:</td>
</tr>
<tr>
<td></td>
<td>• <strong>Child Labour</strong> – Are children used in the mining process? The ILO has identified children working in ASM as one of the worst forms of child labour. In many ASM operations, children will be present, helping to wash minerals, hauling ore from one area to another, polishing diamonds and gemstones or working in the mines. Companies planning to purchase mineralization from ASM miners using child labour need to address the social and reputational risks associated with such a step. Recognizing that child labour is very strongly connected to poverty, companies may choose to support education programs for the children of miners at the same time as providing a more stable purchasing price and system for the minerals produced by the miners. The combination of these two actions may reduce the number of children working in the mines.</td>
</tr>
</tbody>
</table>

---

• **Occupational Health and Safety** – Do the standards meet national requirements, and are they consistent with the standards of the purchasing company? The increasing focus being placed on product stewardship means that LSM companies are likely to be required to account for any mineralization they source from outside of their direct operations. It is unlikely that health and safety conditions in ASM operations will meet the standards of an LSM company, but by focusing on specific aspects of the operation, LSM companies may be able to improve ASM conditions. This could include a focus on provision of appropriate personal protective equipment to workers, technical assistance improving the structural foundations of mine shafts to reduce the likelihood of accidents, training for workers and process improvement suggestions minimizing exposure to hazardous chemicals.

• **Labour Conditions** – Is forced or bonded labour employed in the ASM activities? Are miners free to leave the mine workings as they choose? This information can be very challenging to determine, and it is best gained through participatory interview methodologies with a wide cross-section of the ASM workforce.

**STEP 3**

Identify the basic business model for the ASM activities to determine who would benefit and who would be negatively affected by the purchasing program. It is not uncommon for ASM mining activities to be controlled by groups with a considerable level of power in a country. As such, a company may find itself in association with a number of strange bedfellows, including military groups, corrupt business owners and elites of the country. The ASM baseline study (Tool 2.1) should identify the key interests in ASM activities in an area, allowing a company to draw conclusions about their suitability as business partners and to understand the potential impacts of a purchasing program on the broader ASM economic activity.

**STEP 4**

Integrate the findings from Steps 1–3 into a risk assessment to compare the overall benefit to the ASM miners from the purchasing program to the risks the company is exposed to and potential impacts to the secondary ASM economy.

**INDICATIONS OF SUCCESS**

• Development of a fair market for ASM production without compromising existing secondary economies, leading to greater transparency for miners and less risk associated with the storage of mineralization.
2 DIAGNOSTICS, APPROACHES AND TOOLS

Diamond Buyers, Democratic Republic of the Congo, 2007

Photo credit: K. Hayes
## 2.10 Employment of ASM Workers

Skilled labour shortages are experienced across the world in the mining industry. During exploration, construction, operation or closure, recruitment and retention of employees often remains a challenge. A wide variety of approaches have been developed to address these shortages, from fly-in fly-out operations, through to remote mining techniques. ASM miners can also play a key role in abating this challenge.

### Purpose

Possibly the most common request received by companies from ASM miners is for employment. This tool provides guidance to companies on how to manage these requests, maintain a fair system of employment and benefit both LSM and ASM at the same time.

### When to Use This Tool

This tool is applicable when working with any of the types of ASM identified. ASM miners, however, may play a different role in the exploration phase than in the construction/operation phases. While this approach is focused on employment during the construction and operational phases of an operation, it should be noted that during exploration it is common for companies to use the skills of ASM miners to identify known mineralization in the area. The use of ASM knowledge and activity to guide the identification of exploration targets occurs both formally through the appointment of miners to guide the geologists and informally through viewing areas of intense ASM activity.

When engaging with influx ASM in particular, there may be a tendency for new ASM miners to arrive as soon as a space is made available through the formal employment of a miner in the LSM operation. For this reason, employment programs should not be expected to necessarily reduce the level of ASM activity in the area under influx ASM conditions.

### How to Use This Tool

The commencement of a mining project is always associated with high expectations from surrounding communities. Many of these expectations relate to employment opportunities. ASM miners are often better informed of the planned LSM activities than other community members and commonly have the highest levels of expectations around employment. ASM miners can often bring valuable mining and processing skills and language skills as well as a knowledge of the orebody and of social and environmental conditions, which can prove invaluable to a developing project. In keeping with the general goal of maximizing local employment at mining projects, employment of ASM miners, where they derive from the area, can provide a significant social bonus for a community. In deciding to employ ASM miners, the following steps are recommended.
### STEP 1

Establish an ASM recruitment steering committee, incorporating representatives from each aspect of the ASM operations (mining, washing, hauling, crushing, polishing/processing and buying), the LSM human resources department, local administration and community leaders. The incorporation of these last two groups is key to ensuring that the surrounding communities are on-board with the allocation of jobs between ASM miners and community members where possible and appropriate. The number of new jobs available in an operational minesite is typically limited, and expectations around job availability need to be managed.

### STEP 2

Conduct a demographic and skills census of ASM miners. This census should consider such qualifications as:

- Experience working for an LSM company in the past;
- Type and years of work undertaken as an ASM operator;
- Technical knowledge, such as blasting expertise, electrical or mechanical skills;
- Ownership of a driver’s licence;
- Cooking, cleaning or catering skills;
- Language and literacy skills; and
- Experience operating mining equipment.

A cut-off date for eligibility for addition to the employment database needs to be determined, at which stage the census will be completed and only those on the list should be considered for employment. The eligibility cut-off will help to reduce the incentive for in-migration of ASM miners from other areas.

### STEP 3

Develop and communicate skill set requirements for various roles. By developing role requirements for a number of key positions, such as security guards, drivers, cooks, processing plant workers, field assistants and office assistants, and then recording ASM miners’ skills against these requirements as the census is completed, the risk of unmet expectations is minimized. Required skills could include eyesight over distance for drivers, literacy skills, citizenship requirements, etc.
STEP 4

Publish recruitment requirements and results on a regular basis. The delay between project commencement and employment can cause considerable anxiety in mining communities as expectations go unmet. In this situation, conflict with ASM miners or expectant community members can develop. The best means to minimize this tension is to maintain a continuous information and consultation program, whereby knowledge of recruitment pushes and the results from those campaigns are known with minimum delay.

STEP 5

Retain records of employment for all workers including ASM miners. When someone is appointed to a position with the LSM company, a medical test should be conducted. Given the physically demanding nature of much ASM work, health problems are not unlikely in an ASM workforce. LSM companies need to be aware of these conditions at the time of employment to ensure miners are fit to work in the role they have been given and to minimize future compensation claims.

STEP 6

Provide training for ex-ASM miners upon appointment to build capacity and ensure their operating practices are in line with LSM standards.

