Step 06

Production

At this sixth step, the operations phase of the mine can last decades or, in some cases, centuries. It is also the phase when the ESHR planning proves its value, as the mining company will have ESHR impacts to manage over the long term. Given the long-term nature of mining, a mine site will predictably be subject to changes over the life of the mine, so it is important that the authorities and the mining company have clear procedures to continually review and update mining management processes to manage changes and to consult with stakeholders when changes are significant.

Primary Target Audience

- → Mining Authorities
- → Environmental Authorities
- → Social Authorities & Human Rights Authorities

Summary of Step 6: Production

	KEY ACTIONS IN THIS STEP	KEY MESSAGES
A	**Update ESHR Requirements Throughout the Production Phase**	Given the high level of uncertainty inherent in mining, strengthening capacities and processes for managing change and the potential ESHR impacts that may accompany change should be given a high priority.
B	**Conduct Regular Monitoring of ESHR Impacts Throughout the Production Phase**	The longer-term monitoring required during the production phase provides the opportunity to set up coordinated and integrated approaches to monitoring and to build longer-term approaches to stakeholder involvement in monitoring.
C	**Manage ESHR Impact Events**	Mining is a high-risk sector and needs to be managed accordingly. In addition to managing ongoing impacts of production, authorities and the mining companies should be prepared to manage sporadic events that can have significant ESHR impacts – including emergency and security events.

D Address Relationships with ASM

There is often a significant artisanal and small-scale mining (ASM) sector in many mining countries, often neighbouring or even interwoven with large-scale mining (LSM) enterprises. While, in the past, ASM mining has been discouraged or even criminalized, governments and larger mining companies are beginning to recognize that ASM is often a significant source of livelihood that should be supported to improve rather than being further marginalized.

A Update ESHR Requirements throughout the Production Phase

This is the stage when the mining operations move into longer-term operations, with the greatest potential impacts on the environment and the community over the long term. It is also the phase when the benefits or costs of the planning decisions implemented during the earlier phases are realized.[281] But, even with appropriate planning, unlike many other industries, mining companies often face high levels of uncertainty around the scope of their operations and, subsequently, their land requirements,[282] which is often the source of many of the significant ESHR impacts of mining. It is therefore inevitable that many changes in operations will occur – expansion, contraction, new infrastructure, new resettlement – that need to be managed and regulated appropriately.

Mechan Isms for Coordination

Do the authorities charged with supervision have coordinated approach to regulating the mining operations?

- The operations phase will typically have a wide range of negative ESHR impacts that become particularly evident and must be managed over the course of operations. (See Box 63 on Typical ESHR Impacts at the Production Stage.)
- The mine operations will have to comply with:
  - → The ESIA/ESMP
  - → The mining license/contract
  - → Potentially a wide range of other ESHR laws
  - → In addition, mining companies may also have their own policies and procedures that set additional requirements for managing ESHR impacts.
- As a result, there will be multiple regulatory frameworks that apply to the mining operations with a range of authorities supervising compliance who are not familiar with all ESHR requirements and, in particular, how impacts in one area can raise the risk in other areas of operations.
  - → Such a mix leaves the opportunity for issues to 'fall between the cracks' or for a lack of coordination to increase risks of conflict. While sometimes a crisis is needed to prompt better coordination (see Box 64 on the follow up to the Marikana massacre), a better approach is to take advantage of extensive learning and support to build more coordinated approaches to managing the ESHR impacts of mining.

281 Australia Guide to Leading Sustainable Practices in Mining, (2011), p. 62, https://industry.gov.au/resource/Documents/LPSDP/guideLPSD.pdf

282 J. Owen and D. Kemp, "Mining-induced displacement and resettlement: a critical appraisal," (2014), Journal of Cleaner Production 87 (2015) p. 481

Managing expansion

Do the authorities and the company have a process for managing significant expansions or other changes in operations that can have ESHR impacts? Is there a process for informing and involving stakeholders?

