

# IGF GUIDANCE FOR GOVERNMENTS

## Managing artisanal and small-scale mining

January 2017



**IGF**

INTERGOVERNMENTAL FORUM  
on Mining, Minerals, Metals and  
Sustainable Development

© 2017 The International Institute for Sustainable Development

Published by the International Institute for Sustainable Development

IGF Guidance for Governments: Managing artisanal and small-scale mining

January 2017

Written by Dan Paget, Nicholas Garrett and Alec Crawford

Recommended citation:

Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development (IGF). (2017). *IGF Guidance for Governments: Managing artisanal and small-scale mining*. Winnipeg: IISD.

The advice in this IGF Guidance for Governments is based on research and publications on artisanal and small-scale mining management good practice available at the time of writing, and has been reviewed by representatives of IGF member countries and other interested stakeholders. This Guidance shall be used at the risk of the user, and the IGF accepts no responsibility for consequences of following the advice or recommendations found in this document.

© 2017 The International Institute for Sustainable Development  
Published by the International Institute for Sustainable Development

The International Institute for Sustainable Development (IISD) is one of the world's leading centres of research and innovation. The Institute provides practical solutions to the growing challenges and opportunities of integrating environmental and social priorities with economic development. We report on international negotiations and share knowledge gained through collaborative projects, resulting in more rigorous research, stronger global networks, and better engagement among researchers, citizens, businesses and policymakers.

IISD is registered as a charitable organization in Canada and has 501(c) (3) status in the United States. IISD receives core operating support from the Government of Canada, provided through the International Development Research Centre (IDRC) and from the Province of Manitoba. The Institute receives project funding from numerous governments inside and outside Canada, United Nations agencies, foundations, the private sector and individuals.



The IGF is a member-driven organization aimed at providing national governments committed to leveraging mining for sustainable development the opportunity to work collectively to achieve their goals. It is devoted to optimizing the benefits of mining to achieve poverty reduction, inclusive growth, social development and environmental stewardship.

The IGF serves as a unique global venue for dialogue between its 56 member country governments, mining companies, industry associations and civil society.



RCS Global produced this Guidance document under contract from the IGF. RCS Global is one of the world's leading responsible raw materials supply chain audit and advisory groups. Our advisory work continues to shape and implement industry and regulatory good practice while our audit practice ensures companies can prove compliance. This project was delivered under project direction of RCS Director Dr. Nicholas Garrett. Dan Paget is the Lead Author, with Dr. Nicholas Garrett and Alec Crawford as additional authors. Nicolas Eslava provided project management support.



**IISD Head Office**  
111 Lombard Avenue  
Suite 325  
Winnipeg, Manitoba  
Canada R3B 0T4

[iisd.org](http://iisd.org)  
 [@IISD\\_news](https://twitter.com/IISD_news)

**IGF / IISD Ottawa office**  
1100-220 Laurier Avenue W.  
Ottawa, Ontario  
Canada R3B 0T4

[IGFMining.org](http://IGFMining.org)  
 [@IGFMining](https://twitter.com/IGFMining)

**RCS Global**  
207 Regent Street  
London, W1H 3HH  
United Kingdom

[RCSglobal.com](http://RCSglobal.com)  
 [@RCS\\_global](https://twitter.com/RCS_global)

Secretariat hosted by



Secretariat funded by



Guidance funded by





# ABOUT THE IGF GUIDANCE FOR GOVERNMENTS

In order to expand on the direction provided by the IGF's Mining Policy Framework (MPF), IGF member states identified the need for more concrete guidance on managing key issues relating to mining and sustainable development. In response, the IGF Secretariat will develop, on an annual basis, IGF Guidance for Governments documents that build on and enhance the direction provided in the MPF in order to assist member countries in their implementation of the framework. *IGF Guidance for Governments: Managing artisanal and small-scale mining (ASM)* is the first report in this series.

## ABOUT ARTISANAL AND SMALL-SCALE MINING

ASM is a complex and diversified sector across much of the developing world. It ranges from informal individual miners seeking a subsistence livelihood, to small-scale formal commercial mining entities producing minerals in a responsible way. For many countries, ASM is at once an important source of livelihoods and of environmental damage. There is a pressing need to enhance the quality of life for those miners working outside of formal legal and economic systems, and to enhance the contribution of the sector to sustainable development.

The exact scale of ASM worldwide is unknown, given that many operating in the sector do so outside of formal economic and legal structures. However, it is assumed the sector provides a livelihood to tens of millions of people globally. Many miners practice ASM seasonally, to supplement other forms of income, leaving their farms during periods of drought, for example. The ASM sector comprises all stages of the value chain, including inputs, mining, trading, primary processing, trading, secondary processing and export. It can occur at each stage of the mining life cycle, from exploration through development, operation, closure and post-closure and is often carried out in areas adjacent to or within large-scale mining concessions.

ASM is a central theme of the IGF's Mining Policy Framework (MPF). The MPF outlines three key ways in which countries can govern their ASM sectors to ensure that they contribute to the country's sustainable development:

- Integrate informal ASM activities into the legal system
- Integrate informal ASM activities into the formal economic system
- Reduce the social and environmental impacts of ASM



# TABLE OF CONTENTS

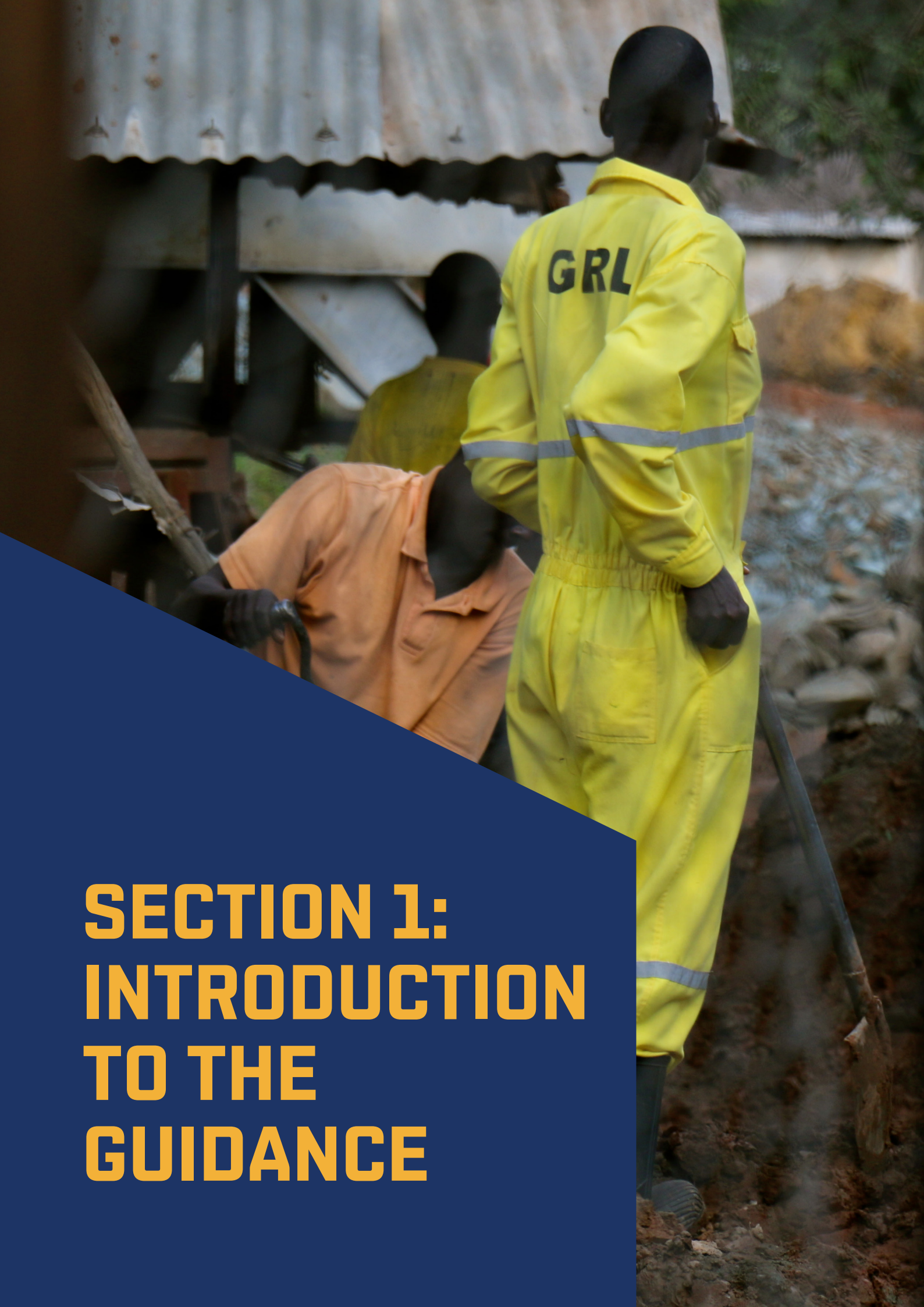
<b>SECTION 1: INTRODUCTION TO THE GUIDANCE</b> .....	<b>1</b>
<b>SECTION 2: ASM AND SUSTAINABLE DEVELOPMENT</b> .....	<b>4</b>
<b>PHASE 1: GETTING STARTED</b> .....	<b>7</b>
1.1 FORM AN ASM TASK FORCE .....	9
1.2 ESTABLISH A FORUM FOR CONSULTING WITH ASM STAKEHOLDERS .....	9
1.3 ANALYZE THE ASM CONTEXT .....	10
1.4 ENGAGE WITH PARTNERS.....	11
<b>PHASE 2: DEVELOPING AN ASM MANAGEMENT STRATEGY</b> .....	<b>14</b>
2.1 DEVELOP AN ASM VISION.....	16
2.2 ORGANIZE THE ASM SECTOR INTO TYPES AND PRIORITIZE.....	18
2.3 DEVELOP THE ASM MANAGEMENT STRATEGY .....	19
2.4 FINALIZE THE ASM MANAGEMENT STRATEGY .....	35
<b>PHASE 3: IMPLEMENTING THE ASM MANAGEMENT STRATEGY</b> .....	<b>38</b>
3.1 PREPARE TO IMPLEMENT .....	40
3.2 IMPLEMENT .....	43
3.3 MONITORING, EVALUATION AND IMPROVEMENT .....	48
<b>ANNEX: ADDITIONAL RESOURCES ON ASM</b> .....	<b>50</b>



# ACRONYMS

ASM	artisanal and small-scale mining
IGF	Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development
IISD	International Institute for Sustainable Development
LSM	large-scale mining
M&E	monitoring and evaluation
MPF	Mining Policy Framework





# **SECTION 1: INTRODUCTION TO THE GUIDANCE**

# SECTION 1: INTRODUCTION TO THE GUIDANCE

## WHAT IS IGF GUIDANCE FOR GOVERNMENTS: MANAGING ARTISANAL AND SMALL-SCALE MINING?

This guidance document presents a step-by-step process for governments to develop, implement and monitor an effective artisanal and small-scale mining (ASM) management strategy. The guidance includes steps on how to ensure effective, inclusive strategy development and implementation, as well as effective governance of the process overall. It encourages the user to focus on the local context, and to continually think about the most practical and feasible ways for a government to achieve its ASM-related sustainable development objectives.

The process for developing an ASM management strategy is broken down into three key phases (see Figure 1):

### PHASE 1: GETTING STARTED

This phase is comprised of the steps that a government should take before it begins to develop an ASM Management Strategy. It offers guidance on the roles and responsibilities required for the development and implementation of the strategy, recommends the research that governments should undertake prior to setting national objectives for the ASM sector and lays out options for stakeholder engagement in the process.

### PHASE 2: DEVELOPING AN ASM MANAGEMENT STRATEGY

The second phase of the process, which makes up the majority of the guidance, describes the steps that the user should take in developing or reviewing an ASM Management Strategy. It is during this phase that a government sets its goals for the sector, and identifies the instruments and initiatives that it will employ to develop programs to achieve those goals.

### PHASE 3: IMPLEMENTING THE ASM MANAGEMENT STRATEGY

The third phase outlines the steps that a government should take to implement, monitor and evaluate the components of its new ASM Management Strategy.

This *IGF Guidance for Governments* document is supported by both a summary and a supplement, which provide further information on ASM management and sustainable development for those who require it as they read through this document. Both are available through the IGF website.

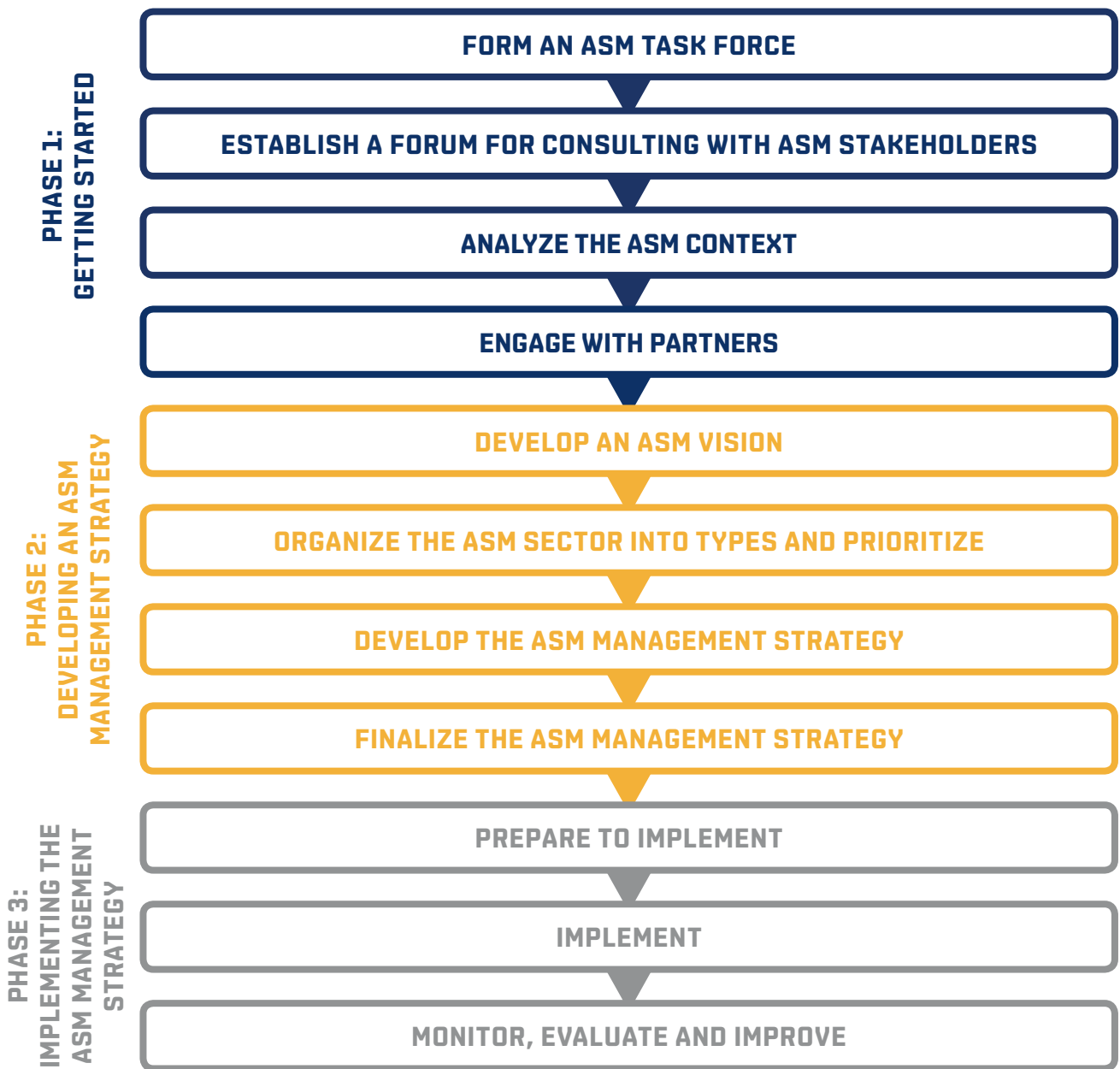
## WHO IS IT FOR?