INDICATIONS OF SUCCESS

• Reduction in ad hoc demands for employment due to implementation of an effective, transparent and respected recruitment system for ASM miners, capable of weathering mineral cycle variations.
Looking for work opportunities, Democratic Republic of the Congo, 2008

Photo credit: K. Hayes
A company’s approach to ASM needs to be articulated and adopted throughout the workforce. This is particularly important where the physical boundaries of LSM and ASM activity intersect, when LSM employees are likely to interact with ASM operators. While employees can be informed and trained in company approaches to ASM through company policy documents, workshops and other company communication systems, contractors often fall outside of these systems.

### PURPOSE

However, all contractors are typically inducted in health, safety and environment policies when they commence work on a site, and there is an opportunity to include an induction to the company approach to ASM at the same time.

This tool provides a template for companies to modify to their own needs, which could be used to induct new contractors into the approach taken towards ASM mining on the site.

### WHEN TO USE THIS TOOL

A contractor induction on ASM would be beneficial for any company interacting with ASM activities. The template described is more specifically suited to companies engaging with traditional, seasonal and permanent co-habitation forms of ASM, as it assumes a history of ASM activity on the site preceding the LSM development.

### WORKFORCE AWARENESS – CONTRACTOR INDUCTIONS

<table>
<thead>
<tr>
<th>STEP</th>
<th>HOW TO USE THIS TOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ensure all new contractors complete a health, safety, environment, communities induction before commencing work on the project site.</td>
</tr>
</tbody>
</table>
2 DIAGNOSTICS, APPROACHES AND TOOLS

<table>
<thead>
<tr>
<th>STEP 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incorporate training on ASM into the induction. The following slides could be inserted in the induction presentations to ensure contractors do not negatively affect the relationship between LSM and ASM workers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INDICATIONS OF SUCCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Consistent approach and attitude to ASM miners maintained across permanent and contractor workforces, minimizing potential for unintentional tension between LSM and ASM communities.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ARTISANAL AND SMALL-SCALE MINING</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Globally over 100 million people derive their livelihoods from ASM activities.</td>
</tr>
<tr>
<td>• Many variations in ASM, summarized into five types of activity:</td>
</tr>
<tr>
<td>- Traditional ASM</td>
</tr>
<tr>
<td>- Seasonal ASM</td>
</tr>
<tr>
<td>- Permanent co-habitation ASM</td>
</tr>
<tr>
<td>- Shock ASM</td>
</tr>
<tr>
<td>- Influx ASM.</td>
</tr>
<tr>
<td>• Important to understand the different motivations for ASM activity in each location.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ASM AT “XX” PROJECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>• In the minesite, the following types of ASM activity can be seen or may be encountered in the area:</td>
</tr>
<tr>
<td>- Xx</td>
</tr>
<tr>
<td>- Xx</td>
</tr>
<tr>
<td>• These miners have been working in the region since XX and are primarily from the YY region of country Z.</td>
</tr>
<tr>
<td>• Over xx miners work inside the mining concession on a daily basis and average yields of US$xx/day.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMPANY APPROACH TO ASM</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Company XX identifies artisanal and small-scale miners as key stakeholders for Project X.</td>
</tr>
<tr>
<td>• Company policy, “We work in coordination with artisanal and small-scale miners and seek to build relationships built upon mutual respect and partnership.”</td>
</tr>
<tr>
<td>• By completing this induction and agreeing to work on this project site, you are agreeing to work in compliance with this policy.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HOW DOES THIS AFFECT DAILY OPERATIONS?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• As a contractor you will see ASM miners working inside the concession in designated areas;</td>
</tr>
<tr>
<td>• If you see ASM miners working outside the designated areas, notify ASM manager or security;</td>
</tr>
<tr>
<td>• Company X supports the improvement of health, safety and environmental practices of ASM activities. As such, you may be asked to participate in training programs with ASM miners, or be involved in emergency rescue operations in the ASM working area if needed.</td>
</tr>
<tr>
<td>• If your company’s looking to hire new employees, refer to ASM demographic and skills census held by the HR department.</td>
</tr>
<tr>
<td>• Most ASM miners walk onto the concession using specially protected walkways. Please apply additional caution when driving or working in these areas.</td>
</tr>
</tbody>
</table>
2.12 SEGREGATION OF MINERAL CONCESSION

Within the concession of an LSM company, there may be areas that cannot economically be mined using large-scale technologies. In these cases, LSM companies may invite ASM workers to mine in designated areas of the concession.

PURPOSE

This tool is intended to provide guidance on issues that should be taken into consideration when a company is contemplating segregating its mineral concession to share the area with ASM miners.

WHEN TO USE THIS TOOL

The segregation of a mineral concession is more likely to be considered when a company is working in close proximity to formalized forms of ASM. Where traditional and seasonal ASM activities are located within the mineral concession in a zone considered non-essential by the LSM company, the approach may be applied. However, it is more likely that it will be applicable when LSM companies are working with permanent co-habitation, shock or influx forms of ASM. This is primarily due to these forms of ASM having greater mobility and less connection to a specific mining site. Importantly, it is also more likely that LSM companies would feel compelled to consider segregation due to pressure being exerted (either peaceably or through incursions) from co-habitation, shock or influx forms of ASM. Examples exist where companies have segregated their concession to work with “illegal” ASM miners, as seen in the Damang case study.

HOW TO USE THIS TOOL

The segregation of a mineral concession is more likely to be considered when a company is working in close proximity to formalized forms of ASM. Where traditional and seasonal ASM activities are located within the mineral concession in a zone considered non-essential by the LSM company, the approach may be applied. However, it is more likely that it will be applicable when LSM companies are working with permanent co-habitation, shock or influx forms of ASM. This is primarily due to these forms of ASM having greater mobility and less connection to a specific mining site. Importantly, it is also more likely that LSM companies would feel compelled to consider segregation due to pressure being exerted (either peaceably or through incursions) from co-habitation, shock or influx forms of ASM. Examples exist where companies have segregated their concession to work with “illegal” ASM miners, as seen in the Damang case study.
### 2 DIAGNOSTICS, APPROACHES AND TOOLS

<table>
<thead>
<tr>
<th>STEP</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Undertake a critical evaluation of the mineral concessions held by the company to identify whether areas contain mineralization but are inaccessible/uneconomic for mining by LSM.</td>
</tr>
<tr>
<td>2</td>
<td>Conduct geological surveys on the identified areas to determine the potential viability of the area for ASM mining.</td>
</tr>
<tr>
<td>3</td>
<td>Concurrent with the geological assessment of the land, the community relations team or another appropriate group should engage with ASM miners operating in close proximity to the site to identify a group to which the area could be handed over to. In many cases this identification exercise is simplified, as companies may be reacting to a request for access to mineralization from a specific group of miners.</td>
</tr>
<tr>
<td>4</td>
<td>If viable areas exist, clarify the process of designation and segregation of the concession with the Department of Mines (or equivalent). This may involve delays and requirements on ASM operators that are outside the control of the company, which needs to be communicated to the ASM operators to the extent possible.</td>
</tr>
</tbody>
</table>
Formally hand over access to the area within the concession to the ASM miners. In many cases LSM companies only temporarily allow access, with the right to rescind this if the commodity prices change and make the marginal ground profitable for the company. While this is an understandable practice from an economic rationale, the value of the mineralization may pale when compared with the cost of the conflict that is likely to ensue over handing back the concession.