- Over the course of the life of a large-scale mine, there is likely to be a range of planned and unplanned changes that can have significant ESHR impacts:
  - → *Ad hoc* land acquisition, potentially with associated resettlement
  - → Moving into areas with significant ASM activity (see Key Action 3 below)
  - → Unexpected impacts on habitats, etc.
- If the changes are significant enough, do they trigger a new ESIA and new ESMP accompanied by consultation that provides a structured process for involving the community and other stakeholders?
  - → Are there clear criteria for when a new ESIA should be triggered? Do the criteria cover only environmental issues? What happens when there may be significant social or human rights impacts?
- What happens if the changes do not require formal review where communication and consultation about the changes with authorities and stakeholders are likely to be more ad hoc and potentially carried out under pressure to complete the changes.
  - → The authorities and the companies should have ongoing processes for engaging with local communities, particularly where IPs are involved. It may be necessary to update consent with other stakeholders such as environmental groups.

Managing Cumulative Impacts

Do the relevant authorities have an approach to monitoring the cumulative impacts of multiple mining operations?

- Step 2 highlighted the importance of considering possible cumulative impacts when planning various mining operations (see Box 74 on cumulative impacts).
- At this production stage, if there are multiple mining or other operations in the same area, monitoring should be alert to potential cumulative impacts.
  - → Monitoring programmes that are geared to one mining operation will not pick up the cumulative burden on the environment and communities.

Managing for closure

Do the authorities and the company have a process for managing for closure during production?

- Progressive rehabilitation of mining areas during operations enables rehabilitation work to proceed while there is an operational cash flow and management and financial resources available.[283]

283 Australia Guide to Leading Sustainable Practices in Mining, (2011), p. 68, https://industry.gov.au/resource/Documents/LPSDP/guideLPSD.pdf Aus Leading Practices

Box 63

Typical ESHR Impacts of Mining at the Production Phase

Land

- *Short- and long-term impacts on topography and landform*: Temporary changes include access and haul roads, laydown and hardstand areas, topsoil stockpiles, process plant sites and support infrastructure. Permanent changes include open pit voids, waste rock landforms, tailings storage facilities (TSFs) and permanent water flow diversions.
- *Soil contamination*: Chemical reactions in waste rock and tailings can result in the contamination of surface soils.

Water

- Mining is a water-dependent and water-demanding industry that impacts on water quality and quantity. These are among the most contentious aspects of mining projects. Impacts include:
- *On surface water hydrology and groundwater*: The development of open pits, stockpiles, waste rock landforms, TSFs, processing plant and other infrastructure often interrupts natural drainage paths.
- *Water contamination*: Chemical reactions in waste rock and tailings can contaminate groundwater and surface water. Eliminating acid mine drainage is a key issue.
- *On the cultural and environmental values* of water used by communities
- *On the availability of water for other uses & other livelihoods*: particularly those related to agriculture
- *On local and regional economies*: through changing water patterns and the availability of water for other sectors that contribute to local development
- *On public health (see below)*
- *On national security*: as a result of social conflict among competing water users, with the potential to escalate as climate change impacts worsen

Waste

- ***Waste management and disposal***, including tailings waste, rock waste, hazardous disposal waste, slurry waste

Hazardous Substances

- *Transport, storage and use of a range of hazardous materials*, including fuels, process reagents, lubricants, detergents, explosives, solvents and paints, use of cyanide, mercury and other hazardous substances, which, if not properly managed, can cause atmospheric, soil or water contamination and could pose ongoing risks to human health and the environment.

Air

- *Air pollution* from hazardous substance use, dust, transport activities
- *Climate change impacts* through lost CO_2 uptake by forests and vegetation that is cleared, CO_2 emissions from machinery (e.g., diesel powered heavy vehicles) involved in extracting and transporting ore, and from the processing of ore into metal

Biodiversity/ Ecosystem

- *On flora*: Direct impacts on floral communities occur mainly through clearing for the mine, waste rock landforms, processing plant, TSFs and associated infrastructure[284]
- *On fauna*: The primary impact is the direct destruction of habitats through land clearing and earthmoving. Secondary impacts relate to activities, with varying degrees of disturbance beyond the immediate location where mining is taking place, such as access and haul roads; power lines; pipeline and transport corridors; other infrastructure; introductions of feral animals or increases in their numbers; and general workforce activities.
- *Ecosystem services* where activities pose unacceptable risks to ecological services relied upon by surrounding populations

284 Australia Guide to Leading Sustainable Practices in Mining, (2011), p. 73-74, https://industry.gov.au/resource/Documents/LPSDP/guideLPSD.pdf