The guidance is designed for the local, subnational and national governments of countries where ASM takes place. It is relevant for those governments that have the decision- and policy-making power to develop and adopt laws and policies, issue permits and licences, offer access to land, commission major programs and control spending. It is also useful to those stakeholders interested in how government do manage or could manage their ASM sector.

## WHO DEVELOPED THE GUIDANCE?

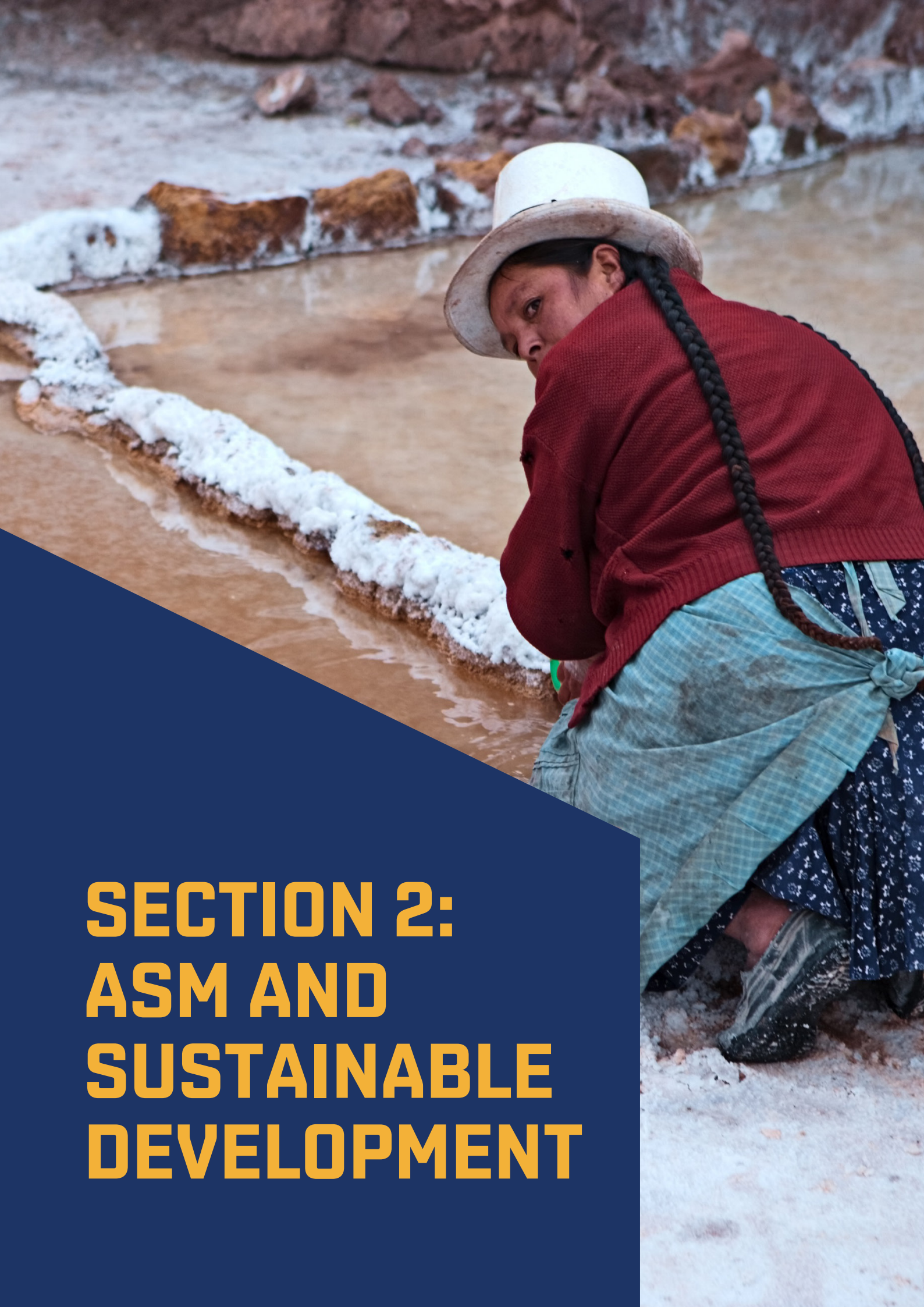
RCS Global and the IGF developed the *IGF Guidance for Governments: Managing artisanal and small-scale mining*, and involved global practitioners and experts via inclusive consultation.





**FIGURE 1. THE THREE PHASES OF DEVELOPING AN ASM MANAGEMENT STRATEGY**

*“The guidance includes steps on how to ensure effective, inclusive strategy development and implementation, as well as effective governance of the process overall.”*



# **SECTION 2: ASM AND SUSTAINABLE DEVELOPMENT**



## SECTION 2: ASM AND SUSTAINABLE DEVELOPMENT

ASM is a complex and diversified sector across much of the developing world. It ranges from informal individual miners seeking a subsistence livelihood, to small-scale formal commercial mining entities producing minerals in a responsible way. For many countries, ASM is at once an important source of livelihoods and of environmental damage. There is a pressing need to enhance the quality of life for those miners working outside of formal legal and economic systems, and to enhance the contribution of the sector to sustainable development.

The exact scale of ASM worldwide is unknown, given that many operating in the sector do so outside of formal economic and legal structures. However, it is assumed that the sector provides a livelihood to tens of millions of people globally. While artisanal mining is, by definition, carried out using simple, non-mechanized techniques and is largely labour intensive, small-scale mining can be slightly more capital intensive, though it is also carried out by small groups of individuals or communities. The ASM sector is further characterized by low productivity, a lack of health and safety measures, the absence of environmental safeguards, and economic insecurity. Many miners practice ASM seasonally, to supplement other forms of income (leaving their farms during periods of drought, for example).

The ASM sector comprises all stages of the value chain, including inputs, mining, trading, primary processing, trading, secondary processing and export. It can occur at each stage of the mining life cycle, from exploration through development, operation, closure and post-closure. It is often carried out in areas adjacent to or within large-scale mining concessions, with the ASM miners either active in the area prior to the establishment of the big mine, or arriving during or after its construction.

ASM is a central pillar of the IGF's Mining Policy Framework (MPF). The MPF outlines three key ways in which countries can govern their ASM sectors to ensure that they contribute to the country's sustainable development.



**1. Integrate informal ASM activities into the legal system by:**

- Creating clear legal frameworks and regulatory mechanisms to facilitate the organization of ASM, access to property rights and ensuing obligations for ASM.
- Providing technical support to build the capacity of government or other bodies tasked with regulating and supporting the sector.
- Developing and replicating formalization strategies on the basis of lessons learned.

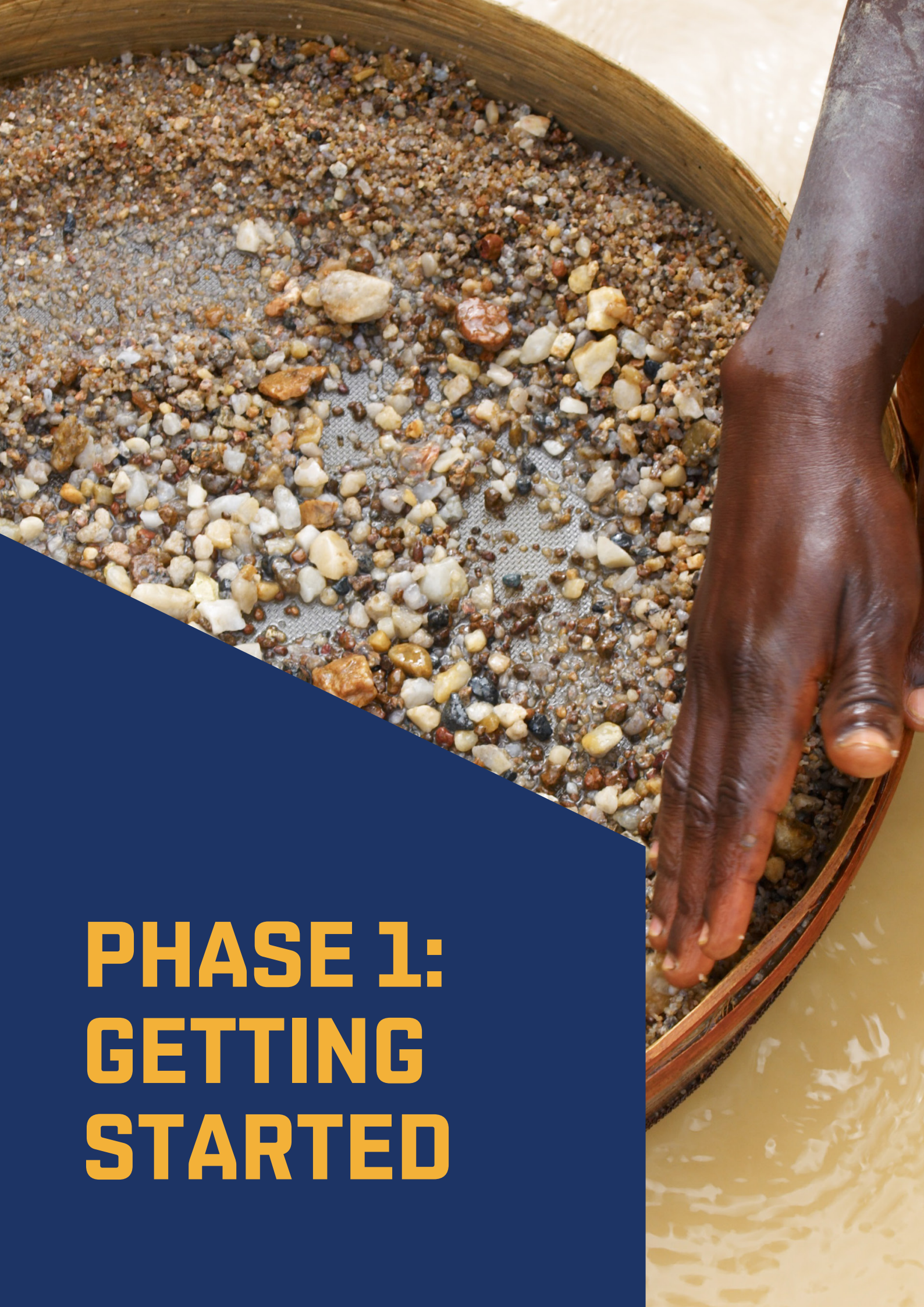
**2. Integrate informal ASM activities into the formal economic system:**

- Improving savings in the artisanal mining community, establishing more acceptable forms of financing and encouraging responsible investment.
- Strengthening the appropriateness, viability and transparency of policies and systems for collection, management and reinvestment of ASM revenue.
- Encouraging initiatives for standards and certification of ASM “fair trade,” conflict-free minerals to harmonize and grow in scale.
- Encouraging entities, through the permitting process or at other times, to explore ways to collaborate with ASM when it is present or can reasonably be anticipated to follow the development of a mine.

**3. Reduce the social and environmental impacts of ASM by:**

- Providing technical training to improve productivity and safeguard the environment, and developing, disseminating and enforcing regulations with a particular emphasis on safeguarding water sources, reducing deforestation, ending or reducing the use of mercury, and improving the management of mercury and other toxic substances when it is not possible to eliminate them, including safe working conditions, access to health care.
- Having national programs that provide minimal standards of health and education to ASM workers and their families.
- Making a significant and verifiable reduction in the number of children employed in artisanal mining and improvements in the nature and scheduling of their work so as to accommodate educational needs.
- Strengthening, monitoring and enforcing laws on child labour in artisanal and small-scale mining areas.
- Strengthening the role and security of women in ASM.
- Promoting the inclusion of ASM in rural development and job creation policies such that, where desired and realistic, alternative livelihoods are promoted.





# PHASE 1: GETTING STARTED

# PHASE 1: GETTING STARTED

## PURPOSE:

To put in place structures that will ensure the efficient and effective development and implementation of a national ASM Management Strategy.

## STEPS:

### 1.1 FORM AN ASM TASK FORCE

Establish a government task force to drive the development process for the ASM management strategy, and ensure that it has the resources, capacities and political support required to do so.

### 1.2 ESTABLISH A FORUM FOR CONSULTING WITH ASM STAKEHOLDERS

Create a forum for dialogue around ASM, ensuring that it is inclusive, transparent, gender-balanced, conflict-sensitive; and that it meets regularly and concretely informs policy and practice.

### 1.3 ANALYZE THE ASM CONTEXT

In order to develop an effective strategy for managing ASM, the government must fully understand the context in which that strategy will be developed and implemented.

### 1.4 ENGAGE WITH PARTNERS

Reach out to potential national and international partners and experts that may have relevant experience in ASM management, and that could help design, finance, implement and monitor the ASM Management Strategy.

## ACTIVITIES:

The activities conducted during this phase of the process include establishing a team to conduct the work, carrying out desk-based research, identifying and mapping key stakeholders, and reaching out to potential partners.

## OUTPUTS:

An ASM task force

An ASM context analysis

A platform for stakeholder dialogue on ASM

This first, preparatory phase in the process is focused on laying the foundation for the efficient and effective development and implementation of a national ASM Management Strategy. It requires the identification of an internal champion to drive the process forward; the establishment of a platform for dialogue among relevant stakeholders to ensure an inclusive process; a thorough context analysis to guarantee a deep understanding of the current ASM sector and how changes to law and policy will affect those involved; and early engagement with partner governments and institutions to support the process.



## 1.1 FORM AN ASM TASK FORCE

The ASM task force is established to lead and coordinate the development of a government's ASM management strategy, from design to implementation to monitoring. It will bring together the government's key ASM decision-making bodies, and will work to ensure that, through collaboration and participation, potential tensions and conflicts that are identified are prevented and resolved.

The task force should be made up of individuals representing those key ministries, departments and agencies central to the management of the ASM sector. While the size of the task force is up to the user, typically a group of approximately five to eight individuals will allow for constructive dialogue and action while not falling victim to the challenges inherent in organizing larger groups. In addition to guiding the process laid out in this document, the task force will communicate with and coordinate the work of those ministries, departments and agencies that will be involved in developing and implementing the ASM Management Strategy. The task force will typically include mining, land, finance, trade, environment, labour, health, agriculture and planning.

Having a task force in place to act as an internal champion for the process will be crucial to the successful development of an ASM Management Strategy. Along with the selection of the right people for the task force, a crucial early step will be ensuring that the group has the resources—financial and human—and high-level government support required for it to carry out its mandate. Prior to its establishment, the government should decide whether the task force will be temporary or permanent, and how the selection of task force members will affect interministerial dynamics (with a view to identifying and preventing potential conflicts or tensions).

## 1.2 ESTABLISH A FORUM FOR CONSULTING WITH ASM STAKEHOLDERS

Inclusive consultation between government and stakeholders is crucial to improving and legitimizing ASM laws, policies and approaches. It provides relevant stakeholders with the opportunity to discuss, challenge and influence government proposals and decisions. Establishing a platform for such stakeholder consultation is the second step of Phase 1, and will strengthen ASM management strategies by allowing for constructive dialogue among government, communities, miners, civil society and large-scale mining entities, among others. The ASM task force is responsible for the establishment of the ASM consultation forum.

In order to be legitimate, the ASM stakeholder forum should:

- **Be inclusive:** All stakeholders are given equal opportunity to participate, and there are low barriers to participation with no threat of reprisals. Financial and human resource requirements are assessed and distributed if needed to create a representative stakeholder group. Language barriers, customary or cultural barriers and early notification are all considered, and those actors without collective representation are helped to form them.
- **Meet regularly:** Forum meetings take place periodically throughout the process of developing, implementing and monitoring the ASM management strategy. Meetings take place in a safe, neutral space where opinions can be given openly without fear.
- **Be transparent:** Consultations are public and known, with participants identified and the expected and actual outputs and outcomes of each consultation made publicly available. Notices and outcomes are reported in a timely and accessible manner.
- **Be relevant:** Outcomes of the process should affect government policy-making and activities.
- **Be gender-balanced:** Consultations should achieve a level of gender representation that reflects the composition of the national ASM sector, in terms of both direct and indirect ASM activities.
- **Be conflict-sensitive:** Consultations are designed in a way that minimizes the risk of creating or exacerbating tensions or conflicts, while identifying opportunities for enhancing dialogue and cooperation among stakeholders.