Where there are no areas available for segregation on the mineral concession, companies consider supporting governments in their efforts to map the geology of their countries sufficient to allow for allocation of ASM permits for a limited range of minerals.

**INDICATIONS OF SUCCESS**

- Peaceable co-existence of ASM and LSM on the same mineral concession over a sustained period and a reduction in incursions onto LSM operating areas.

**POINTS FOR CONSIDERATION**

- What will happen when the area has been mined out? Are alternate sites available?
- How will the ASM miners perceive the viability of the land they have been granted compared with the land being retained by the LSM?
Abosso Gold Fields Ltd (AGL) operates the Damang mine in the Tarkwa district of Ghana. While historically the relationship between ASM and LSM in Ghana had been less than cordial, AGL sought to pioneer a plan of co-existence with ASM miners in the mid-1990s, which became known as the “Live and Let Live” plan. The approach sought to accommodate artisanal miners on AGL’s concession insofar as their operations did not cause operational threats to the company. It was founded on two principles:

- Recognition that ASM activities have for a long time been an important activity both socially and economically to the indigenous operators of the region.
- Recognition that a well-organized and harmonious relationship between artisanal operators would facilitate sound and safe mining practices, and also help to eliminate the suspicions ASM operators had about government agencies and LSM companies.

Initially, AGL officers offered to demarcate areas for indigenous ASM operators, but this approach proved unmanageable. Instead a management committee was formed, with members from the company, ASM operators, local government, traditional chiefs, police and opinion leaders. As ASM miners were operating close to areas earmarked for active mining by the company, AGL demarcated an alternative site also on an active lease for temporary relocation of the ASM groups. To provide some level of authorization for ASM operators in the designated site and to further control in-migration of miners from areas outside of AGL’s catchment communities, indigenous ASM operators from each community were identified and given photo identification cards.

As a means of building trust and confidence between the two parties, the company ran a series of educational campaigns, which focused on assuring ASM operators of their total ownership and control of their own operations and, critically, of their produce. ASM miners were free to sell their gold to any buyer of their choice. Operators were also assured that there would be no harassment by police so long as they operated within the designated area.

RESULTS

Within a few years, 740 small-scale miners had registered with AGL. This figure later declined due to a combination of factors, including improved formal employment opportunities within the mine for ASM miners, drought and alternate business opportunities being sought by ex-miners.

While the project was deemed a success in the mid-1990s, it subsequently experienced significant challenges as gold prices rose, converting marginal areas of the concession into valuable assets for the company. If the project were to be repeated, it is assumed some level of guaranteed permanent access rights to ASM miners would be required to minimize future risk of conflict.

Source: T. Aubynn, Goldfields Ltd
The Voluntary Principles on Human Rights and Security\textsuperscript{a} (as defined in Appendix 2) were developed through a process of dialogue between the governments of the United Kingdom and the United States, extractive and energy sector companies, and NGOs with a common interest in human rights and corporate social responsibility. Launched in early 2000, the Voluntary Principles establish a framework for managing the relationship between extractive industry companies and security providers (government and private) so as to ensure respect for human rights and fundamental freedoms.

They represent an acknowledgement that conventional security, while essential for the safety and well-being of personnel and protecting against loss of assets, has the potential to present risks to the safety and well-being of communities, which may also include ASM. The Voluntary Principles are structured around three elements: risk assessment, relations with public security and relations with private security. This tool draws upon some of the commitments embodied in the Voluntary Principles and adapts them to the ASM-LSM operational setting.

**PURPOSE**

Security concerns and potential impacts on human rights can arise as a result of interactions between:

- ASM miners and security providers, either government or private;
- Different groups of ASM miners competing for valuable territory;
- ASM miners and local communities where miners are not from the region; and
- LSM miners and ASM miners where incursions onto LSM concessions occur, often linked to petty theft and vandalism of LSM company property.

This tool seeks to minimize the risks arising from the first of these scenarios.

**WHEN TO USE THIS TOOL**

The adoption of Voluntary Principles is recommended for all extractive companies. The principles should be applied from the commencement of LSM activity.

**HOW TO USE THIS TOOL**

By adopting the Voluntary Principles, companies agree to undertake a risk assessment to identify human rights and security risks associated with their project, manage the relationship between the company and public security and manage the relationship between the company and private security providers. The steps below are structured in the same manner.

\textsuperscript{a}See http://www.voluntaryprinciples.com for full details.
2 DIAGNOSTICS, APPROACHES AND TOOLS

STEP 1

Conduct a risk assessment to ensure the company has accounted for all foreseeable threats and developed appropriate mitigation measures to address those threats. A number of tools have been developed to help companies conduct these risk assessments and evaluate performance against the principles established in the Voluntary Principles (included in the resource section at the end of this tool). The following questions may be useful:

- **What threats and vulnerabilities exist for this company and is the company generating new or additional risks for the community or ASM miners?** Some mining projects are likely to experience greater threats than others – for example, gold and diamond mines, by virtue of their highly transportable, high commodity value products, typically present greater security risks than coal mines. Likewise, operating in a country or region known to have political or civil security risks increases the threat to the project. In these environments it is essential to determine whether there are political or criminal affiliations that support ASM operations in the project area. A vulnerability assessment\(^\text{39}\) will identify potential physical security shortcomings of the operation and assist in the prioritization of where protective resources should be used. Consideration also needs to be given to risks that may be generated within ASM communities through the company’s activities, such as the potential for incitement of intra-community violence through poorly communicated recruitment decisions or failure to engage all appropriate stakeholders through the engagement process, etc.

- **What is the potential for violence?** In areas where there is a history of ASM activity engaging with LSM companies, interviews should be conducted with other operators where possible or with the national Mineral Council to understand the nature of past relationships. It is particularly important to review the history of any conflicts that may have surrounded the concession area and may well be inherited by a new operator. Moreover, an assessment of the potential for violence would be well informed by discussions with security experts to determine the likelihood and capacity for violence at both local and national levels.

\(^{39}\)See World Bank, 2008, for additional details on Mission Essential Vulnerability Assessments.
• **What is the human rights record of the security provider used by the company?** In many developing-country settings, companies may employ a private security company to protect their employees and assets. In some cases, public security is also used to supplement the efforts of private security contractors or employees. Before taking decisions on arrangement for security provision, companies should review the human rights records of potential security providers. This is also applicable when employing ex-soldiers or paramilitaries. Where security personnel will in the future be used to control access to mining concessions, and possibly come into conflict with ASM miners, it is essential that the company feel confident that their security providers have received training in human rights and employ an appropriate level of force to protect employees, assets and surrounding communities.

• **Is the legal system supportive of the recognition of human rights?** In situations where security problems have occurred and guilty parties have been apprehended, it is important that the local legal system hold those accountable for human rights abuses and for violations of international humanitarian law in a manner that respects the rights of the accused. Where the legal system does not provide adequate support for the recognition of human rights, companies may be able to identify higher education or donor organizations working on this field in the host country and could seek to engage with them on the topic.