Nuisance	• Increased ***dust***, ***noise***, ***light***, ***vibration*** and ***traffic***
Workers	• ***Occupational health and safety*** • ***Forced and child labour*** and exploitation of temporary and vulnerable work forces directly or through contracting value chains • Restrictions on ***freedom of association and collective bargaining*** • ***Poor working/employment conditions*** – such as low pay, long hours of work without overtime pay, only temporary contracts • ***Gender discrimination*** in hiring, training and/or promotion
Culture & Cultural Heritage	• Direct impacts on ***cultural resources*** from construction and other mining activities, affecting sacred landscapes, historical infrastructures and natural landmarks and indirect impacts can result from soil erosion and restricting accessibility to sites. • ***Unauthorized removal of artifacts or vandalism*** as a result of increased access to previously inaccessible areas • ***Visual impacts*** due to clearing of vegetation, large excavations, dust and the presence of operations
Social Cohesion	• Introduction of a ***cash economy*** into formerly rural-based economies • ***Inflation*** that puts pressure on local resources and local salaries • ***Influx*** of new populations with different cultures suddenly affects quality of life and the physical, mental and social well-being of local communities. • ***Influx*** of new populations that have not been planned for, resulting in an overburdening of public services
Community Safety & Security	• ***Mining accidents*** with an impact on community health and safety • ***Violent or abusive acts*** by private or public security forces • Increasing ***crime***, ***drugs***, ***alcohol***, ***prostitution*** and ***trafficking***
Public Health	• ***Water***: Surface and ground water contamination with metals and elements; microbiological contamination from sewage and wastes in campsites and mine worker residential areas • ***Air***: Exposure to high concentrations of sulphur dioxide, particulate matter, heavy metals, including lead, mercury and cadmium • ***Soil***: Deposition of toxic elements • ***Food security***: Improvised mining towns and camps often threaten food availability and safety, increasing the risk of malnourishment. • ***Disease***: Increased threat of communicable diseases
Indigenous Peoples & Ethnic Minorities	• ***Rights of participation and self-determination***, rights to property, culture, religion and non-discrimination in relation to lands, territories and natural resources, including sacred places and objects • Rights to ***health and physical well-being*** in relation to a clean and healthy environment • The right of indigenous peoples to ***set and pursue their own priorities for development***, including with regard to natural resources • Rights to ***freedom of expression and to participation***, good faith consultations with indigenous peoples in efforts to reach agreement or FPIC • ***Freedom from reprisals and violence***

Human Rights

- In addition to the issues already noted above (labour rights, women's rights, indigenous peoples' rights, non-discrimination), in particular:
- Right to ***information***, ***participation***, freedom of expression, assembly and association
- Right to ***health***, ***food***, ***housing***, an ***adequate standard of living***
- Right to ***life and security***
- ***Access to justice and an effective remedy***[285]

Box 64

Marikana – Example of Inter-Authority Coordination on Mining

During the 2012 Marikana massacre at the Lonmin platinum mine, the South African Police Service opened fire on a crowd of striking mineworkers at Marikana, killing 34 mineworkers, wounding 78 and arresting more than 250 people. The protesting mineworkers were demanding a wage increase.

In response, the South African Government established an Inter-Ministerial Committee for the Revitalisation of Distressed Mining Communities, which coordinates policy on the social and human rights impacts on mining communities.

B Conduct Regular Monitoring of ESHR Impacts throughout the Production Phase (see Step 5 for a more detailed discussion on monitoring)

Mining, environmental and labour/social authorities will need to continue the programme of monitoring started during the construction phase, moving into longer-term monitoring that can expand regular interaction with mine operators to ensure that ESHR monitoring is effectively linked to management strategies within the operator's ESMS. A cooperative and iterative approach assures the community that environmental and social concerns are being adequately managed.[286] In addition, the long-term production phase provides the opportunity to solidify or initiate new joint or community-based monitoring. Authorities may consider approaches to coordinating monitoring that help the authorities deliver a 'whole-of-government' approach to solving problems. (See Box 65 on establishing cross-functional monitoring boards.)