Before proceeding with the establishment of the stakeholder forum, the ASM task force must identify whether there are existing legitimate ASM representatives in place, or whether ASM operations and miners will need assistance in forming such associations or nominating representatives. Second, the task force should identify whether these representatives require assistance in preparing for and attending the consultations. Related to this, the task force should assess—at least in the early stages of the process—whether the government itself will require assistance in preparing for and facilitating the stakeholder forums, and if so, should decide on how it can get the needed help.

Once in place, the ASM stakeholder forum will help the government form a line of communication with those active in the sector, develop and gain support for the Management Strategy, improve existing laws and policies, and build knowledge about the domestic ASM sector.

### 1.3 ANALYZE THE ASM CONTEXT

Before proceeding with the development of a national ASM Management Strategy, the government must fully understand the context and dynamics of the domestic ASM sector. This includes an understanding of the key minerals, stakeholders, geographies, economics and conflicts associated with ASM within the country. It is possible that much of this information exists already; a literature review should be done before the analysis to gauge what is already known and what must be researched. What is clear is that there is a strong need to generate and collect the data necessary to inform the development of the ASM Management Strategy. And while the ASM task force can drive the research process, assistance from other ministries (labour, land, trade, environment) is likely required.

The context analysis should include:

1. **Scoping study:** Provide an overview of the ASM sector, and inform the design of further research. It should be commissioned before or while the ASM task force is being formed.
2. **Government capacity assessment:** Evaluate the government's capacity to manage the ASM sector and to develop and implement the ASM Management Strategy. Additional research into the capacity of potential partner organizations that can support in this strategy development process could also be required.
3. **Sector assessment:** Document the techniques used by ASM operations and the economic characteristics of the ASM sector, allowing the ASM Management Strategy to be set within the context of existing skills and practices in the sector.
4. **Impact assessment:** Determine the impacts of each type of ASM so that appropriate responses can be incorporated into the ASM Management Strategy.
5. **Political economy analysis:** Map and assess the objectives, power and activities of relevant stakeholders in and outside the government in relation to ASM, in order to ensure that the ASM Management Strategy takes into consideration political realities in its proposed measures.
6. **Supply chain mapping:** Map ASM supply chains while considering other relevant information.
7. **Geological and land-use mapping:** Compile and analyze data about the country's geology and land use (including ASM) in mineral- and metal-rich areas.

This research should be conducted on a periodic basis to update available information and inform future policy-making.

The quality of the policies is directly dependent on the quality and accuracy of the research. As such, users should avoid the urge to cut costs at this research stage of the process. Where governments face resource and capacity constraints, donor governments, private foundations and other bodies may be approached to support the research process.



## 1.4 ENGAGE WITH PARTNERS

Partners—whether national or international—can help a government in managing ASM and in the development of the ASM Management Strategy. Developing partnerships allows the government to leverage the complementary capacities that partners may have to support the government in its governance of the sector. Partnerships also allow the government to adapt a strategy that accommodates partner goals, where these are strategic and feasible.

Relationships with partners should be developed by the ASM task force before a government develops an ASM Management Strategy. Possible partners for cooperation include, but are not limited to: international donors; large-scale mining (LSM) companies; civil society organizations; international development organizations; companies or groups interested in investing directly in the ASM sector; financial entities interested in capitalizing on the ASM sector; downstream companies such as refineries, jewellers, luxury goods makers, technology makers; and neighbouring states.

Engaging with international donors and international development organizations has the potential to be doubly beneficial for governments, as these partners can also provide long-term financial support to the process, as well as networks of experts and access to relevant forums and networks. Furthermore these actors tend to look at ASM from a sustainable development perspective, which is aligned with both this guidance and the MPF.

The first step in partner engagement is to map potential partners and assess their relative power, importance as potential partners and interest in collaboration. You can then reach out to potential partners, either bilaterally or through existing international forums. Once in touch, you should explore whether there are shared interests or mutually compatible goals that could be pursued together to support the development of the ASM Management Strategy, and whether potential partners and governments have complementary resources that they can bring to the process. The establishment of partnerships should not end at this point; you should continue to develop partnerships throughout the process of developing the ASM Management Strategy.

Partnerships can be pursued with three main groups: international donors and development organizations, industry partners, and neighbouring states.

### INTERNATIONAL DONORS AND DEVELOPMENT ORGANIZATIONS PARTNERS

International donors and international development organizations are often important partners due to their extensive experience in sector reform and their financial resources. However, few international development organizations have substantial ASM expertise, because treating ASM as a development issue and allocating resources to it is relatively new for development agencies. Nonetheless, international donors can provide loans or development grants, can help in articulating sector-wide strategies, and can offer access to international forums and visibility, if needed. The ASM task force should conduct an overview of their country's existing partnerships with international donors and development organizations to determine where opportunities lie. This should include an analysis of the track records of potential international partners in projects, focusing outreach efforts on those partners whose support for ASM best matches the country's needs (e.g., land rights management, market integration). Partner strengths are thus evaluated against the national context.

### MINING, MINERAL AND METAL INDUSTRY PARTNERS

The expertise and resources of industry partners can complement government resources and capacities. Specifically, large-scale mining companies have capacities in geological surveys and data, engineering, financing and processing, and are often in geographical proximity to ASM operators, while downstream companies can commit to purchasing responsibly produced ASM minerals and improving supply chain initiatives. Cases suggest that both groups of actors can be convinced to actively engage with the ASM sector and the government's plan to do so if the right incentives are in place and risks in participating in such engagements are minimized.

LSM companies wish to minimize the risks emanating from ASM operations on or near their own concessions. Typically, their interests include:

- Removing ASM operations from LSM sites or managing the operational risks linked to their presence on or near the mine
- Mitigating the negative impacts of ASM, tied to reputational risk management
- Improving community relations and reducing security risks
- Addressing any supply chain contamination risks for downstream buyers
- Improving community well-being and reducing poverty

Downstream companies also have interests in managing the risks emanating from ASM operations upstream in their supply chains, each of which can motivate support for improved ASM governance:

- Demonstrating corporate social responsibility by having positive impacts on the lives of ASM operators, their families and communities
- ASM suppliers meeting the standards of downstream buyers' responsible sourcing and quality-control policies
- ASM suppliers complying with buyers' due diligence and supply chain initiative standards, if any
- Managing levels of supply

## TRANSBOUNDARY COOPERATION

While government policy stays within national borders, ASM does not. This causes many potential problems for ASM management: cross-border pollution, weak monitoring and enforcement, smuggling and tax evasion, and trafficking in illegal chemicals. Regional or international coordination and cooperation are required to address many of these challenges, and will be driven by the ASM task force in close collaboration with the Ministry of Foreign Affairs. It can be achieved by:

1. Opening a dialogue with those states connected in some way to the domestic ASM sector (through trade, migration, supply chains). This can be done bilaterally, or within existing regional organizations. Reach out to other groups of states that have dealt with similar issues and learn from their experiences.
2. Exploring and agreeing on whether or not there is a basis for—and a mutual interest in—cooperating on transboundary ASM management.
3. Negotiating the terms of cooperation, including an institutional framework for cooperation (see below).
4. Convening the institutional group that will lead cooperation. Jointly fund and staff it as appropriate, drawing mainly from relevant ministries and the ASM task force.
5. Developing proposals for cooperation at the same time that the ASM Management Strategy is developed.

Choosing the right institutional framework for cooperation depends on how much cooperation is needed and the degree to which states are willing to work together. There are three broad options:


- **Joint Working Group:** when state policies only need minor adjustments. This can be a temporary or recurrent body.
- **Cooperation Secretariat:** when state policies need coordination. This is a permanent body.
- **Border Area ASM Secretariat:** when a cluster of ASM crosses borders and a joint ASM Management Strategy is needed. If participating governments choose to set up a Border Area ASM Secretariat, it would form part of a permanent Joint ASM Management Strategy for that area, and the government would treat ASM in that cross-border area as a separate subtype of ASM (to be explained further in the process).

# CHECKLIST

At the end of Phase 1:

- Has an ASM task force been constituted?  
Does it?
  - Include all relevant ministries
  - Clearly assign responsibilities
  - Establish communication channels
  - Receive sufficient financial resources
  - Have appropriate staffing and knowledge
- Has an ASM stakeholder forum been constituted?  
Is it:
  - Transparent
  - Relevant
  - Inclusive
  - Regular
  - Gender-sensitive
  - Conflict-sensitive
- Is the ASM stakeholder forum recognized as legitimate and able to function and communicate with the ASM task force?
- Has a context analysis been carried out?  
Does it include:
  - Scoping Study
  - Government Capacity Assessment
  - Industry Assessment
  - Impact Assessment
  - Political Economy Analysis
  - Supply Chain Mapping
  - Geological and Land-Use Mapping
- Has the government identified potential partners?  
Do partners include:
  - International donors and development organizations
  - LSM companies
  - Neighbouring countries



A man wearing a green t-shirt, a brown cap with a red brim, and dark work pants is working with a large blue barrel. He is using a wooden tool to lift or move the barrel. The background shows a rural area with several small, simple buildings with corrugated metal roofs, situated on a hillside. The overall scene suggests a manual labor or construction activity in a developing area.

**PHASE 2:  
DEVELOPING  
AN ASM  
MANAGEMENT  
STRATEGY**



## PHASE 2: DEVELOPING AN ASM MANAGEMENT STRATEGY

### PURPOSE:

To develop an ASM vision and Management Strategy that addresses the negative impacts and enhances the positive impacts of all types of ASM in the country.

### STEPS:

#### 2.1 DEVELOP AN ASM VISION

Establishing a vision for the ASM sector that supports sustainable development and local livelihoods.

#### 2.2 ORGANIZE THE ASM SECTOR INTO TYPES AND PRIORITIZE

Organize the domestic ASM sector according to types of operations to reflect the variety of operations that comprise the ASM sector (i.e., by commodity; by degree of mechanization; by scale; whether alluvial or hard rock). Once identified, prioritize the subcategories based on the degree to which the government can expect to address, reduce or enhance the net impacts of the mining.

#### 2.3 DEVELOP THE ASM MANAGEMENT STRATEGY

Choose the instruments and initiatives that will help the ASM sector reach its economic potential, and the instruments and initiatives that will mitigate the negative and enhance the positive impacts of each type of ASM operation.

#### 2.4 FINALIZE THE ASM MANAGEMENT STRATEGY

Consolidate the strategies for all types of ASM operations and check for coherence.

### ACTIVITIES:

Phase 2 activities include stakeholder workshops and strategy development.

### OUTPUTS:

ASM vision

ASM Management Strategy (by type and overall)

Once the preparatory phase of the process is completed, the ASM task force can turn to the development of the ASM Management Strategy. The first step in this second phase is the elaboration of a vision for the sustainable development of the domestic ASM sector. This vision will imagine an ASM sector that a government wishes to see in the future, but is also a way to articulate the goals that should be pursued in its ASM Management Strategy. Once a government decides what goals it will pursue to manage ASM, it must decide what it will do to achieve those goals. This requires an identification of the different types of ASM that comprise the sector, and the development of response strategies for each that help realize the economic potential of ASM and improve ASM practices so as to minimize negative impacts.

## 2.1 DEVELOP AN ASM VISION

As mentioned, the first step for the ASM task force will be to develop a national ASM vision that articulates what the domestic ASM sector should look like in the future. The development of this vision should be done with the support of the ministries of Mines, Environment, Land, Labour, Health, Trade, Development and Planning, and in collaboration with ASM experts. The development team will undertake three main tasks: identify those ASM practices of greatest significance to the country; categorize ASM practices as unacceptable, poor or good practices; and articulate the goals that should be pursued in its ASM management strategy.

### IDENTIFY ASM ISSUES

In a national ASM vision, a government can establish what ASM issues matter to it most: the practices it most wishes to curtail due to their negative impacts, and the positive practices it most wishes to enhance. These issues or impacts can be drawn from six principal areas central to ASM: the environment, human rights, labour standards, health and safety, gender, and socioeconomic benefits and sustainable development. Drawing upon the context analysis prepared in Phase 1, the ASM task force should:

1. Review the main practices and impacts of ASM operations, drawing upon the impact assessment.
2. Assess the scale, frequency and distribution of each impact, using the impact assessment, supply chain map, and maps on geology and land use.
3. Prioritize these practices according to their contribution to sustainable development, from least to most desirable.

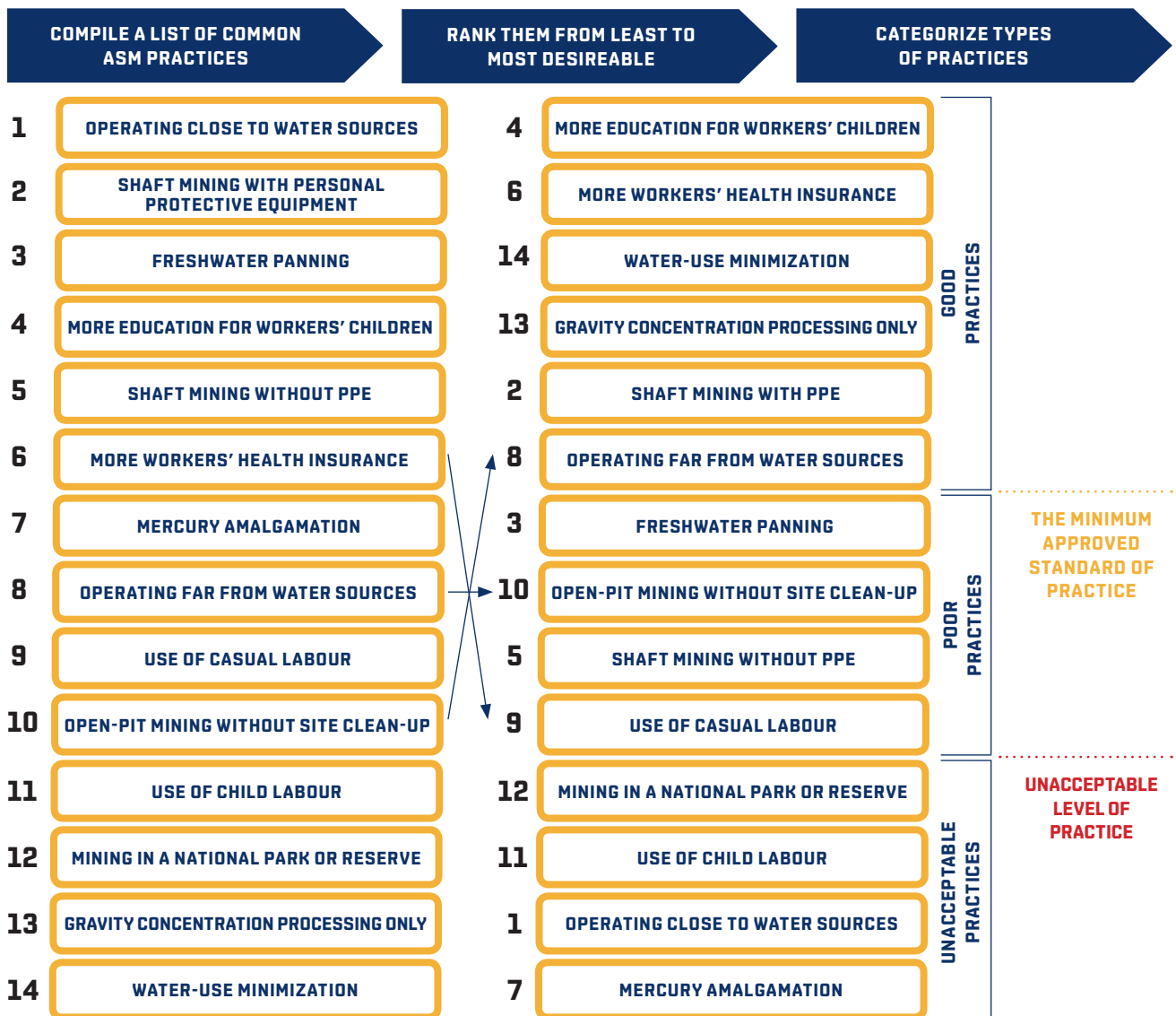
### CATEGORIZE ASM PRACTICES AS UNACCEPTABLE, POOR OR GOOD PRACTICES

Once a list of ASM practices has been identified and prioritized, the task force can set about categorizing these practices as unacceptable, poor and good. This will help to identify those practices and subsequent impacts that should be the focus of the ASM Management Strategy.