• **What has been the cause of conflict in the past and what could trigger it in the future?** The influx of large numbers of artisanal and small-scale miners from other regions, or possibly different countries, often of a different ethnic background, can build tension for reasons outside of mineral access. It is important to understand the relationships between local communities and influx populations and to watch how these change over time as benefits accrue at different speeds to different groups.

**STEP 2**

**Manage the relationship between the company and public security providers in a manner that respects human rights.** The following principles for management have been suggested:

- Avoid situations where intervention by public security is required by assessing job safety and security before undertaking activities.
- Use company security first and don’t ask a member of public security to do something if company security can legally do the same job.
- Minimize the presence of public security on company sites. Request public forces only when there is an urgent need at a specific location, and set time limits for their expected withdrawal.
- Negotiate and sign protocols with public security providers that clarify expectations and obligations of both parties.
- Support capacity building efforts for public security forces in a manner consistent with the Voluntary Principles.

---

*40 Taken from World Bank, 2008.*
Manage the relationship between the company and private security providers in a manner that respects human rights. The following approaches have been suggested:

- Define the company’s standards and expectations of the private security provider clearly.
- Verify the successful delivery of these performance goals through an active and aggressive inspection, review and audit of the security providers.
- Communicate the performance standards to other security stakeholders, most specifically targeting ASM stakeholders.

Use independent or third-party monitoring of security provision as required. In tense situations, miscommunication can be a powerful tool, and stories of human rights abuses or excessive use of force can escalate a volatile situation into a very serious security risk. The use of independent monitors to oversee the activities of both the company and the security providers can help maintain a reality check on communication around security in communities. It is highly recommended that independent monitoring teams include representation from ASM teams and local community leadership where possible.

**INDICATIONS OF SUCCESS**

- Potentially conflictual situations between LSM and ASM have been avoided through identification in risk analysis process.
- Where security forces are interacting with ASM miners, the interaction is in line with the Voluntary Principles, causing no threat to the protection of human rights and the reputation of the LSM company.

Adapted from World Bank, 2008.
RESOURCES


Training for Security Forces, Democratic Republic of the Congo, 2008

Photo credit: K. Hayes
Limited illegal ASM activity has occurred from the commencement of the operation at Porgera Joint Venture (PJV) in 1990. Initially, the presence of police and security guards acted as an effective deterrent, but the past seven years have seen an escalation in violence, and ASM workers have increasingly entered the property bearing arms.

ASM workers – mostly young men who have recently moved into the area – generally work individually or in small groups along family lines, showing no evidence of organized processing. Illegal mining is mainly a safety issue (for employees and ASM workers), and today artisanal mining is one of the critical business issues facing PJV.

In 2006, faced with between 1,000 and 2,000 incursions onto the concession per week, an illegal mining action plan overseen by a dedicated manager was drawn up. The approach included studies, risk assessment, issue awareness, stakeholder buy-in, increased community engagement processes and changes to mining and security operations (e.g., a fence was built around the active areas). The PNG National Court sanctioned the process, and the tripartite approach (government, community and PJV) helped implementation.

A tripartite approach was also taken with government and international human rights organizations. All local and mobile squad police underwent accredited human rights training prior to deployment. Human rights standards were embedded into PJV standard operating procedures. Police operations focused on enhancing general community security as well as targeting illegal miners and associated crime.

Attention was focused on preventing entry to the active mine areas through more effective engagement with local leaders, education of young people about the safety risks involved and improved co-ordination between mine security staff and public authorities. Significant reductions in illegal entries were seen, however; despite these measures, some illegal ASM activity continued on the lease area.

In June 2009, a Landowner Partnership Initiative (LPI) was developed in response to calls from landowners recognizing that illegal ASM was significantly affecting general community security, customary rights and values as well as company operations. Aimed at strengthening traditional authority and values, the LPI encourages landowners (through monetary incentives) to take responsibility for the actions of people living on their land and to exercise their recognized right to prohibit people from trespassing on their land and onto compensated operating areas of the mine. Using strictly non-violent methods, landowners are working collaboratively to develop non-confrontational methods of inhibiting trespassers and are working with police to support their rights. The combination of initiatives implemented at PJV have seen incursions from illegal ASM reduced to approximately 250 per week in late 2009.

Source: S. Gimpel, Porgera Joint Venture
Conflict is a normal part of relationships and occurs whenever people or groups have different expectations of joint or intersecting activities. Stakeholder engagement processes, grievance mechanisms, community development and ongoing consultation programs are all designed in the hope that conflict will not arise, but they and other tools described here will all prove useful in the event that it does occur.

The relationships between LSM, ASM, surrounding communities and security forces are not always peaceful. Conflict can arise from the beginning of the LSM project activity due to resentment over the removal from artisanal workings within an LSM concession, or it may grow over time as ASM miners watch the socio-economic situation of LSM employees improve while their own vulnerability continues.

In many cases security concerns increase following a major influx of ASM miners from other parts of the country or region.

There are many ways of responding to escalating conflict, including surrendering to external threats and leaving the site, overpowering opposition with force or filing a lawsuit. This tool, which draws on the ICMM Community Development Toolkit, focuses instead on alternative dispute resolution or conflict management approaches, which operate outside the formal court system.

### PURPOSE

This tool is designed to offer companies an approach to the resolution of conflict, without reliance upon either legal remedies or the use of force.

### WHEN TO USE THIS TOOL

Conflict is possible between any ASM or LSM operators, independent of the type of ASM activity. As such, this tool can be applied unilaterally. In situations where conflict develops between illegal ASM miners and LSM companies, it is particularly important that government authorities be notified of the development and integrally involved in the resolution of the conflict. Where companies are experiencing criminal activity associated with ASM activities, such as sabotage of equipment or violence against workers, they should engage government authorities responsible for law and order to address the challenges faced.
## DIAGNOSTICS, APPROACHES AND TOOLS

### STEP 1

**Identify potential sources of conflict between ASM and LSM.** These are likely to have been identified through the social and environmental baseline work completed at the feasibility stages of a mining project [Tool 2.1] or as part of the security and human rights assessment [Tool 2.13]. The sources of conflict may change over time as the operating scenario changes, whether through project expansion or changing ASM activity levels in the region. Of particular importance is the changing socio-economic situation in a region – for example, where mineralization in ASM areas is nearing exhaustion, the pressures placed on LSM operations can change considerably and incursions into concessions can become a regular feature. It is also important to identify a series of indicators that suggest escalating conflict. This may include increased levels of petty theft from the LSM concession, vandalism of assets extending beyond the concession boundaries (such as water or electrical lines), increased incursions onto the mine concession, increased levels of social disturbance in surrounding communities, increased numbers of community grievances recorded or physical injuries occurring within communities. More guidance on conflict analysis is provided in Tool 2.13.