285 See, in addition, OECD, OECD Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractives Sector (2016), Table 4 on Identifying Potential Human Rights Impacts of Extractive Activities, http://www.oecd-ilibrary.org/governance/oecd-due-diligence-guidance-for-meaningful-stakeholder-engagement-in-the-extractive-sector_9789264252462-en

286 Australia Guide to Leading Sustainable Practices in Mining, (2011), p. 23, https://industry.gov.au/resource/Documents/LPSDP/guideLPSD.pdf LP

Box 65

Establishing Cross-Functional Monitoring Boards

Some countries have established 'Environment Boards' that are located in regions close to where mining takes place, comprised of different authorities with relevant mandates for monitoring mining operations – social welfare, labour, environment, mining, justice and treasury -- may sit on such a Board. These Boards review ESIAs and help to monitor progress and can make collective decisions when ESHR issues arise.[287]

C Manage ESHR Impact Events

Mining accidents have the potential to cause significant damage to the environment and loss of human life – through collapsing tailing dams, spills of toxic chemicals, explosions, etc. – and to a significant loss of reputation for the companies involved. It is also a sector with potentially high-value assets with legitimate interests for both mining companies and the government in protecting the security of facilities, assets and personnel. For mining operations, this may eventually include a large contingent of private security guards, and/or depending on the context and arrangements, there may also be deployment of public security forces (local police forces and/or military).

Managing Emergencies

Do the mining or environmental authorities and mine operators have emergency plans in place?

- Emergency preparedness plans to deal with a range of accidents should be an integral part of the planning process and adapted to each phase, starting with the construction phase, and adapted throughout the operating phase as the risk profile of operations change. (See Box 66 on emergency planning.)
- Regular monitoring of emergency preparedness, testing of systems through test drills and periodic updating of plans to account for changing circumstances will be needed.
- Mining companies should be required to notify the authorities of incidents causing or threatening environmental harm or health and safety threats to the surrounding community.

Involving the Public in Emergency Planning

Do the mining or environmental authorities have a system to disseminate information immediately to the public in the event of an imminent threat of harm to human health or the environment resulting from mining operations?[288]

- Emergency planning should also include public participation in the planning for higher risk mining operations – in the establishment of emergency plans and in any testing of the systems.

287 Extractives Hub, Mineral Policy, (2017), p. 25, https://beta.extractiveshub.org/topic/view/ID/16

288 Bali Guideline 6: In the event of an imminent threat of harm to human health or the environment, States should ensure that all information that would enable the public to take measures to prevent such harm is disseminated immediately. UNEP, "Putting Rio Principle 10 into Action: An Implementation Guide for the UNEP Bali Guidelines for the Development of National Legislation on Access to Information, Public Participation and Access to Justice in Environmental Matters," (2015), http://wedocs.unep.org/handle/20.500.11822/11201

- Authorities should have an alert system to:
  - → Warn about imminent threats, via various media, depending upon local circumstances, which may include radio, television, public warning systems and the internet
  - → Provide information during the course of any emergencies on safety measures and behaviour in the event of a major accident
  - → After the emergency, provide information about what is being done to address the incident and avoid repetition
- The specific information that public authorities should release includes all information that could enable the public to take protective action to avoid or minimize harm.

Managing Security-Related Incidents

Do the public security forces and the mining companies have an approach to managing security incidents in a manner that protects human rights?

- Given the potential for conflicts with local communities (see Step 5 – Mine Development and Construction, Key Action 3 on community engagement), the interaction of public and private security forces with local communities has been a high profile topic for the extractive sector for many years.
  - → Whether dealing with theft or other crimes or managing protests, private and public security forces should act in a manner consistent with human rights, with any response being proportional to the threat.
  - → Proactive communication, community engagement and grievance redress are central to this approach. (See Boxes 67 and 68 on addressing security and human rights.)
- While many companies already assess the types and likelihood of security threats posed to their operations by their operating environment, they are increasingly called upon to consider the impacts that their security arrangements might have on local communities, including on those communities' human rights.[289]

Box 66

IGF Recommendations on Emergency Plans

- Requiring all mining operations to have an emergency preparedness and response programme prior to commencement of operations and ensuring that the programme be reviewed, tested and updated on a regular basis
- Basing all elements of the emergency preparedness programme on ongoing consultation and cooperation with local and other stakeholders and government
- Ensuring that monitoring of the effectiveness and responsiveness of the emergency preparedness programme is conducted by companies in cooperation with communities and all levels of government
- Ensuring that mine emergency plans are comprehensive and meet current best practice standards, specifically by:
  - → Requiring the development of emergency preparedness programmes as part of an environmental impact assessment for any new operation
  - → Requiring regular review and updating of such programmes
  - → Requiring consultation and cooperation with local, regional, national and, as appropriate, trans-boundary stakeholders in the development and maintenance of emergency preparedness programmes
  - → Endorsing and promoting international best practices, such as the APELL process, at national or regional levels to better coordinate emergency preparedness between mining entities, local authorities and local populations
  - → Ensuring that appropriate government departments and agencies at the national, regional and local levels are aware of and prepared to cooperate with mining company response actions