**Unacceptable practices** will not be tolerated under any circumstances or for any time, and all unacceptable practices will be made illegal and may be classified as criminal offenses. These include using child labour, paying armed groups or polluting key freshwater resources. Governments may want to consider a phase-out of some unacceptable practices, such as the use of mercury in gold amalgamation upon ratification of the Minamata Convention. Such a phase-out approach helps to prevent the creation of a black market that could result from an outright and immediate ban.

Any practices that are not deemed unacceptable but which do not meet minimum approved standards are to be categorized as **poor practices**. Regulations or laws will forbid poor practices, or will focus upon preventing them. Practices will fall into this category if the government intends to discontinue their use over time, which is often required where it is impossible to end the practice immediately.

Finally, **good practices** are those that the government will encourage and promote moving forward. These are not necessarily to be made mandatory by law or regulation. An example of a ranking and prioritization exercise for ASM gold mining practices can be found in Figure 2.



**FIGURE 2. EXAMPLE OF RANKING AND CATEGORIZATION OF ASM PRACTICES**

## SET GOALS

In order to set goals for the government to build into their ASM vision in response to the issues and impacts that have been prioritized and categorized, the ASM task force (with support from the ministries of Finance and Mines) can now use the government capacity assessment, industry assessment and supply chain mapping research developed in Phase 1 to assess the feasibility of addressing these priorities areas. They will also have to review budgetary support for ASM management, to assess what resources are available for addressing ASM impacts and what additional resources would be required. Goals to integrate into the national ASM vision should focus on eliminating unacceptable practices, improving poor practices and enhancing or promoting good practices in the sector.

A clear understanding of required capacities and resources, as well as a prioritization of impacts to address, will allow the task force to set achievable goals over a range of time periods (e.g., goals for three, five and 10 years in the future). The task force should also consider whether the goals need to be disaggregated by region, type of ASM, and minerals and metals. Integrating clear goals into the ASM vision will help in the development the ASM management strategy by expressing clear government priorities that must be addressed.

## 2.2 ORGANIZE THE ASM SECTOR INTO TYPES AND PRIORITIZE

National ASM sectors typically contain a variety of types of operations. These operations have different characteristics and present different risks, and a government should not try to adopt a one-size-fits-all strategy to address the sector. Instead, it should develop ASM management strategies that respond to the unique challenges of each of the country's major ASM types. In this step, you will organize the domestic ASM sector according to types of operations to reflect the variety of operations that comprise the ASM sector (i.e., by commodity; by degree of mechanization; by scale; whether alluvial or hard rock). Once identified, you can prioritize action based on the degree to which the government can expect to address, reduce or enhance the negative and positive impacts of the mining for each type of ASM.

### CHOOSE WHICH TYPES OF ASM BEST REFLECT THE NATIONAL ASM SECTOR

The ASM task force, in consultation with relevant government departments and experts, should first divide the domestic ASM sector into types that are relevant to the country. To do so, the task force should use the context analysis from Phase 1 to identify how the national ASM sector should be divided into practical categories that would require tailored management strategies (for examples of possible ASM categories, see Table 1.). There are endless ways to categorize ASM, but the task force must decide which categorization is most useful to policy development and implementation.

In developing the ASM categories, the task force should consider the relative importance of the various types of ASM, and the degree to which they can be managed; the negative and positive impacts of each, and how these relate to the ASM vision; whether distinct management strategies are needed for each ASM type; and whether the number of agreed-upon types of ASM complicates the development of the overall ASM Management Strategy.

**TABLE 1. EXAMPLES OF ASM CATEGORIES**

CATEGORIES	POSSIBLE SUBCATEGORIES
Technical methods	Hand- or machine-crushing, gravimetric or mercury processing
Alluvial and hard rock deposits	N/A
Scale	Micro-scale operation, small-scale operation
Minerals and metals	Gold, coal, sand, diamonds
Phase in the value chain	Mining, primary processing, secondary processing

### PRIORITIZE TYPES

Once ASM types have been established, the task force should prioritize them, based on the contribution each type of ASM can make to improve the overall sector. To do this, you should first use the context analysis developed in Phase 1 to evaluate those ASM types that have the greatest positive and negative impacts, and to identify possible entry points for mitigating, addressing or enhancing these impacts. The industry assessment, supply chain mapping and government capacity assessment will all be helpful in the identification of entry points. Once you have mapped out these impacts and entry points by ASM types, you can use the national ASM vision to determine which of these impacts should be prioritized for action and allocate resources as part of the ASM Management Strategy.

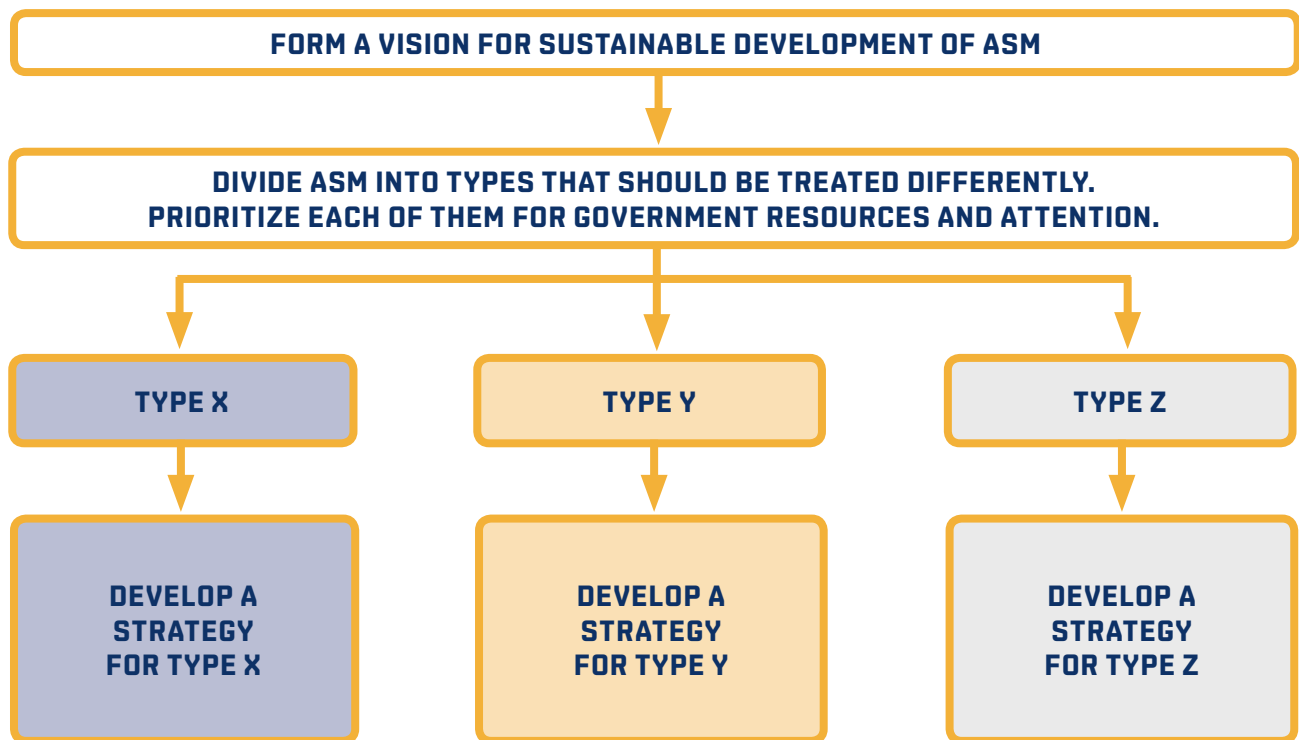
As part of the prioritization exercise, you should consider whether the government's ability to improve ASM varies from region to region, and whether the chosen ASM categories will allow the government to engage in the sector as it wants to. It is also helpful to look at examples of past engagement with particular types of ASM to understand why these may have succeeded or failed, so that these lessons can be integrated in the new management strategy.



With a prioritized list of ASM types, each with corresponding impacts and entry points for action, you can now turn to the development of ASM Management Strategies. For each ASM type, it is recommended that you develop a management strategy that addresses the instruments and initiatives that will help the ASM sector reach its economic potential (an industry approach) and the instruments and initiatives that will mitigate the negative and enhance the positive impacts of each type of ASM operation.

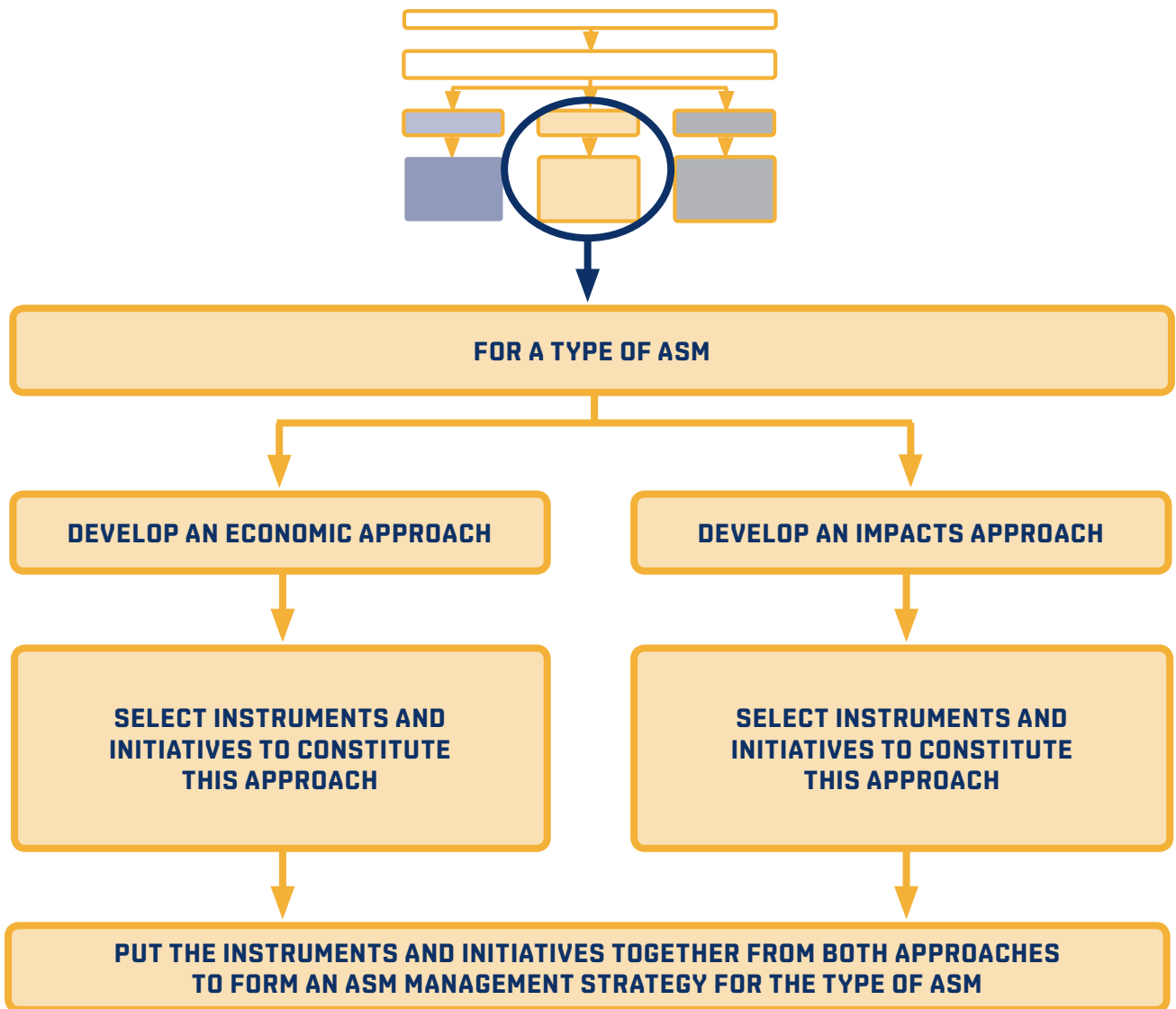
## 2.3 DEVELOP THE ASM MANAGEMENT STRATEGY

Once ASM types have been categorized, the government should develop separate ASM Management Strategies for each type of ASM (see Figure 3). It should follow the steps in the remainder of Phase 2 for each type of ASM that has been identified. This will allow the task force to develop an overall management strategy that responds to the different characteristics of each type of ASM.



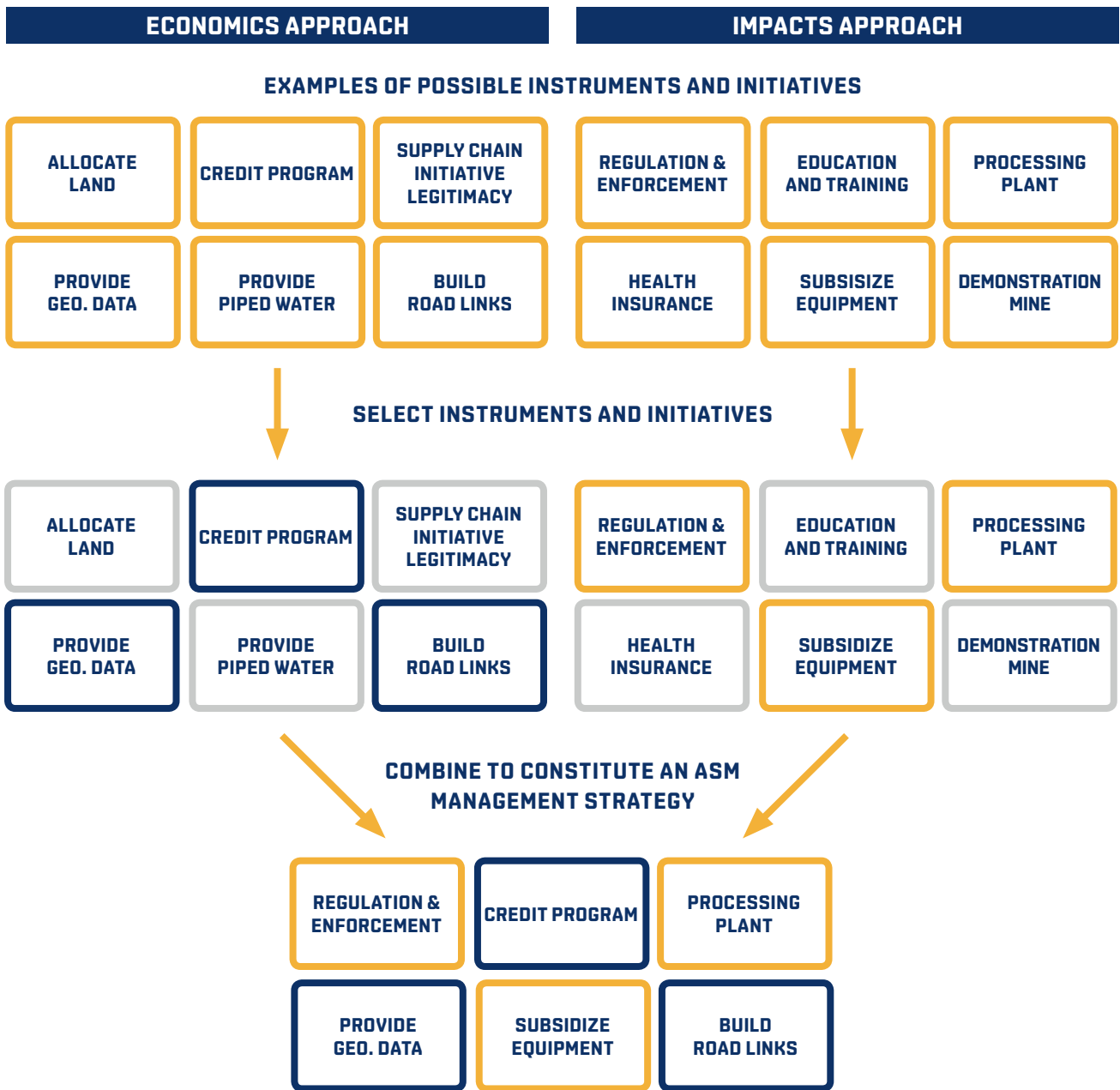
**FIGURE 3. PROCESS OF DEVELOPING AN ASM MANAGEMENT STRATEGY: DISTINGUISHING BETWEEN TYPES OF ASM**

To complete an ASM Management Strategy, the task force needs to develop two complementary approaches for each type of ASM: one that pursues the economic potential of the ASM sector (the economics approach) and another to mitigate the negative impacts of ASM while promoting the positive impacts (the impacts approach) (see Figure 4). The objectives of each approach are best treated distinctly.