### STEP 2

**Identify the appropriate type of conflict resolution for the local setting.** There are four main types of conflict resolution:

1. **Negotiation** – a discussion with two or more people, with the goal of reaching an agreement.

2. **Mediation** – a voluntary and confidential process in which a neutral facilitator will help people discuss issues and negotiate a solution.

3. **Arbitration** – where a neutral third-party reviews evidence and listens to the arguments of both sides and then makes a decision to settle the case.

4. **Mediation arbitration** – where parties agree to try mediation first and if this is not successful then a neutral third party has the authority to make a decision.

All parties to the conflict should agree the selection of the conflict resolution mechanism. Conflict resolution often commences as a negotiation, and if this has limited success, a mediated or arbitrated approach is tried. If mediation or arbitration are independently unsuccessful, mediated arbitration may be adopted.

### INDICATIONS OF SUCCESS

- Resolution of disputes without reliance on the use of force or legal solutions.
RESOURCES


Close working conditions, Democratic Republic of the Congo, 2008

Photo credit: K. Hayes
When engaging in conflict resolution between LSM companies and ASM groups, the following considerations could be useful:

- **Power Equity** – When the assets, physical or human, of a large company are threatened, significant resources can often be pooled to resist the threat. The situation for ASM miners is considerably different, which may result in a strong power imbalance in a negotiation or mediation process. LSM companies can seek to support the resolution of conflicts with ASM miners by providing additional support to the ASM miners in their representation, allowing the capacity of the parties to be increased to enable the mediation or negotiation process to take place.

- **Representation** – ASM groups may consist of a highly variable mixture of individuals, with different motivations. Hence, if conflict does occur, it is important to isolate which elements of the ASM community are in conflict with the company or community and to recognize that this group may not represent the wider ASM community.

- **Proactive Engagement** – Mediation approaches will only succeed if all parties to a conflict agree to meet. This is more likely to occur when a well-grounded stakeholder engagement process has already been established and is functioning well in the region.

Mediation and arbitration should be conducted by specialists in these fields with knowledge and understanding of the local culture and environment.

**CASE STUDY – CONFLICT RESOLUTION, LA RINCONADA, CORPORACION ANANEA, S.A., PERU**

In La Rinconada, Peru, one of the highest gold mines in the world, ASM historically existed within the property of the industrial mining company, Corporacion Ananea S.A. There was a conflict over mineral rights and a mediation process was facilitated by a donor agency, GAMA Peru (a technical assistance project sponsored by the Swiss government). It started with a series of roundtable meetings to develop rules for the process. The negotiations, conducted over two years, led to an agreement allowing the artisanal miners to buy shares of the larger company.

GAMA Peru acted as a neutral broker between the mining company and artisanal miners’ co-operatives and was able to integrate the relevant actors such as the regional government, NGOs and other specific agencies. The neutrality of the facilitator and its ability to maintain a dialogue with each of the main stakeholders was an important element of success.

Source: Priester, 2007
2.15 ESTABLISHMENT OF AN ASM DEPARTMENT

The establishment of a specific ASM department on an LSM site can bring together the multiple disciplines that need to work together on ASM issues in a united fashion. It can also ensure a consistency of the staff who are engaging with the miners, building additional trust and a stronger relationship over time.

PURPOSE

Depending on the scale of ASM activity and its level of impact on the LSM company, companies can find that they are experiencing significant time costs associated with any number of staff engaging, negotiating, securing and reviewing the ASM situation. The time demands can also pull managers and operators away from their standard operational roles, leaving potential gaps in the daily management team. Engagement and negotiation processes are compromised as well by regular changeover of staff, as both of these activities rely in part on the relationships built between the various stakeholders. High numbers of people engaging in conflicts for brief periods of time or from narrow perspectives can also lead to the continuation or expansion of the conflict, as the broader circumstances may not be fully understood. The establishment of an ASM department can minimize the number of staff being drawn into managing ASM activities by providing a co-ordinated approach to the issues, and it provides a more consistent engagement process with the ASM miners.

WHEN TO USE THIS TOOL

The option of establishing a specific ASM department on a minesite is likely to be influenced by the scale of the ASM-LSM interaction. In many cases, a minesite ASM department is better justified when there is conflict between the groups and when the ASM activities are of a significant size. This is more likely to be the case with legal or illegal permanent co-habitation, shock and influx forms of ASM.
## DIAGNOSTICS, APPROACHES AND TOOLS

<table>
<thead>
<tr>
<th>STEP</th>
<th>HOW TO USE THIS TOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Conduct a review of employees currently working on ASM issues in some manner.</strong> This may include community relations, human relations, security, exploration geologists, mine planning, asset loss and control and, where ASM products are purchased by LSM, mill managers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STEP</th>
<th>HOW TO USE THIS TOOL</th>
</tr>
</thead>
</table>
| 2    | **Conduct a review of the current successes and challenges of interaction with ASM. Are any of the following challenges significant?**  
  
  - Inconsistent approach to engagement with ASM across the company leading to a confused relationship with ASM at present, and in some cases the use of force, undermining more peaceable approaches from other departments.  
  - Scale of the ASM challenge overwhelming individuals such that they cannot complete their “day-job” and respond to the ASM challenge at the same time – in short, a resources shortage.  
  - Complaints generated by ASM miners that the company has no official channel of engagement with them, and that the LSM company provides “new faces” every time a meeting is called. |

<table>
<thead>
<tr>
<th>STEP</th>
<th>HOW TO USE THIS TOOL</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td><strong>If the answers to Step 2 resulted in a number of “yeses,” the establishment of a minesite-based ASM department is more than likely justified.</strong> Ideally, the department would recruit some members from the ASM sector itself to build confidence among the ASM miners and to better inform the LSM company of the realities facing ASM miners.</td>
</tr>
</tbody>
</table>

### INDICATIONS OF SUCCESS

- Improved co-ordination and management of LSM-ASM interaction and minimization of duplication of resources.
2.16 MINE CLOSURE PLANNING

Mine closure planning is an accepted necessity in LSM. The importance of inclusion of artisanal and small-scale miners in this planning process is a relatively more recent realization.

In many jurisdictions, mine closure plans need to be submitted to national governments somewhere between two and five years prior to expected closure. Hence, inclusion of artisanal and small-scale miners in closure planning needs to commence well before this time frame.

PURPOSE

This tool is intended to identify a number of aspects of mine closure planning in which ASM miners can and should play a role.

WHEN TO USE THIS TOOL

The underlying assumption in this tool is that ASM miners who will want to be involved in mine closure planning are likely to be more settled in the region. As such, it is assumed that the tool would find greatest resonance when working with traditional, seasonal and permanent co-habitation forms of ASM.