289 See IFC, Good Practice Handbook on the Use of Security Forces: Assessing and Managing Risks and Impacts – Guidance for the Private Sector in Emerging Markets (2017), p. xi, http://www.ifc.org/wps/wcm/connect/ab19adc0-290e-4930-966f-22c119d95cda/p_handbook_SecurityForces_2017.pdf?MOD=AJPERES

Box 67

IGF Recommendations on Security

Address potential security issues by:

- "Working with entities to address issues that may give rise to security concerns before issuing permits or commencing operations. Governments and entities should consider using the tools and programmes of the socio-economic plan to resolve or reduce the potential for disputes and be guided in their actions by international norms such as those represented by the International Finance Corporation Performance Standards on Social and Environmental Sustainability and the Voluntary Principles on Security and Human Rights
- Not issuing permits when a deposit to be mined is in an area of active armed conflict. When there is already active development or an operating mine when conflict breaks out, governments and operating entities should act to protect human rights and ensure the safety of miners, their families and communities in accordance with the OECD Guidelines. If this does not prove possible, governments may consider removing the mine operation from the dynamics of the conflict by any means possible, including by revoking the mine permit and shutting the mine down."[290]

Box 68

Initiatives and Toolkits to Help Manage Security Concerns Around Extractive Operations in a Manner Aligned with Human Rights

- **IFC, Good Practice Handbook on the Use of Security Forces: Assessing and Managing Risks and Impacts – Guidance for the Private Sector in Emerging Markets** (2017) provides guidance to private sector operators on engaging with public and private security and are therefore relevant to public sector authorities in considering how their security forces are trained and deployed when guarding mining operations.[291]
- **Voluntary Principles on Security and Human Rights – for mining companies and governments**. The Voluntary Principles on Security and Human Rights are a set of principles designed to guide extractive companies in maintaining the safety and security of their operations within an operating framework that encourages respect for human rights while helping companies work effectively with governments that seek to protect human rights. While designed for companies, the Voluntary Principles are a useful tool for all governments with interests in the operations of the extractive industries. They can contribute to the protection of human rights and the prevention of conflict.[292]
- **DCAF-ICRC Toolkit on Addressing Security and Human Rights Challenges in Complex Environments**[293] has the form of an overall guidance document, with references to a selection of the most relevant existing resources and tools covering the following issues: 1) working with host governments, 2) working with public security forces, 3) working with private security providers and 4) working with communities.

290 IGF "Mining Policy Framework" (2013), http://igfmining.org/mining-policy-framework/

291 http://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+sustainability/learning+and+adapting/knowledge+products/publications/publications_handbook_securityforces

292 See: http://www.voluntaryprinciples.org/wp-content/uploads/2014/06/Voluntary_Principles_government_Fact_Sheet_2014.pdf

293 http://www.securityhumanrightshub.org/content/toolkit

D Address Relationships with ASM

The artisanal and small-scale mining (ASM) sector can occur at each stage of the mining life cycle and is often carried out in areas adjacent to or within large-scale mining (LSM) concessions. Because ASM operations are often interwoven with LSM operations, they can be ignored neither by authorities nor by mining companies running large-scale operations. Instead, appropriate management of LSM-ASM relationships can provide another avenue for sharing benefits through capacity-building. This starts with having a mining policy that is appropriately scaled and targeted to the ASM sector rather than regulatory frameworks that are the same regardless of size and social context ('one size fits all').

Updating ASM Approaches

Has the government reviewed its ASM policy in light of its commitments to sustainable development and newly emerging guidance for the sector?