**FIGURE 4. ECONOMICS AND IMPACTS APPROACHES FOR EACH TYPE OF ASM**

In the economics approach, the task force chooses the instruments and initiatives required to help the ASM sector reach its economic potential. In the impacts approach, the task force chooses the instruments and initiatives that it will employ to mitigate the negative and maximize the positive impacts of ASM. Designing separate programs to a) help the ASM sector economically and b) improve ASM practices will help governments think clearly about the objectives of their programs. The approaches will then be combined to form a management strategy for that particular type of ASM (see Figure 5).



**FIGURE 5. COMBINING THE ECONOMICS AND IMPACTS APPROACHES TO FORM AN ASM MANAGEMENT STRATEGY**

### 2.3.1 DEVELOP AN ECONOMICS APPROACH

The ASM economics approach aims to develop the economic potential of the ASM sector. It encompasses a number of decision processes that are described below and that, if undertaken, will help ASM operators better realize the economic potential of the work they are doing.

#### DECIDE WHETHER TO ALLOCATE LAND TO ASM

The size of each ASM operation depends on how much land with useable deposits is available to the miners. While a government cannot change the amount of useable deposits, it can make more land that potentially contains deposits available to miners, land that is otherwise set aside for agriculture, urban development, or as part of a large-scale mining concession, for example.

To decide whether to allocate additional lands to ASM, the task force must:

- 1) Select minerals and metals: Using the ASM vision, decide which types of ASM for each mineral or metal have, on balance, net positive impacts.
- 2) Identify land: Using the geological and land-use maps, identify land not currently under mining concession with known and probable deposits of minerals and metals that can be mined using ASM techniques with net positive impacts.
- 3) Reallocate land: Decide whether to reallocate this land for use by ASM miners operating in accordance with the government's broader land-use policy and laws (mining, environmental, labour).

This process can be repeated if further deposits exist in areas that could conceivably be allocated to ASM operations. A similar process would also have to be undertaken in those situations where ASM operations cannot continue to operate on existing LSM concessions. Before allocation, you must make sure that the process will be undertaken with regard for due process. You should also review if there is any land held by large-scale companies (mining, agriculture) that would be better suited to ASM operations. Decisions will have to be made in conjunction with the ministries of Land, Environment and Economic Planning.

### **DECIDE WHETHER TO FACILITATE AND ENCOURAGE PARTICIPATION IN SUPPLY CHAIN INITIATIVES**

There are existing supply chain initiatives, including as Fairmined, ITSCI and the Better Sourcing Program, that ensure market access for minerals and metals that are mined in a way that promotes human rights, environmental protection and peace. These minerals and metals can, at times, command a higher price on the market, and the initiatives require that participants uphold good mining and trading practices across their supply chains.

Encouraging the ASM sector to work through such supply chain initiatives can improve the ASM sector's economic, environmental and social performance. However, some supply chain initiatives can be inaccessible to the majority of miners due to high barriers to entry, and if participation is mandated by the government, miners may be discouraged from participating—thereby preventing their entry into the formal economy. As part of an economics approach, the government should consider whether to encourage ASM participation in supply chain initiatives, a decision-making process that can be broken down into six steps:

1. Map potential supply chain initiatives and participants. Establish their interest and capacity to expand the supply chain initiative into your country.
2. Identify what standards of practice each type of ASM operation will have to meet in order to become compliant with each initiative.
3. Use the context analysis to determine whether some portion of ASM operations could feasibly meet the standard of each initiative.
4. Decide whether to encourage the expansion of a supply chain initiative into the country. Weigh the added economic benefits against the effort to help operations comply with the supply chain initiative's certification requirements, and the likelihood of success.
5. Integrate the standards of the relevant supply chain initiative(s) into education, training, policy and regulations, to ease compliance over time.
6. Provide or facilitate technical assistance to ASM operations to help them meet the initiatives' standard requirements.

Before proceeding with the promotion of fair trade or supply chain initiatives, the task force should consider whether the practices of the ASM sector can feasibly be improved to make them compliant with the standards of supply chain initiatives, whether the requirements of such initiatives, including traceability and due diligence, can feasibly be implemented, and whether the initiative could be



introduced on a sufficiently wide scale to make the benefits of compliance outweigh the costs of setting up the scheme. Hopefully these kinds of initiatives are possible in-country, and with implementation and compliance they improve access to markets alongside environmental and human rights protections.

## **DECIDE WHETHER TO PROVIDE SERVICES AND TECHNICAL ASSISTANCE TO ASM OPERATIONS AND WORKERS**

The task force must also decide if it is to provide or facilitate the provision of services and technical assistance to ASM operators. Such services can include: the provision of geological data and expertise; exploration services; assisted access to credit or insurance; provision of transport and infrastructure; provision of water and sanitation; provision of electricity; and the provision of equipment (or relevant subsidies or tax exemptions).

Limited budgets will mean that the task force will have to prioritize which services to offer. Some services, however, can be provided at low or zero cost, or can even be profitable. There are four steps in the decision-making process to determine which kind of services and technical assistance to provide or facilitate:

1. Determine whether ASM operations currently struggle to access potential services due to a market failure or some other barrier.
2. Determine whether access can be improved without direct intervention.
3. If intervention is required, evaluate whether the benefits would justify the use of funds or other resources from government or other stakeholders.
4. Compare the costs and benefits of each service and form of technical assistance, and select those most advantageous for inclusion in the ASM Management Strategy.

Organization among ASM operators will facilitate their receiving support from the government or from outside trainers and service providers. If operations are not currently organized, you should evaluate the ease with which such organization could be arranged. If you are working with a third party to provide services or technical support, you should identify whether there are any barriers that might prevent them from carrying out their task, and if so, how these barriers could be overcome.

### **2.3.2 DEVELOP AN IMPACTS APPROACH**

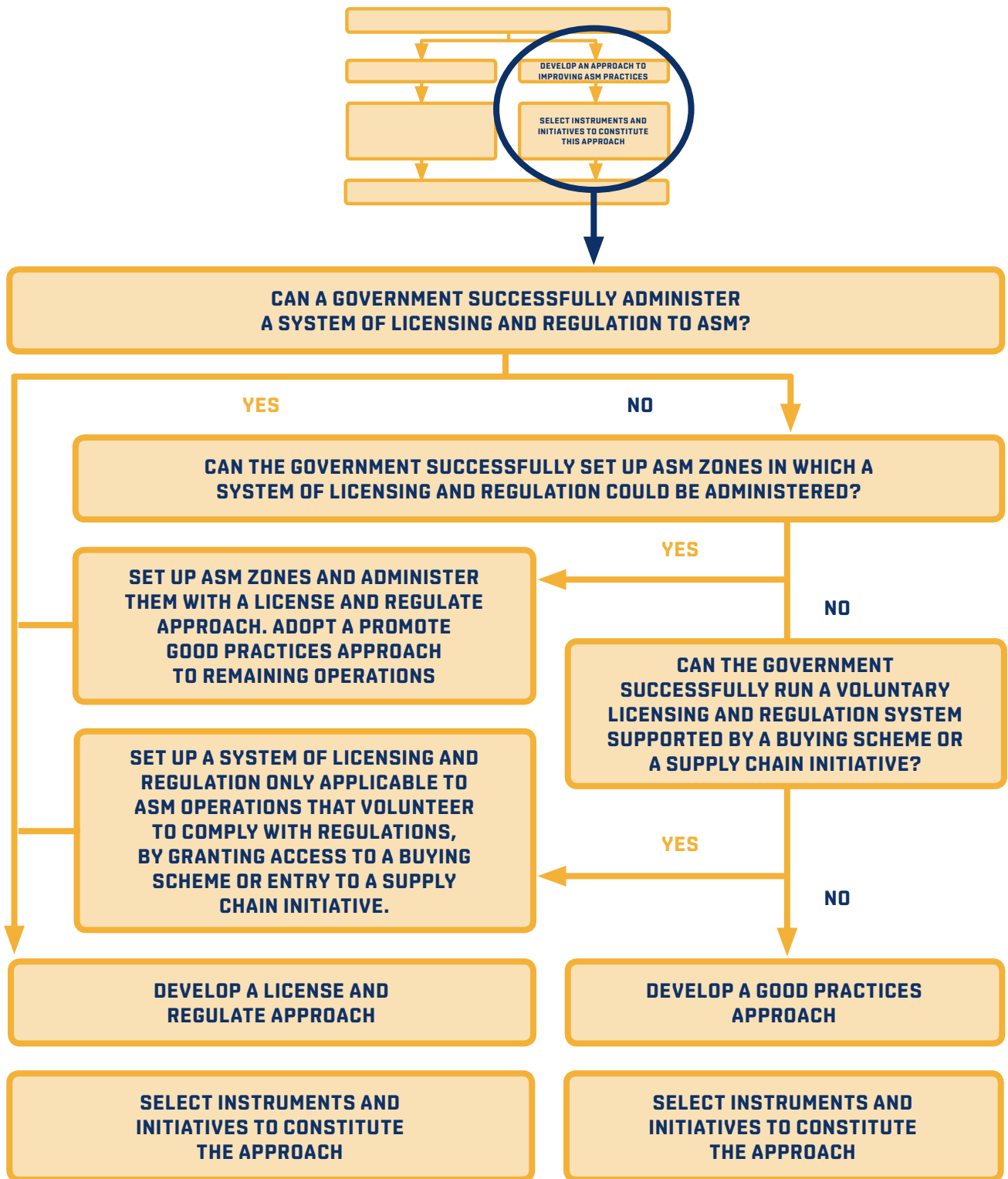
Developing an impacts approach to improving ASM practices will help minimize the negative impacts and enhance the positive impacts of ASM operations. Doing so will require that the government realistically evaluate its capacities, as these will determine its options.

#### **CHOOSE WHICH SORT OF IMPACTS APPROACH TO ADOPT**

There are several different types of approaches to addressing ASM impacts (see Figure 6).

The most desirable is a **license and regulate approach**, in which a government licenses ASM operations that obey regulations and shuts down those operations without licences. This approach may not always be feasible, given the ability of the government to manage a particular type of ASM, the incentives for operations to comply, and government capacities to license, monitor and enforce. It will include decisions on conditional assistance that depends on compliance and taxation.

If it is not possible to regulate and license the ASM sector, a government can adopt an approach that promotes **good practices**, where they encourage or incentivize the ASM sector to use good practices through education, demonstration and forms of assistance.



**FIGURE 6. SELECTING AN IMPACTS APPROACH**

If it is not feasible to wholly implement either approach, a government can consider using a **combined approach** that promotes good practices in some areas and licensing and regulating in others.

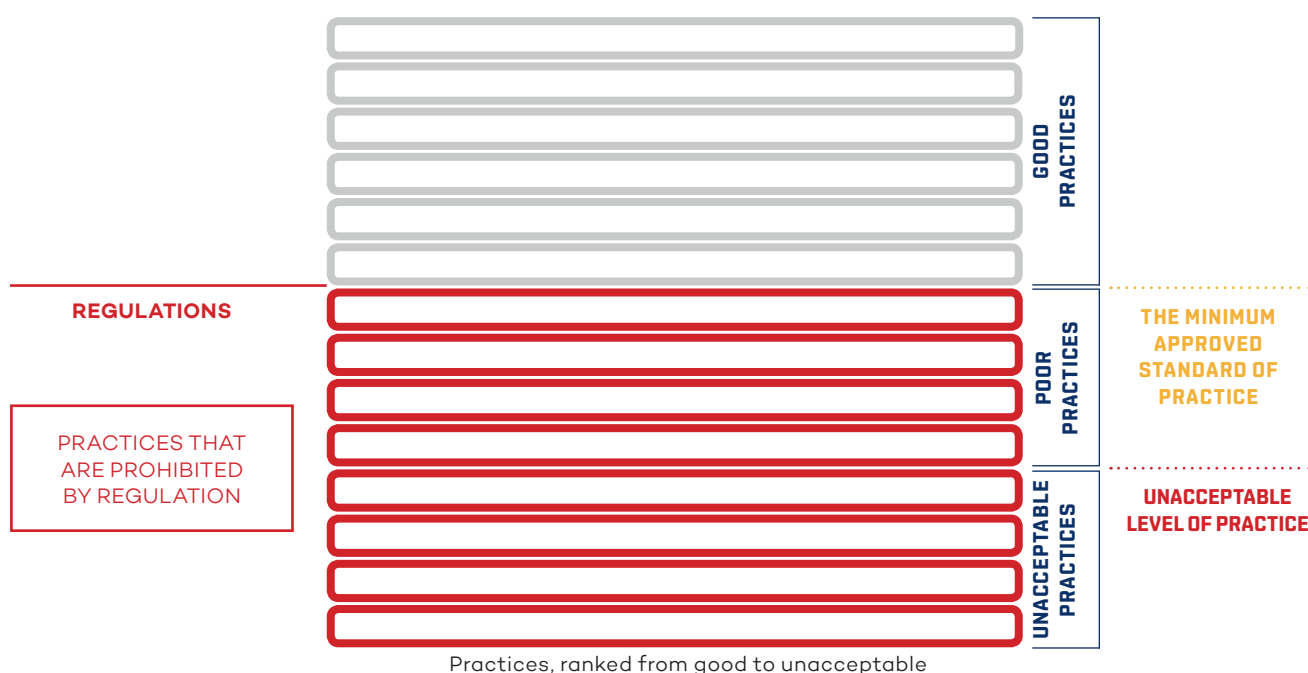


## ADOPT A LICENSE AND REGULATE APPROACH

In a license and regulate approach, the government develops a system of licensing and regulation that is supported by a system of monitoring and enforcement, and makes it the centre of its strategy for addressing ASM impacts. Licensing, regulation, monitoring and enforcement work as a system, with state force used to support this system of rules. The unacceptable practices previously identified in this process are made illegal, while poor practices are forbidden in regulations. State agents then monitor compliance with regulations, and apply sanctions for non-compliance. Licences will show state agents the scope and scale of work they are permitted to carry out, and working without a licence or carrying out work they are not permitted to do can result in fines or the closing of operations and revocation of permits.

If a government adopts a license and regulate approach, it commits to formalizing the ASM sector. However, if the licensing and regulating framework is onerous or unworkable for unforeseen reasons, the government may be perpetuating the marginalization of ASM. If regulations are feasible, the government can use a series of complementary instruments and initiatives to further improve ASM practices, such as education and training and assistance, building on the content of regulations.