STEP 1 HOW TO USE THIS TOOL

1. Engage with stakeholders, including ASM miners, about planned mine closure.
### 2. DIAGNOSTICS, APPROACHES AND TOOLS

<table>
<thead>
<tr>
<th>STEP</th>
<th>DIAGNOSTICS, APPROACHES AND TOOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Identify potential opportunities for ASM miners available through the closure process and also the risks that the miners may pose to certain aspects of closure, such as disturbances of rehabilitation sites to seek mineralization post-closure. Considerations should include the following:</td>
</tr>
</tbody>
</table>

- **Value of mineralization** – It should be anticipated that ASM miners will search for additional mineralization post-closure where the commodity value of the product is high.

- **Planned transition to small-scale mining methods** – For the reasons described above, artisanal and small-scale miners can extend the life of a mineral deposit through their lower operating costs. Where extensions to the mined orebody exist that are uneconomical for a large-scale company but may be financially beneficial for smaller operators with smaller equipment and overheads, planning needs to be put in place to transfer mining titles where possible and to improve the health and safety skills of the planned ASM miners in order to minimize future risks in the ex-LSM operation. Engaging with ASM miners early in the closure planning process provides plenty of time to undertake considerable training programs in occupational health, safety and environmental practices before mine closure. And there may be possibilities of operating both ASM and LSM activities in tandem in the final years or months.

<table>
<thead>
<tr>
<th>INDICATIONS OF SUCCESS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• ASM endorsement and commitment to uphold the mine closure plans, minimizing future liabilities for LSM companies and maximizing sustainable use of resources.</td>
</tr>
</tbody>
</table>
The Kelian gold mine commenced operation in East Kalimantan between 1990 and 1992, and ore reserves were exhausted, leading to mine closure, by 2004. The area had traditionally been the site of artisanal alluvial gold mining, and it was considered inevitable that reworking of mined areas and tailings would occur after environmental rehabilitation efforts had been completed unless an innovative solution was developed with surrounding communities.

The KEM Mine Closure Steering Committee, established in 1998, worked closely with stakeholders over a number of years to determine the social and environmental impacts of mine closure. Wetlands were developed by KEM to ensure that water discharged from the site met international water quality standards, and while these areas were demarcated as “protected forests”, their protection post-closure was unlikely as it was widely believed among some stakeholders that gold could be found in these wetlands. Kelian’s response was to enter into a partnership with the government and the surrounding communities whereby the company mined the area for alluvial gold prior to constructing the wetlands. Community members were involved in this mining, and the whole community was able to witness the depletion of alluvial gold in the potential wetlands. The proceeds from this alluvial mining were then placed in a fund for community members, which could be made available on a non-cash basis. Only when the alluvial mining was completed was rehabilitation commenced, and if artisanal mining is to occur in the wetlands area in the future, the cost of rehabilitation undertaken is to be deducted from the quarterly community grant. KEM has also worked with the regional government to help alluvial miners to mine to the point of sterilization various mineralization deposition points on the tailings dam as part of the closure plan.

Source: O’Brien, 2006
Monitoring and evaluation (M&E) ensures companies can assess the success of the programs they have put in place and modify them as necessary. Because of the broad nature of tools suggested in this guidance document, the appropriate M&E techniques vary considerably for each tool. As highlighted in the ICMM Community Development Toolkit, M&E should address four fundamental questions:

- What worked and why?
- What did not work and why?
- What could have been done differently?
- What adjustments and changes are now required?

Engagement and feedback from people affected by these projects or programs should be a key element of all M&E programs. In working with ASM miners, M&E programs are likely to yield both quantitative and qualitative information.

**PURPOSE**

In trying out different tools and approaches to engaging with ASM miners, companies will need methods of monitoring and assessing the effectiveness of each engagement.

**WHEN TO USE THIS TOOL**

All companies engaging with ASM groups should apply this tool. Ideally, monitoring and evaluation systems should be incorporated into the standard operating procedures for the minesite to ensure their consistent application.
This tool provides a range of approaches to monitoring and evaluation that can be applied by companies, depending on the nature of the project being undertaken. Relevant tools include Logical Framework, Participatory Indicator Development, Goal Attainment Scaling, Community Scorecards, Social Return on Investment, Global Reporting Initiative and Poverty and Social Impact Analysis. These tools are described in detail in a number of locations, as indicated below:

- **Logical Framework** – The logical framework is an effective and flexible method of planning, monitoring and evaluating development activities. It involves methodically moving through each step of a management plan and checking that it flows logically from what precedes it and that it can contribute to the outcomes expected from it. See Tool 15 in the ICMM Community Development Toolkit for full details of this tool.

- **Participatory Indicator Development** – Effective M&E depends on the quality of the indicators being monitored. This tool develops the notion of inputs, outputs and outcomes. See Tool 16 in the ICMM Community Development Toolkit for full details of this tool.

- **Goal Attainment Scaling** – This is a tool used to determine different, or changing over time, levels of stakeholder satisfaction with development activities. See Tool 17 in the ICMM Community Development Toolkit for full details of this tool.

- **Community Scorecards** – This is a community-based monitoring tool that is a hybrid of social audit, community monitoring and citizen report cards.\(^\text{42}\)

- **Social Return on Investment (SROI)** – SROI analysis is a process of understanding, measuring and reporting on the social, environmental and economic value that is being created by an organization. The SROI framework is an approach to measurement – developed from cost-benefit analysis, social accounting and social auditing – that captures social value by translating social objectives into financial and non-financial measures\(^\text{43}\).

- **Global Reporting Initiative (GRI)** – The GRI provides a voluntary framework for use by organizations to report on the economic, environmental and social dimensions of their activities, products and services. The GRI Mining and Metals Supplement has been designed to assist companies to evaluate and illustrate their commitments to the ICMM Sustainable Development Principles.


The development of M&E indicators should be integrated into any initiative or project with ASM that a company undertakes. Through establishing appropriate indicators and metrics for those indicators, companies will improve their ability to assess project success and to adapt programs as they evolve.

\(^{42}\)World Bank, 2005.
\(^{43}\)New Economics Foundation, 2008.
CONCLUSION

Artisanal and small-scale miners, whether operating legally, informally or illegally, are key stakeholders for LSM companies. The tools and approaches presented in this guidance document are intended to help companies build stronger and more effective engagement with ASM miners. Engagement strategies will work best when they are tailored to specific conditions.

As more companies expand into regions where artisanal mining currently exists or could develop, the business case for a sound engagement approach between LSM and ASM will only strengthen. The spectrum of tools presented in this document – ranging from conflict resolution and resettlement through to technical assistance and support for formalization policies – recognizes the diversity of relationships between ASM and LSM that exists around the world. It is hoped that by coming to understand each other’s activities and drivers, ASM and LSM can support each other to “work together” in the future.
ASM activity in Cote d'Ivoire, 2008

Photo credit: E. Wall

Bugnosen, E. 2003. Small-Scale Mining Legislation: A General Review and an Attempt to Apply Lessons Learned”. In G. Hilson, ed., The Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries. Taylor and Francis Group, Rotterdam.


CASM. 2008b. Certification and Small-Scale Mining: An Emerging Opportunity for Sustainable Development. CASM, Washington, DC.

CASM. 2008c. Walikale: Artisanal Cassiterite Mining and Trade in North Kivu – Implications for Poverty Reduction and Security. CASM, Washington, DC.