- New approaches to policymaking recognize that a more comprehensive and fit-for-purpose approach is necessary to:
  - → Improve the sustainable development outcomes of ASM through targeted policymaking and support so that ASM can continue to provide livelihoods for millions of miners and their families but in a manner that better protects the environment and workers
  - → Reduce conflicts and improve synergies with LSM operations. (See Box 69 on Changing Attitudes to ASM and 70 on IGF guidance on managing the ASM sector.)
- Has the government moved from a one-size-fits-all framework that treats all mining alike to a progressive compliance approach that provides technical assistance and support to small-scale miners?
  - → Developing requirements that are fit for purpose for ASM can help persuade informal miners to come into the formal system (see Box 71 for an example from Colombia), whereas imposing the same requirements as for LSM can create perverse incentive that discourages formalization of ASM miners.

Including ASM Voices in Updating Its Approach

Has the government taken an inclusive approach to developing its policy and approach to ASM?

- ASM often involves marginalized, informal populations operating outside formal structures. By involving ASM communities in the dialogue around needed changes, governments can create consensus on a new agenda for change, bring unheard voices to the debate and ensure that new approaches are fit for purpose.
- In particular, given the high percentage of women and children in the sector, with many involved in insecure, dangerous work, particular attention should be paid to bringing their voices into the discussion and specifically to considering the particular impacts on women[294] and children[295] that should be addressed as part of a renewed approach to ASM.[296]

294 See: World Bank, "Women and Artisanal and Small-Scale Mining (ASM)," Nairobi Note 4, https://olc.worldbank.org/sites/default/files/WB_Nairobi_Notes_4_RD3_0.pdf and World Bank, "Gender Dimensions of Artisanal and Small-Scale Mining A Rapid Assessment Toolkit," (2012), http://siteresources.worldbank.org/INTOGMC/Resources/toolkit-web.pdf

295 See, for example, UNICEF, Child Rights and Mining Toolkit (2017), https://www.unicef.org/csr/files/FINAL_Child_Rights_and_Mining_Toolkit_060217.pdf

296 African Minerals Development Centre, "African Woman in Artisanal and Small Scale Mining," (2015), http://commdev.org/wp-content/uploads/2015/05/P_African_Women_In_Artisanal_and_Small_Scale_Mining.pdf

- Several countries have state-sponsored programmes to assist indigenous peoples to manage natural resources or develop their own income-generating enterprises, providing various kinds of support, such as grants, loans, favourable tax treatment, advisory services, skills training and scholarships. Resource extraction carried out by indigenous peoples themselves maximizes the possibility of such extraction being pursued in manners respectful of the rights and interests of indigenous peoples.[297]

Managing LSM-ASM Relationships

Do the mining authorities encourage LSM adjacent to ASM to appropriately manage relationships with ASM?

- LSM companies operating side-by-side with ASM are recognizing that working with ASM rather than ignoring or even trying to repress ASM can result in benefits for the LSM and ASM if managed well. For the LSM, building better relationships with ASM can have the following benefits for LSM:
  - → Risk minimization and improved security
  - → Maximizing community development opportunities
  - → Improved mine closure planning
- Support to improving the sustainability of ASM and improving the lives of ASM miners and their dependents ASM can include (see Box 72 on good practices on developing the ASM-LSM relationship):
  - → Skills training
  - → Technology transfers to improve EHS
  - → Support for formalization
  - → Purchasing programmes from ASM
  - → Employment opportunities and alternative livelihoods,
  - → Support for moving to certified ASM[298]

297 See Report of the Special Rapporteur on the rights of indigenous peoples, James Anaya on "Extractive industries and indigenous peoples," A/HRC/24/41 (2013), pp. 5-6.

298 See, for example, the Alliance for Responsible Mining and its Fairmined Certification for ASMs, http://www.responsiblemines.org/

Box 69

Changing Attitudes to ASM

ASM is increasingly being seen for what it is – a source of livelihood for a significant number of the world's miners and therefore an appropriate focus of development. ASM produces about 85 percent of the world's gemstones and 20 to 25 percent of all gold. The sector provides jobs and income for 20 million to 30 million of the world's poorest people and supports the livelihoods of many more – more than 10 times the number employed in LSM. It is a source of and supplement to meagre livelihoods.[299] The exact scale of ASM worldwide is unknown, given that much of ASM operates outside formal economic and legal structures and in remote, rural areas.