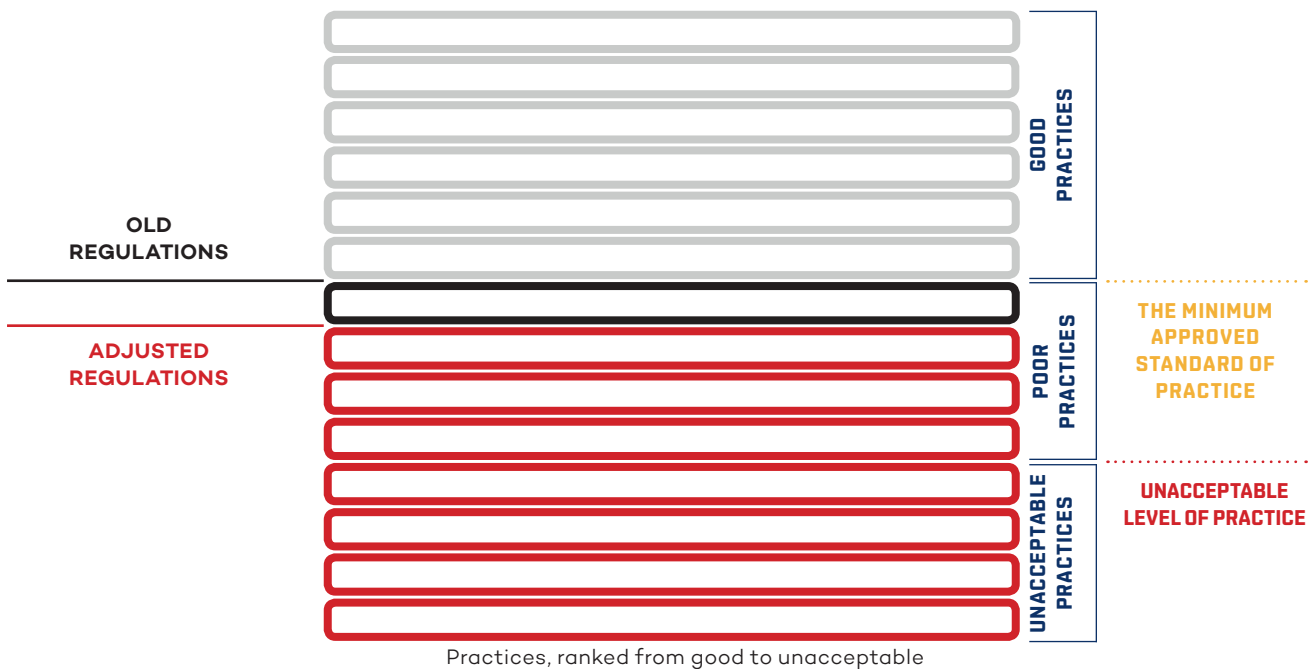
By making unacceptable practices illegal and prohibiting poor practices through regulations, monitoring and enforcement forces ASM operations to improve their practices further. Examples of the sorts of ASM practices that might be prohibited through regulations can be found in Figure 7.



**FIGURE 7. ASM PRACTICES THAT COULD BE PROHIBITED BY LAW**

The ASM vision should guide priorities for regulation, but these should be adjusted to reflect the realities of their implementation. Regulations may be so burdensome that, on balance, it is better for ASM miners to ignore them and risk being caught and punished than to comply with them. This type of scenario should be avoided, as non-compliance will start to be seen as acceptable by ASM operators and even society at large. The task force should then try to design and maintain through periodic adjustment regulations that are as stringent as will be obeyed by ASM operators, given the government's own ability to monitor and enforce them. This will require the government having an accurate idea of the compliance incentives of ASM operators, and may require that economic models be developed to reflect the choices they face under a regulatory regime. The task force should also

monitor whether various ASM operations have the same tipping points at which they choose to obey regulations, and whether all reasonable measures have been taken to incentivize compliance among ASM operators. An example of changing regulations can be found in Figure 8.



**FIGURE 8. ADJUSTED ASM REGULATIONS**

Monitoring compliance with regulations should include inspections, spot-checks and supplementary methods, such as examining levels of pollution around sites, creating whistleblower mechanisms, and sampling soil and water for contaminants. Monitoring agents should administer sanctions not connected to criminal law, such as warnings, fines and removing access to assistance. Enforcement should assist monitoring agents in administering sanctions, and directly administer sanctions connected to criminal law, including shutting down operations.

When interacting with ASM, law enforcement agents should act in accordance with their responsibilities to protect and respect human rights. They should:

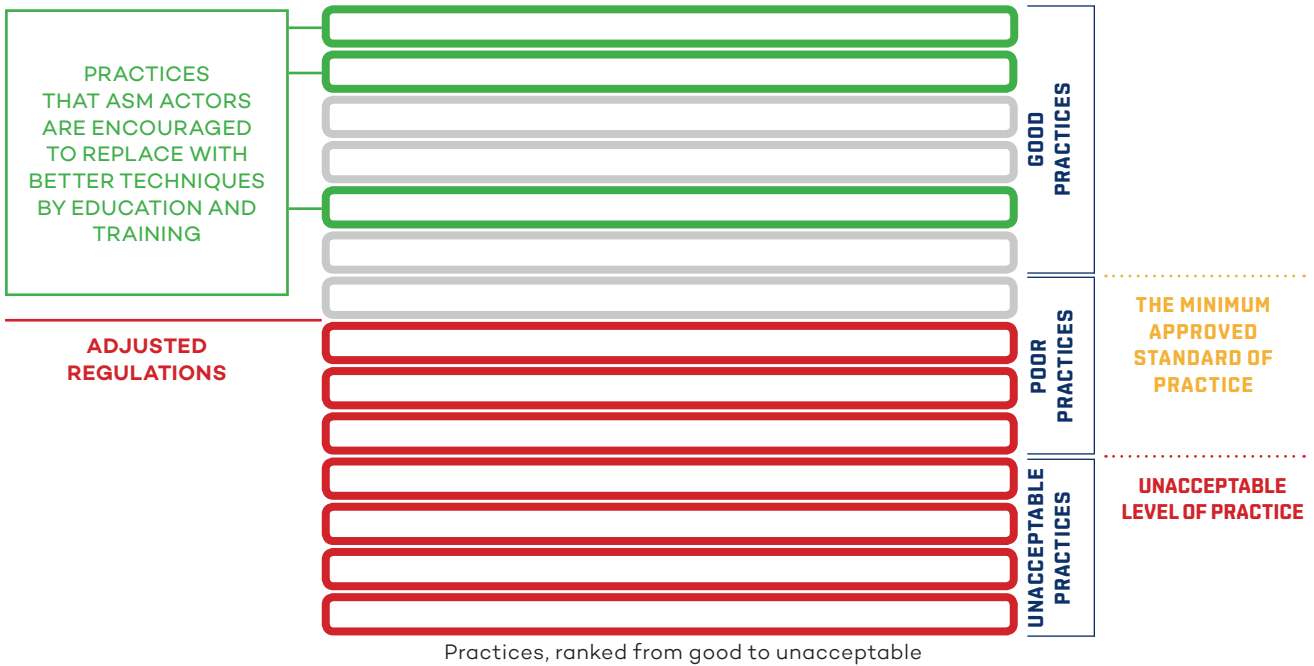
- Together with monitoring agents, follow due procedure for closing down ASM operations.
- Follow the principles of economic resettlement (see Phase 3).
- Adhere to the Voluntary Principles on Security and Human Rights.
- Under no circumstances use force to deny rights to assembly.
- Provide equal medical services to each and every person that experiences injuries during the use of force.
- Comply with the UN Basic Principles on the Use of Force and Firearms.
- Be adequately equipped, trained and supervised.
- Create a system in which to anticipate, respond to and log human rights abuses, including grievance and whistleblowing mechanisms.

While ASM operations often know what is in their best interests, sometimes their experience is limited to one facet of a problem, and they can fail to see the bigger or longer-term picture. The easiest way to make ASM operations adopt good practices is to persuade them that it is in their best interests



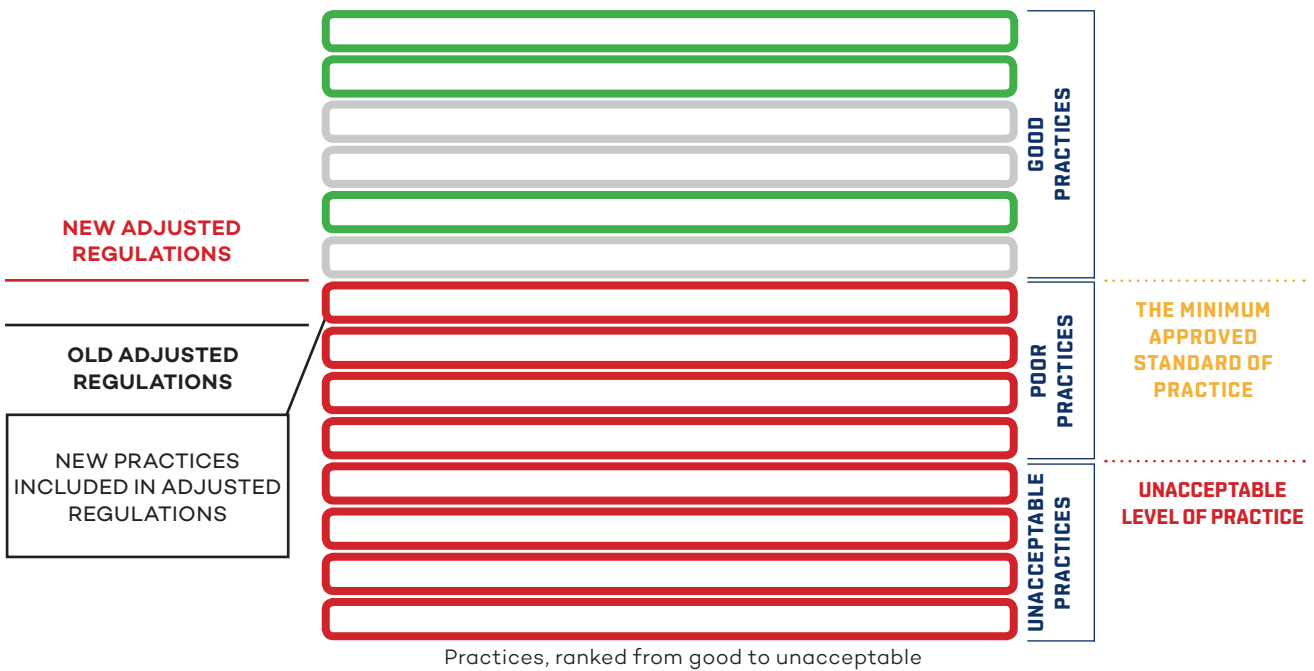
to do so. The most practical way to do this is to run an education program. Such programs could also include, to a limited extent, other government priority areas where useful, such as information on reproductive and public health.

To determine whether or not to run an education program, the ASM task force should: identify good practices not covered by laws or regulations and currently not used by ASM operators, which are in the interests of ASM actors to use and which they could feasibly adopt; and run education and training programs, which train ASM actors on these good practices and encourage their adaptation (see Figure 9).



**FIGURE 9. EDUCATION PROGRAMS TO INCENTIVIZE COMPLIANCE WITH REGULATIONS AND GOOD PRACTICE**

Assistance and training can also be offered to ASM operations in exchange for their application for licences and compliance with regulations. Conditional assistance can be withdrawn if an operation loses its licence or ceases to comply with regulations. For example, if withdrawing equipment provision or access to water decreases the rate of metal extraction from ore, it would also decrease the profitability of an operation. ASM operations will obey tighter regulations than they otherwise would, even if they are more costly, if compliance means that they get the assistance that is meaningful to them. The task force can look through possible forms of assistance to determine if any should be conditional on compliance with regulations. Imposing conditional assistance, and thus changing incentives for compliance, may also allow for strengthened regulations (see Figure 10).



**FIGURE 10. ADJUSTED REGULATIONS BASED ON CONDITIONAL ASSISTANCE**

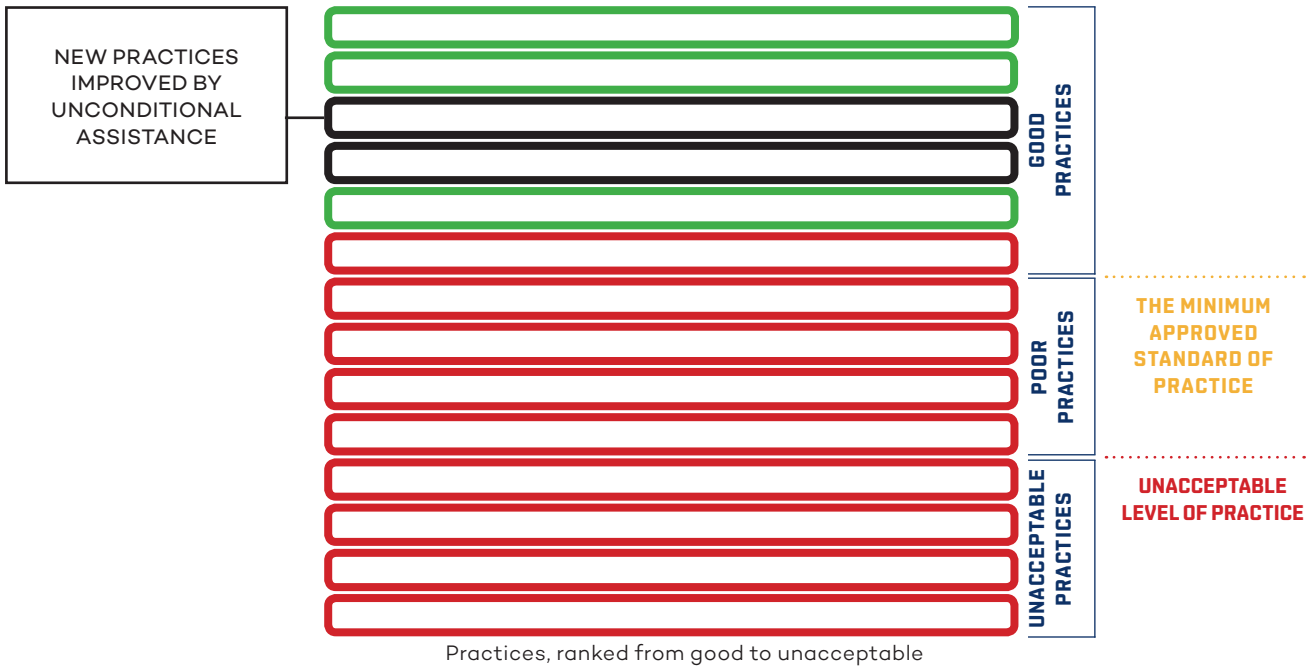
While some forms of government assistance can be offered to ASM operations in exchange for a particular behaviour, other forms of assistance cannot be practically withdrawn if ASM operations do not comply with regulations. These non-conditional forms of assistance should be employed to help ASM operations adopt or improve good practices or to mitigate the effects of poor practices (see Figure 11). To determine which kind of non-conditional assistance should be provided, the task force should:

1. Evaluate the gains already made by regulations, education, training and conditional assistance, and determine what other practices remain to be improved.
2. Model (ideally in the form of a pilot) what improvements in ASM conditions or practices can be expected following the introduction of each non-conditional form of assistance.
3. Compare the costs and gains of introducing each non-conditional form of assistance, and based on that, choose which ones to offer.

The ASM task force should identify the remaining ASM practices most in need of addressing, the forms of assistance that best address those needs and the types of assistance that the government can most effectively deliver. It should also identify those ASM operations that would be targeted with the non-conditional assistance, which might include:

- Services for ASM workers
  - Healthcare or life insurance for workers
- Services to ASM operations
  - Security provision
  - Transport infrastructure provision
  - Electricity and electricity infrastructure provision
  - Water and sanitation provision and infrastructure provision
  - Assisted access to credit or insurance

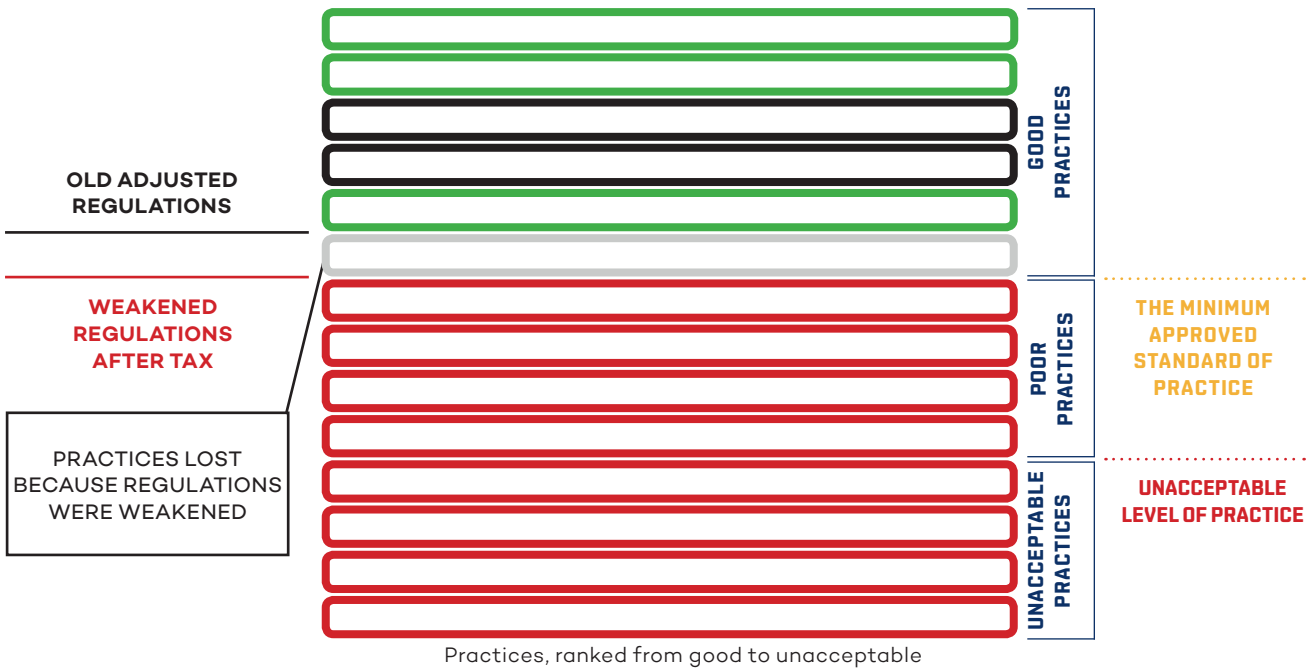
- Technical assistance to ASM operations
  - Provision of geological data and expertise and exploration services
  - Provision of technical expertise
  - Provision or subsidy of the sale of equipment
  - Subsidy of inputs for mining and processing
  - Government-sponsored demonstration operations
  - Sponsoring clean processing plants



**FIGURE 11. IMPROVING ASM PRACTICES WITH NON-CONDITIONAL ASSISTANCE**

While the government can raise revenue by taxing ASM operations, excessive taxation is a disincentive for ASM operations to get licences and comply with regulations (see Figure 12). Depending on the national context, ASM can be a survival activity that the government might not consider taxable or worthwhile taxing. To determine whether or not to tax ASM, the ASM task force, working with the Ministry of Finance, should:

1. Estimate the total taxes that could be collected under different tax rates.
2. Estimate the cost of collecting such taxation.
3. Estimate the costs of taxation to the economy (through consequent non-compliance).
4. If either the cost of collecting taxes or costs of taxation to the economy or a combination of the two outweighs the benefits the state derives from ASM tax revenue, ASM should not be taxed, but still be regulated. If the revenues outweigh the costs, the sector should be taxed.