IFC. 2006. Performance Standards on Social and Environmental Sustainability. IFC, Washington, DC.


Priester, M. 2007. “Small-Scale/Large-Scale Mining Conflicts, Good Examples of Positive Outcomes, a Collection Made for CASM”, unpublished.


A number of resources have been highlighted in this guidance document. A listing of these resources and additional useful references are included here.

STAKEHOLDER ENGAGEMENT


COMMUNITY DEVELOPMENT


APPENDIX 1 – RESOURCES
PARTICIPATORY METHODS


SOCIAL ASSESSMENT

- International Finance Corporation. 2009. The Migration Effect: Risk Assessment and Management Strategies for Addressing Project-Induced In-Migration [draft], at http://www.ifc.org/ifcext/sustainability.nsf/AttachmentsByTitle/p_InfluxManagement_draft/$FILE/In-migration_Peer_Review_Revision%5BAH-SH+edit+CLEAN+++RVG+Comments%5D.pdf
HUMAN RIGHTS


CONFLICT MANAGEMENT


LABOUR


APPENDIX 1 – RESOURCES

RESETTLEMENT


ARTISANAL AND SMALL-SCALE MINING SPECIFIC

• Artisanal and Small-Scale Mining in Asia-Pacific, at http://www.asmasiapacific.org/asm_portal.php

• Communities and Small-Scale Mining, at http://www.artisanalmining.org/index.cfm

• Diamond Development Initiative, at http://www.ddiglobal.org/pages/ddi_mission.php


• United Nations Conference on Trade and Development Natural Resources CD-Rom, at http://www.natural-resources.org/minerals/cd/ssm.htm

FORMALIZATION AND REGULARIZATION OF ASM


APPENDIX 2 – OVERVIEW OF RELEVANT CODES, CONVENTIONS AND GUIDING PRINCIPLES

ILO International Programme for the Elimination of Child Labour (IPEC) and the associated ILO 182 Worst Forms of Child Labour Convention – The IPEC strategy is focused on the creation of an enabling environment for the elimination of child labour through knowledge generation, awareness raising, education and capacity building. The main elements of the IPEC approach are removal and rehabilitation of child labourers, provision of educational alternatives and income-generating activities for families. In 1999 the ILO adopted the Worst Forms of Child Labour Convention (no. 182), and in 2005 small-scale mining was specifically targeted as one of the worst forms of child labour, which could be eradicated within the next 10 years.

Voluntary Principles on Human Rights and Security – The Voluntary Principles were developed through dialogue between the governments of the United States and the United Kingdom, companies in the extractive and energy sectors and non-governmental organizations – all with an interest in human rights and security. The principles are intended to guide companies in maintaining the safety and security of their operations within an operating framework that ensures respect for human rights and fundamental freedoms. There are three aspects to the principles: risk assessment, interactions between companies and public security and interactions between companies and private security.44

Global Compact – The world’s largest voluntary corporate responsibility initiative, the Global Compact includes 10 principles addressing the areas of human rights, labour, environment and anti-corruption. It is derived from the Universal Declaration of Human Rights, the ILO’s Declaration on the Fundamental Principles and Rights at Work, the Rio Declaration on Environment and Development, and the United Nations Convention Against Corruption.

ILO Declaration on Fundamental Principles and Human Rights at Work – Adopted in 1998, this declaration is an expression of commitment by governments, employers and workers’ organizations to uphold basic value in the workplace. The four fundamental principles and rights at work are freedom of association and the effective recognition of the right to collective bargaining, elimination of all forms of forced and compulsory labour, effective abolition of child labour and elimination of discrimination in respect of employment and occupation.

International Finance Corporation (IFC) Performance Standards on Social and Environmental Sustainability – The IFC applies the Performance Standards to manage social and environmental risks and impacts and to enhance development opportunities in its private-sector financing in its member countries eligible for financing.45 The IFC Performance Standards are also the basis for the Equator Principles; hence, any project seeking financing from an Equator bank needs to operate in compliance with the standards. The eight standards cover: social and environmental assessment and management systems; labour and working conditions; pollution prevention and abatement; community health, safety and security; land acquisition and involuntary resettlement; biodiversity conservation and sustainable natural resource management; indigenous peoples; and cultural heritage. A set of Guidance notes corresponding to the Performance Standards has also been developed and contains the following specific guidance on the implementation of land acquisition and resettlement processes to be applied when confronted with ASM:

In the event of potential adverse economic, social or environmental impacts by projects activities other than land acquisition, the Client’s Social and Environmental Impact Assessment process under Performance Standard 1 should address how these impacts will be avoided, minimized, mitigated or compensated for. Examples include the loss of access to state owned sub-surface mineral rights by artisanal miners ... While Performance Standard 5 will not apply in these circumstances, the Client should nonetheless consider appropriate measures for the affected people under Performance Standard 1. Even if the Client’s assessment determines at the outset that no significant impacts are likely to occur, project conditions could subsequently change and affect local communities adversely ... If these impacts become significantly adverse at any stage of the project, so that the relevant communities are left with no alternative except to resettle, the Client should consider applying the requirements of Performance Standard 5, even where no initial project related land acquisition was involved.46

44 Voluntary Principles Website, at http://www.voluntaryprinciples.org
46 IFC, 2007b, paragraph G10.
European Bank for Reconstruction and Development (EBRD) Performance Requirements – EBRD-financed projects are expected to meet good international practice related to sustainable development. Ten Performance Requirements have been developed to assist companies and projects to achieve this goal. The Performance Requirements cover the following themes: environmental and social appraisal and management; labour and working conditions; pollution prevention and abatement; community health, safety and security; land acquisition, involuntary resettlement and economic displacement; biodiversity conservation and sustainable natural resource management; indigenous peoples; cultural heritage; financial intermediaries; and information disclosure and stakeholder engagement. The EBRD Performance Requirements and the IFC Performance Standards share a common basis; on the topic of ASM, however, different approaches have been taken. EBRD considers a “loss of access to state owned sub-surface mineral rights by artisanal miners” as one of the conditions under which involuntary resettlement may occur. This is significant, as it means the economic and/or physical displacement of ASM miners generated by a project needs to be managed in a manner consistent with any other form of involuntary resettlement. In circumstances where a mining project requires the physical resettlement of artisanal miners, a resettlement action plan, including details of compensation payments, would be required to meet the EBRD’s Performance Requirement 5.

OECD Guidance for Multinational Enterprises – These guidelines are recommendations advised by governments to multinational enterprises operating in or from adhering countries. They provide voluntary principles and standards for responsible business conduct in a variety of areas, including employment and industrial relations, human rights, environment, information disclosure, combating bribery, consumer interests, science and technology, competition and taxation.