The ASM sector "is a paradox — productive but undervalued, conspicuous yet overlooked, and 'small-scale' but economically and socially significant."[300] ASM often involves severe pollution and harsh working conditions. The miners very often lack access to rights and rights protection, access to finance, skills and technology, to make ASM a prosperous economic activity with reduced environmental and social impacts. ASM is often indiscriminately criminalized, further eroding rights and protections. And as a result, many are often driven to operate illegally.

However, government and LSM approaches to the ASM sector[301] are evolving, recognizing that ASM has been around for centuries, providing livelihood opportunities with the potential to contribute to sustainable rural development. Policies to date have often been poorly designed or implemented or even repressive or too often take a 'one-size-fits-all' approach that is modelled on LSM and wholly inappropriate to ASM. Government treatment of ASM has varied from earlier approaches of ignoring the sector or trying to eliminate the sector entirely to more recent approaches of formalization and, finally, most recently recognizing ASM as a sustainable development issue – focusing on environmental and social as well as economic impacts.[302]

Box 70

IGF Objectives & Guidance for Governments on Managing Artisanal and Small-Scale Mining (ASM)

The IGF's Mining Policy Framework outlines three key ways in which countries can govern their ASM sectors to contribute to the their sustainable development:

1. Integrate informal ASM activities into the legal system
2. Integrate informal ASM activities into the formal economic system
3. Reduce the social and environmental impacts of ASM

The more detailed **IGF Guidance on ASM**[303] presents a step-by-step process for governments to develop, implement and monitor an effective ASM Management Strategy. The guidance includes direction on how to ensure effective, inclusive strategy development and implementation, as well as effective governance of the process overall. The guidance is designed for the local, subnational and national governments of countries where ASM takes place.

299 See: http://artisanalmining.org/

300 IIED, "IIED shines a light on small-scale mining", (2013), https://www.iied.org/iied-shines-light-small-scale-mining

301 IIED, "IIED shines a light on small-scale mining", (2013), https://www.iied.org/iied-shines-light-small-scale-mining. See also: ICMM & World Bank Group, "Working Together How large-scale mining can engage with artisanal and small-scale miners," (2018), https://commdev.org/userfiles/files/2018_file_Working_Together_FINAL_PILOT_VERSION.pdf

302 http://goxi.org/profiles/blog/show?id=5786733%3ABlogPost%3A486631&commentId=5786733%3AComment%3A49412

303 IGF, "ASM Guidance Document", http://igfmining.org/resources/asm-guidance-document/

Box 71

Developing a Fit-for-Purpose Policy and Legal Framework for the Different Segments of the Mining Sector – An Example from Colombia

The Sector-Wide Impact Assessment on Human Rights in the Mining Sector (SWIA)[304] in Colombia found that one of the main gaps of the sector in Colombia is a comprehensive and inclusive policy that is attuned to the realities of the populations and the differences in mining activities given size and mineral. A constant complaint of small and medium-sized miners was about a one-size-fits-all policy regarding technical end environmental standards. The financial, knowledge and administrative hurdles discourage entering into the legal and formal path mining. Instead, these miners prefer the risk of being informal because the hurdles to formalization are too high. A progressive compliance approach to substitute the rigid current framework that is scaled to capacities and impacts would provide better incentives to formalize.

Box 72

Good Practices to Promote LSM and ASM Working Together[305]

The 'Working Together' guidance document from ICMM and the World Bank Group "evolved out of a growing sense that more mutually beneficial engagement between mining companies and ASM operators is needed."[306] It brings together a number of approaches and tools for companies to engage with ASM. While it is aimed primarily at LSM, recognizing that ASM is an issue for joint management with government, many of the good practices identified can also be used by government to support ASM – such as support for formalization, job training and alternative livelihood programmes.

304 Centro Regional de Empresas y Emprendimientos Responsables, "Sector-Wide Impact Assessment on Human Rights: Mining Unseen". See (in Spanish) Las Evaluaciones Integrales Sectoriales de Impactos (EISI) (2016), http://creer-ihrb.org/proyectos-eisi/

305 See the updated version: ICMM & World Bank Group, "Working Together How large-scale mining can engage with artisanal and small-scale miners," (2018), https://commdev.org/userfiles/files/2018_file_Working_Together_FINAL_PILOT_VERSION.pdf

306 http://www.miningfacts.org/Communities/What-is-Artisanal-and-Small-Scale-Mining/