**FIGURE 12. IMPACT OF TAXATION ON ASM PRACTICES**

If it is decided that ASM activities should be taxed, it is necessary to consider at which points in the supply chain to tax the activities. The ASM value chain offers multiple opportunities for taxation, depending on government capacity to administer an effective and legitimate taxation system. Generally, collecting taxes close to the mine site requires greater state capacities to administer the tax system effectively and legitimately.



**FIGURE 13. ASM VALUE CHAIN**

Once the point of entry for taxation has been determined, the ASM task force should work with the Ministry of Finance to determine how to tax ASM operators. If it is difficult to tax operations due to difficulties in measuring and verifying income and volumes of material processed, other forms

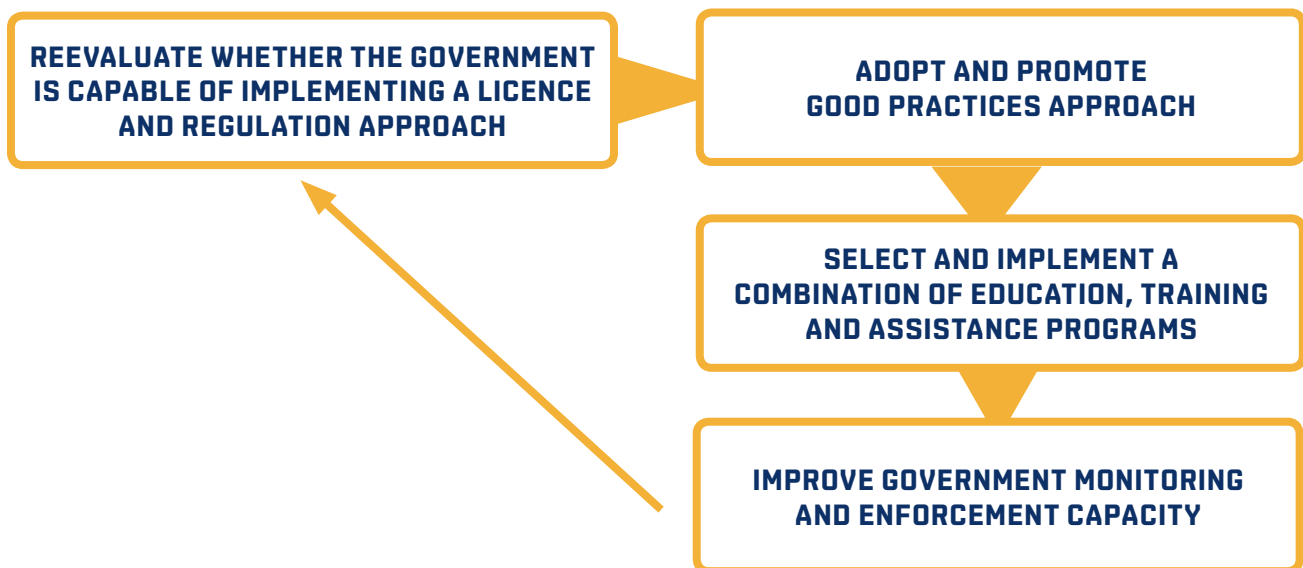


of taxation can be applied. For example, mining operations could be taxed by the number of shafts (for shaft mines) or size of pits (for open-pit mining); processing operations by number of machines or volume of water or electricity consumed (if the government provides either as assistance); and all operations can be taxed through licence applications and renewals and sanctions for non-compliance with regulations. Taxes should be spread across items to minimize distortions to prices and actions, and the government should be cognizant of opportunities for dodging taxes through the manipulation of profits.

### **ADOPT A PROMOTE GOOD PRACTICES APPROACH**

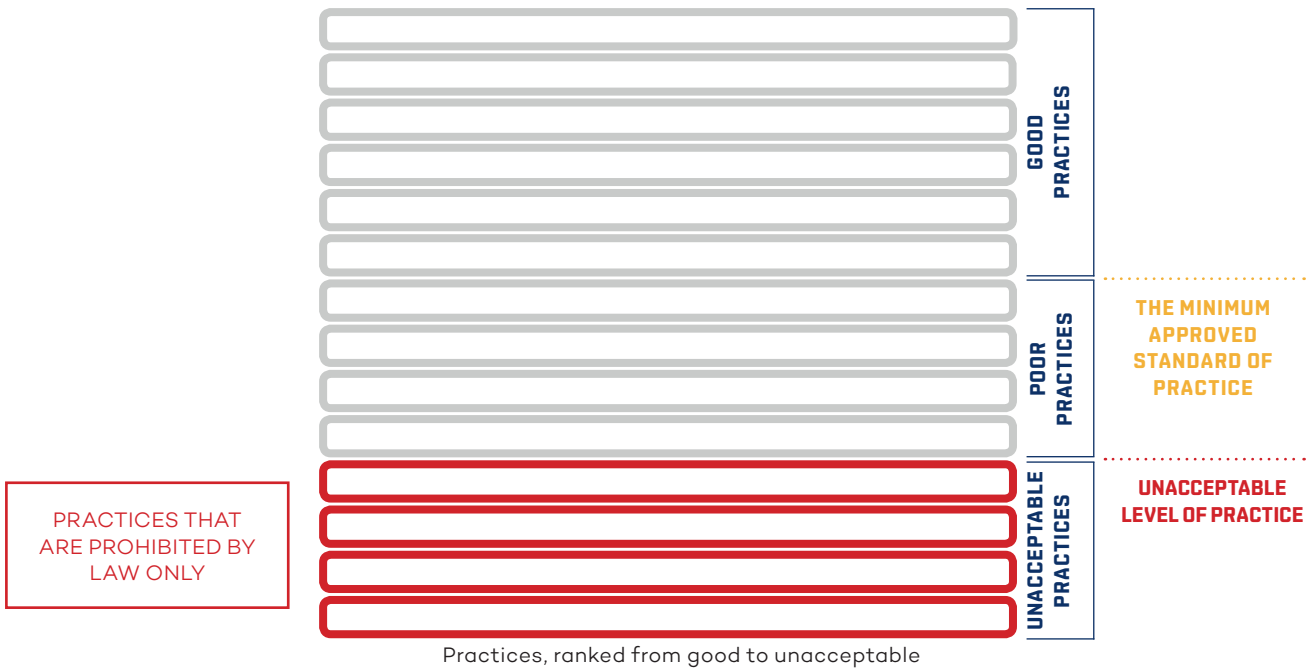
If a government decides not to pursue a license and regulate approach to governing ASM impacts, it can also try an approach that promotes good practices. Education and training play a significant role here, focusing on those skills and practices whose adoption are interests of both ASM operators and the government. The government should also invest in services that can be offered to ASM operations and ASM workers, as well as technical assistance.

This kind of approach can be effective; however, a license and regulate approach or an approach that combines the two is better when: a) the government has enough capacity to monitor and enforce regulations and licences; and b) the incentives for ASM operations to comply are sufficiently strong. From the moment a government begins to promote good practices, it should start to invest in monitoring and enforcement capacity and promote compliance with potential regulations so that, in the future, it can transition toward a license and regulate approach (see Figure 14).



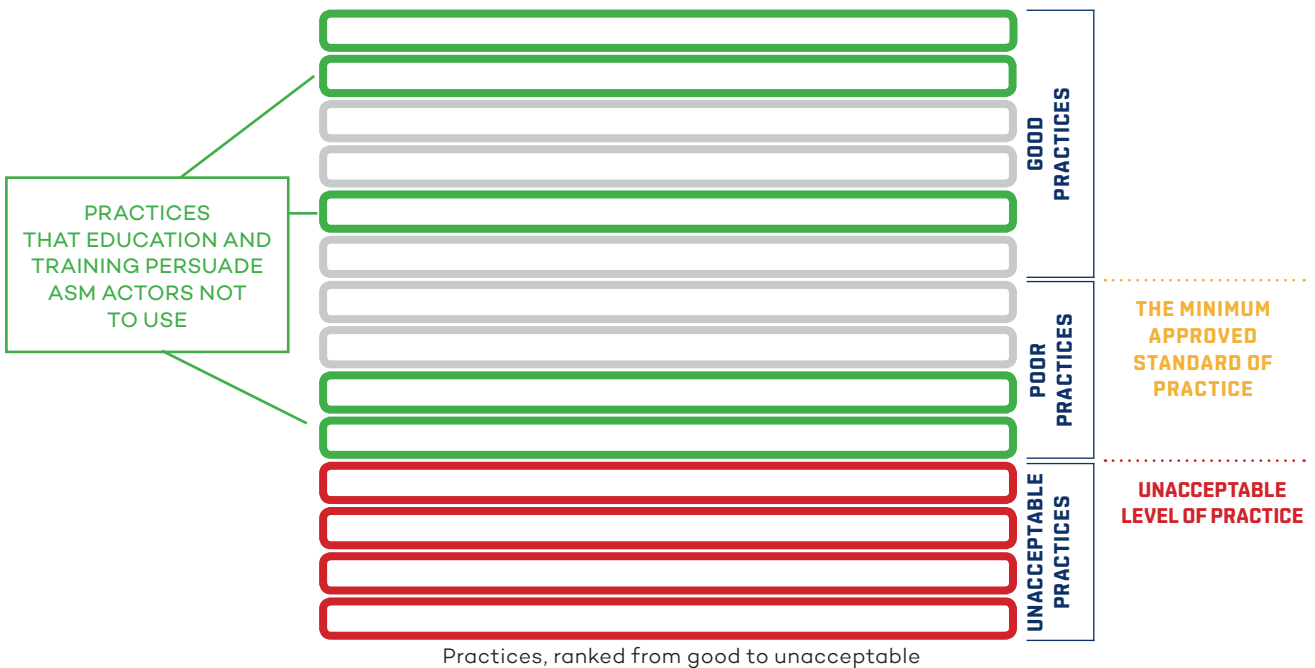
**FIGURE 14. MOVING TOWARD LICENSING AND REGULATION**

Promoting good practices is the approach the ASM task force adopts when no other approach is feasible. That way the government does not squander scarce resources in unproductive or even counter-productive attempts to monitor and enforce regulations. Instead, minimal regulatory criteria are set, legally banning all practices deemed unacceptable in the ASM (see Figure 15), and poor ASM practices are targeted for change through education and training programs. The state should make it easy to acquire and hold ASM licences, which will help the government monitor the sector (including the number of miners), and will make it easier to eventually adopt a license and regulate approach.



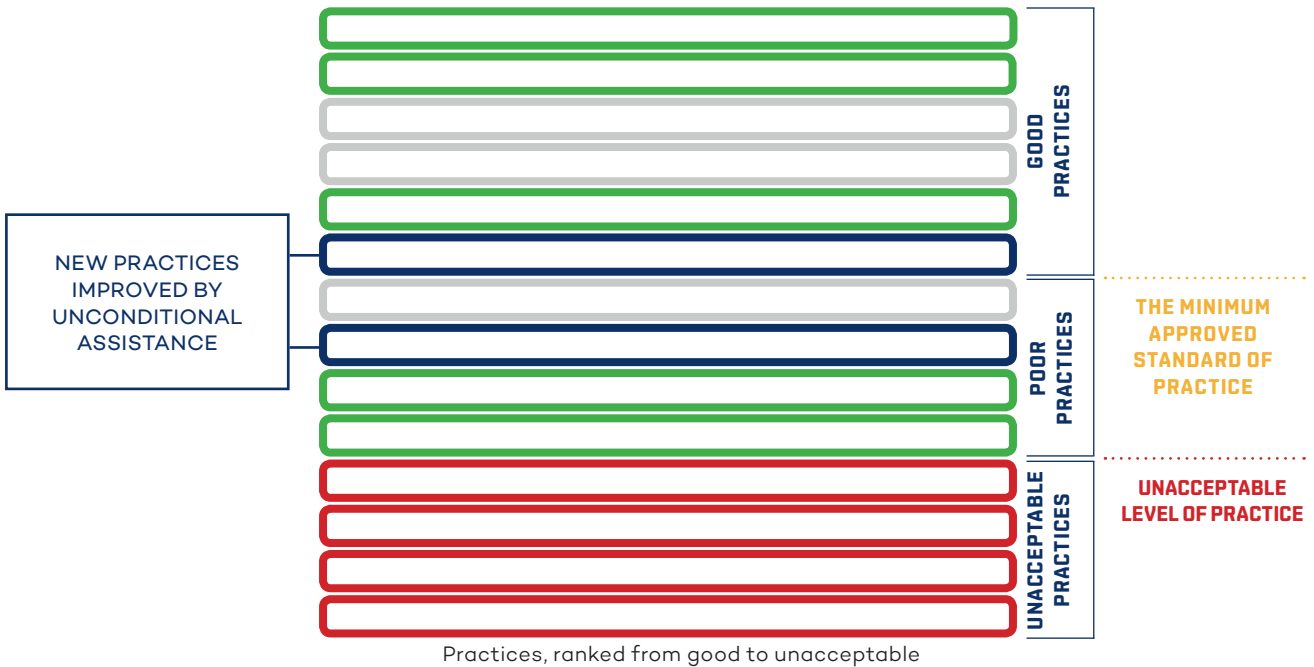
**FIGURE 15. MINIMUM REGULATIONS UNDER AN APPROACH THAT PROMOTES GOOD PRACTICE**

With minimal regulations in place, the government can place greater emphasis on education and training to encourage ASM operations to adopt good practices (see Figure 15). To determine whether or not to run an education program, the ASM task force should identify those practices not covered by laws or regulations that are in the interests of ASM actors (operators, workers or community stakeholders), and which they could feasibly adopt. Education and training programs should be designed to target these practices, should be tailored to the appropriate ASM stakeholder group (e.g., operators, workers, local communities), and should integrate gender considerations into their development and delivery. The ASM task force can coordinate this response with the Ministry of Education.



**FIGURE 16. ADDING EDUCATION AND TRAINING PROGRAMS TO MINIMAL REGULATIONS**

Additional assistance beyond education and training can be provided, including: geological data; access to credit or insurance; transport, water and electricity infrastructure; and subsidies for equipment (see Figure 16). In contrast to a license and regulate approach, there is no distinction between conditional and non-conditional forms of assistance under this approach. The task force must simply decide whether the benefits derived from the assistance outweigh the costs.