Global Reporting Initiative Mining and Metals Sector Supplement (Pilot) – The GRI Mining and Metals Sector Supplement was developed by a multi-stakeholder working group co-convened by the Global Reporting Initiative and the International Council on Mining and Metals. GRI provides a voluntary framework for use by organizations to report on the economic, environmental and social dimensions of their activities, products and services. The aim of the Guidelines is to assist reporting organizations and their stakeholders in articulating and understanding the organization’s contributions to sustainable development. The Mining and Metals Sector Supplement has been developed to provide guidance for companies who are signatories to ICMM’s Sustainable Development Principles to report on their progress against these principles on an annual basis. A final version of this sector supplement is planned for release in 2009.

Extractive Industries Transparency Initiative (EITI) – The EITI supports improved governance in resource-rich countries through the verification and full publication of company payments and government revenues from oil, gas and mining. The EITI is a coalition of governments, companies, civil society groups, investors and international organizations. Twelve key principles related to transparent management and use of revenue generated from extractive industries were developed and agreed by EITI in 2003.47

47For further details on the principles behind the EITI, see http://eitransparency.org/eiti/principles
International Council on Mining and Metals Sustainable Development Principles – ICMM committed its corporate members to implementation and measurement against 10 principles in May 2003. These principles cover ethical business practices, integration of sustainable development into decision-making, human rights, implementation of risk management strategies, health and safety, environment, biodiversity, product stewardship, community development and transparent engagement with stakeholders.

Responsible Jewellery Council (RJC) – The RJC is an independent non-profit organization representing over 130 member companies across the gold and diamond jewellery supply chain. A certification system has been developed (the RJC System) whereby all commercial members of the RJC will be required to be audited to verify their compliance with the RJC Code of Practice. The Code of Practice covers the following elements: business ethics, human rights and social performance, environmental performance and management systems.

Millennium Development Goals (MDGs) – In September 2000, world leaders came together at United Nations headquarters in New York to adopt the United Nations Millennium Declaration, committing their nations to a new global partnership to reduce extreme poverty and setting out a series of time-bound targets – with a deadline of 2015 – that have become known as the Millennium Development Goals. These cover the ending of poverty and hunger, universal education, gender equality, child health, maternal health, combating HIV/AIDS, environmental sustainability and global partnership. In support of the MDGs, a significant volume of aid is now linked to supporting countries in their achievement of national MDG targets.

Kimberley Process – The Kimberley Process is a joint government, industry and civil society initiative to stem the flow of conflict diamonds (rough diamonds used by rebel movements to finance wars against legitimate governments). The Kimberley Process Certification Scheme (KPCS) imposes extensive requirements on its members to enable them to certify shipments as “conflict-free”. It specifically requires small-scale and artisanal diamond miners to hold licences to mine diamonds in order to be considered KPCS-certified.
The preparation of the *Working Together* guidance document has been managed by a committee comprising the International Council on Mining and Metals (ICMM – Anne-Marie Fleury), the International Finance Corporation’s and World Bank’s Oil, Gas and Mining Sustainable Community Development Fund (IFC CommDev – Sarah Ruck and Justin Pooley), and from the Communities and Small-Scale Mining program (CASM- Gotthard Walser and Remi Pelon).

It was authored by Elizabeth Wall (Shared Resources) and drew on a previous document produced by Remi Pelon and Gotthard Walser (World Bank Oil, Gas & Mining Policy Division and CASM) in partnership with CommDev, as well as a working paper produced by Kevin D’Souza (Wardell Armstrong).

Contributors include: Chris Anderson (Newmont), Tony Climie (Mindoro Resources), Aidan Davy (ICMM), Stephen Gimpel (Porgera Joint Venture), Paul Hollesen (AngloGold Ashanti), Veronika Kohler (CASM), Howard Lole (Mineral Resources Authority, PNG), Gary O’Brien (Rio Tinto), Philbert Rweyemamu (Barrick) and Prishani Satyapal (AngloGold Ashanti).

Thanks are also due to all those who provided valuable comments on drafts during the peer review process, including:

Toni Aubynn  Goldfields
Stan Batey  Freeport McMoran
Enkhzaya Chuluunbaatar  Government of Mongolia
Kevin D’Souza  Wardell Armstrong
Liesel Filgueiras  Vale
Robert Gerrits  IFC
Karen Hayes  Pact
Felix Hruschka  Projekt-Consult GmbH
Justin Pooley  IFC CommDev
Manuel Rivas  Sonamipe
Peter Sinclair  Barrick
Dafna Tapiero  IFC CommDev
Kevin Telmer  University of Victoria, and Artisanal Gold Council
The International Council on Mining and Metals (ICMM) was established in 2001 to act as a catalyst for performance improvement in the mining and metals industry. Today, the organization brings together 19 mining and metals companies as well as 30 national and regional mining associations and global commodity associations to address the core sustainable development challenges faced by the industry. ICMM strives to be: Leading companies working together and with others to strengthen the contribution of mining, minerals and metals to sustainable development.

The IFC’s Oil, Gas and Mining Sustainable Community Development Fund (IFC CommDev) promotes trilateral partnerships among communities, local governments, and extractive industry companies to develop timely and sustainable solutions that will, over time, effectively reduce poverty and create further opportunities for oil, gas and mining companies. IFC CommDev is a source of knowledge and funding for practical capacity building, training, technical assistance, implementation support, awareness-raising, and tools to assist community development efforts linked to extractive industry projects.

CASM works to raise awareness about ASM development opportunities – more than 100 million people are affected around the world – to improve synergies and co-ordination between ASM stakeholders; and to promote multi-disciplinary solutions to the complex policy, legal, social and environmental challenges facing ASM communities through a holistic approach that aims to transform this activity from a source of conflict and poverty into a catalyst for economic growth and sustainable development.

CASM
The Communities and Small-Scale Mining (CASM) initiative contributes to the reduction of poverty and the promotion of more viable livelihoods for communities in rural areas where artisanal and small-scale mining (ASM) is significant. CASM’s objectives are fully aligned with the Millennium Development Goals.

CASM
www.artisanalmining.org
Remi Pelon
rpelon@worldbank.org

IFC CommDev
The IFC’s Oil, Gas and Mining Sustainable Community Development Fund (IFC CommDev) promotes trilateral partnerships among communities, local governments, and extractive industry companies to develop timely and sustainable solutions that will, over time, effectively reduce poverty and create further opportunities for oil, gas and mining companies. IFC CommDev is a source of knowledge and funding for practical capacity building, training, technical assistance, implementation support, awareness-raising, and tools to assist community development efforts linked to extractive industry projects.

IFC CommDev
www.commdev.org
Dafna Tapiero
DTapiero@ifc.org

ICMM
The International Council on Mining and Metals (ICMM) was established in 2001 to act as a catalyst for performance improvement in the mining and metals industry. Today, the organization brings together 19 mining and metals companies as well as 30 national and regional mining associations and global commodity associations to address the core sustainable development challenges faced by the industry. ICMM strives to be: Leading companies working together and with others to strengthen the contribution of mining, minerals and metals to sustainable development.

ICMM
www.icmm.com
Anne-Marie Fleury
anne-marie.fleury@icmm.com