**FIGURE 17. NEW PRACTICES IMPROVED BY ADDITIONAL ASSISTANCE**

**ADOPT A COMBINED APPROACH**

When a government does not have the capacity to implement a license and regulate approach, it can adopt an approach that combines regulation with the promotion of good practices. In this combined approach, the ASM operations that can and cannot be effectively regulated are separated and are treated differently. This can be done in two ways: i) establishing zones for ASM operations that operate under a separate administration; and ii) introducing supply chain initiatives that ASM operators can participate in once they acquire licences and comply with regulations and the supply chain initiative’s own requirements.

If a government cannot adopt a license and regulate approach at the national scale, it might be able to adopt one in ASM zones: restricted areas where ASM operations are less mobile, law enforcement more deployable and cost effective, or where things as simple as physical terrain can make monitoring and enforcement easier. The government can run a license and regulate approach within the ASM zones while promoting good practices outside of the zones.

Before proceeding with the establishment of ASM zones, the task force must establish whether is it legally possible to put the zones in place, and—if not—whether it can be made legal. The zones themselves must have some proven reserves to make them attractive to ASM operators, and must be established in areas that are not already covered by existing mining permits, unless this is done in cooperation with the titleholder. The task force could first consider establishing such zones in areas where ASM is more easily governed, and where supporting resources could be easily deployed. It must also be cognizant that, in establishing the zones, the task force may attract more miners to an area than it could otherwise support; as such, decisions on the number of ASM permits will have to be made in a practical way that is sensitive to potential conflict dynamics.

Beyond ASM zones, the supply chain initiatives previously described can be used to create a system of voluntary regulation in the ASM sector. These supply chain initiatives ensure market access for minerals and metals produced through good practices and in a conflict-free way. They require that participants meet certain criteria in exchange for access—criteria that may be similar to the regulations governments may want to introduce. Governments may find ways to add other rules too. If a government can encourage the introduction and expansion of such initiatives, they can be used as demand-driven systems of regulation.

To decide whether or not to implement a supply chain initiative, the ASM task force should:

1. Map, appraise and evaluate the economic benefits of facilitating or encouraging the participation in supply chain initiatives.
2. Review the market demand for products produced by the various supply chain initiatives and compare that demand to domestic ASM production, to understand the reach that the initiative could potentially have.
3. Revise the analysis of whether to facilitate or encourage supply chain initiatives by factoring in how much they could be used as a system of regulation to improve ASM practices.
  - a. Review how possible supply chain initiatives work to see how they would require participants to improve their practices.
  - b. Negotiate with the supply chain initiative to see whether country-specific requirements should be added to the initiative, or legislate to add requirements to the initiative in the country.
  - c. Evaluate what incentives the supply chain initiative would create for ASM operations to comply, if any, and estimate how many ASM operations would take up the initiative.
4. Identify what standards of practices ASM operations will have to meet—and the effort required to get there—in order to become compliant with the scheme(s).
5. Include the supply chain initiatives' standards of practices in the education and training for relevant ASM operations.
6. If necessary and beneficial, facilitate or provide technical assistance to help ASM operations meet those standards of practices.
7. Promote good practices that target ASM operations that will not participate in the supply chain initiative(s), to facilitate eventual adoption.

Finally, the ASM task force can also create a system of regulation using a state-sponsored buying program. Under this approach, the government sponsors and funds a scheme that buys production from ASM operations at competitive prices vis-à-vis alternative buyers. The competitive prices—and other benefits that can be built into the scheme—give miners incentives to participate. Participating members will be obliged to undergo a program of inspections and monitoring to demonstrate that they meet regulations.

The incentives to meet the regulatory standards required by the scheme disappear if non-compliant participants find ways to sell their production to the scheme. To prevent this, operations will sell to the scheme either directly through buying stations/agents or through accredited intermediaries functioning as buying agents, such as local banks with a strong presence in ASM areas. All actors buying minerals for the scheme should apply risk-based due diligence, as per the OECD Due Diligence Guidance.

A number of factors influence the feasibility of running buying stations, including: the costs of running the stations, which is influenced by the distribution of ASM operations, existing state capacities and levels of crime, among others; the benefits of participation for ASM operators, which is influenced by their distance from the buying stations, the value-weight ratio of the product, the strictness of



regulations and the existence of (informal) exclusive buying rights; and the ability of non-participants to sell to participants, which is influenced by the use of inspections, law enforcement investigation, the value-weight ratio of the product, local state capacities and the effective implementation of risk-based due diligence.

The factors that underpin the feasibility of effectively implementing risk-based due diligence include but are not limited to: the ASM operators' organizational capacity and adaptability, the costs of due diligence, state capacities to monitor and ensure the effective implementation of due diligence and the level of effective regulatory enforcement in ASM areas.

## 2.4 FINALIZE THE ASM MANAGEMENT STRATEGY

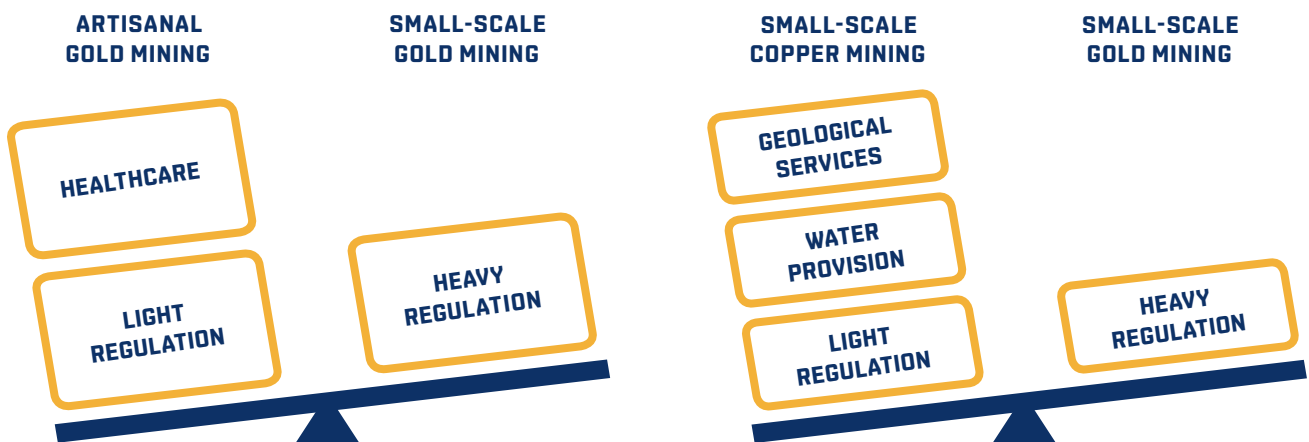
To finalize the ASM Management Strategy, the substrategies that you have developed for each type of ASM must be integrated into a coherent finalized strategy. Doing this may reveal some inconsistencies between approaches, which you will need to be addressed.

Developing separate strategies for each type of ASM means creating different rules and different support programs for each subtype. This could make some types of licences more attractive to hold than others. Operations that ought to operate under one type of licence may try to operate under another instead, and the government must put in place rules to prevent this from happening. Considering the ASM sector is dynamic, the government must also ensure that a transition process is in place to allow ASM operators to apply for different ASM licences, should an operation improve by, for example, adopting good practices.

For example, small-scale gold miners may wish to work under small-scale copper mining licences for two reasons:

1. They wish to avoid the punitive regulations associated with small-scale gold mining licences.
2. They wish to benefit from the provisions for water and geological services that small-scale copper mining operations can access.

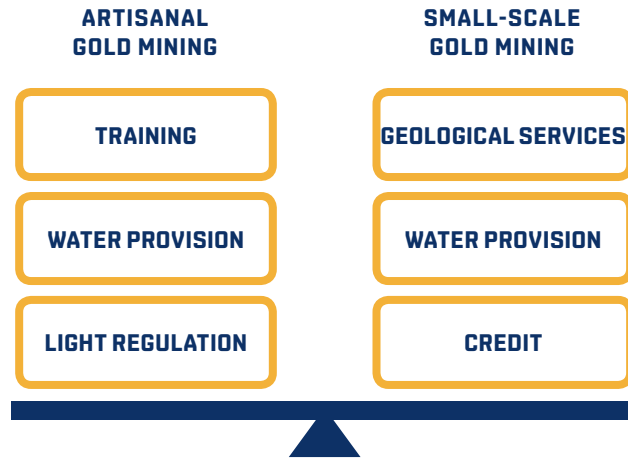
As copper and gold can sometimes be found in the same deposits, there may be an incentive for a gold mining operation to pretend to be a copper mining operation. Similarly, small-scale gold miners may wish to take artisanal gold mining licences to avoid more stringent regulations imposed on small-scale mining, and to benefit from the government-provided healthcare artisanal miners receive (see Figure 18).



**FIGURE 18. DIFFERENT INCENTIVES FOR DIFFERENT LICENSES**

**OPTION 1: ADJUST INCENTIVES**

One way to ensure that ASM operations hold the right licences is to review the strategy for each type of ASM and try to balance the costs and benefits of holding each licence (see Figure 19). In doing so, a government can eliminate the incentives of holding one type of licence over another. However, a government should carefully consider whether it can estimate ASM operations’ cost structures before doing so.



**FIGURE 19. BALANCING THE COSTS AND BENEFITS FOR ASM TYPES**

**OPTION 2: ADD LICENSE CRITERIA**

Alternatively, a government can add criteria that operations must meet before they can be awarded any type of ASM licence, to restrict ASM operators from holding the wrong kind of permit (see Figure 20). In doing this, the government should be careful not to create unintended or unproductive consequences. The criteria needs to be:

1. As simple as possible to understand.
2. As easy as possible for officials and operations to verify.
3. As hard or as costly as possible for other types of ASM operations to meet or mimic.

**ADD THE LICENCE CRITERIA: A SMALL-SCALE COPPER MINING LICENCE DOES NOT LICENCE THE OPERATION TO LIBERATE GOLD OR GOLD ORES**



**FIGURE 19. BALANCING THE COSTS AND BENEFITS FOR ASM TYPES**

In Phase 1 of the guidance, the task force began developing relationships with stakeholders that could be potential partners in ASM management. Before finalizing the ASM Management Strategy, the task force should decide how and where it should enter into partnerships with key stakeholders, and the objectives and practicalities of these partnerships. This involves:

1. Maintaining and, where feasible, building on the relationships developed with potential partners in Phase 1.
2. Engaging with potential partners about the ASM Management Strategy.
3. Deciding whether there is a basis for a partnership. Consider:
  - a. The content of the ASM Management Strategy so far
  - b. Shared or mutually compatible interests on both sides
  - c. The relationship between the government and potential partners
  - d. The resources and capacities that each side brings to the partnership
4. Negotiating a partnership, which should include:
  - a. The goals to be pursued
  - b. The resources and capacities that will be provided by each partner
  - c. The actions that will be taken by each partner
  - d. How the partnership will be managed and monitored and evaluated
  - e. How communication between partners will take place
  - f. How disputes will be resolved

In certain regions, ASM is a cross-border phenomenon that requires cross-border cooperation to manage effectively. To address the specific conditions of border areas in the ASM management strategy, the ASM task force should enter into a dialogue with neighbouring states to discuss why and how cross-border issues are to be addressed. This can be done in collaboration with the Joint Working Party, the Coordination Secretariat or the Border Area ASM Secretariat, as appropriate. There is a range of options for neighbouring states to cooperate on the implementation of a regional approach, which should always be implemented on the basis of the context analysis:

1. Harmonize policies and practices across countries to minimize the incentives to smuggle or to pursue ASM in one country rather than another, including:
  - a. Licensing procedures
  - b. Taxation
  - c. Prices offered by state-sponsored buying schemes
  - d. Access to supply chain initiatives
  - e. Laws and sanctions
  - f. Law enforcement effectiveness
  - g. The scope of ASM assistance programs
2. Strengthen border controls, including:
  - a. Policing unauthorized ports and border crossings
  - b. Tightening customs controls
  - c. Initiating joint law enforcement investigations, including anti-corruption investigations
  - d. Implementing information sharing
3. Mitigate the effects of environmental impacts, or impacts on shared bodies of water or areas, caused by ASM on both sides.
4. Share information about the ASM Management Strategy, including its development, related research, good practice, and monitoring and enforcement.





**PHASE 3:  
IMPLEMENTING  
THE ASM  
MANAGEMENT  
STRATEGY**



## PHASE 3: IMPLEMENTING THE ASM MANAGEMENT STRATEGY

### **PURPOSE:**

Putting the ASM Management Strategy into practice, and ensuring its success through effective monitoring and evaluation (M&E).

### **STEPS:**

#### **3.1 PREPARE TO IMPLEMENT**

Develop an implementation plan, establishing which departments are responsible for implementing which parts of the plan, and the time frame and budget for achieving each task. Design procedures and systems for registering ASM licence-holders, conduct outreach efforts to raise public awareness, and possibly consider running pilot programs to ensure that problems are identified and addressed prior to full implementation. Establish ASM zones if needed.

#### **3.2 IMPLEMENT**

Organize the domestic ASM sector according to types of operations to reflect the variety of operations that comprise the ASM sector (i.e., by commodity; by degree of mechanization; by scale; whether alluvial or hard rock). Once identified, prioritize the subcategories based on the degree to which the government can expect to address, reduce or enhance the net impacts of the mining.

#### **3.3 MONITORING, EVALUATION AND IMPROVEMENT**

Develop and implement an M&E plan, and periodically review the plan and revise it if needed.

### **ACTIVITIES:**

The activities undertaken in Phase 3 include planning, implementation, outreach, stakeholder consultations, and M&E.

### **OUTPUTS:**

Implementation plan

M&E plan

During Phase 3, the government will implement the ASM Management Strategy developed in Phase 2. This starts with an implementation plan, in which responsibilities for the program's delivery are allocated among government departments. The task force should define and agree on levels of accountability, and the roles of external stakeholders and partners who can help to effectively implement the strategy. Partners must be sought if government departments do not have sufficient capacity to successfully implement the ASM Management Strategy, though these capacities should be strengthened over time.

## 3.1 PREPARE TO IMPLEMENT

The first step of Phase 3 is to prepare for the implementation of the ASM Management Strategy. If a government rolls out ASM programs without taking the time to plan implementation, its efforts will likely be ineffective. The ASM task force must therefore work to prepare an implementation plan, review and modify existing legislation, identify possible ASM zones and launch outreach programs to sensitize the population to upcoming changes.

### PREPARE THE IMPLEMENTATION PLAN

The implementation plan translates the ASM Management Strategy into a practical plan that should include: a list of activities and associated outputs and outcomes, timelines, budgets and responsible stakeholders, including government ministries, departments and agencies, as well as external partners. Environmental and gender considerations should be integrated across the document, and indicators, baselines and targets should be developed to help M&E.

As roles and responsibilities are established in the ASM Management Strategy, the task force must ensure that the responsible stakeholders have sufficient capacities to deliver. The task force and the Ministry of Finance should review the government capacity assessment prepared in Phase 1 and compare it to the tasks set out in the ASM management strategy to determine where and to what extent capacities need to be improved.

Using that information, the ASM task force and the Ministry of Finance should agree to distribute the resources required to improve capacities, and to increase or decrease funding as necessary. Financing and other forms of assistance from external partners should be included in the budget.

## CHECKLIST

The implementation plan should:

- Describe how the programs that it includes will put the ASM Management Strategy into practice
- Describe how these programs will fulfill the goals of the ASM Management Strategy
- Detail the goals that each program will achieve
- Ensure that the implementation plan has the support of stakeholders
- Divide responsibilities and assign roles for constituent programs and overall ASM management between government departments and agencies, as well as external partners as appropriate
- Describe complementarities among programs
- Include detailed budgets for programs
- Include inventories of relevant departments' personnel, equipment and capacities assigned to ASM management
- Justify how the capacities of relevant stakeholders are sufficient to fulfill their tasks
- Establish a detailed timeline for individual programs and the overall plan, including clear dates and milestones for all phases and related processes

## MAKE REQUIRED CHANGES TO NATIONAL LEGISLATION

Before proceeding with implementation, and if necessary, a government may need to revise the legal framework for ASM to reflect changes in licensing and regulations proposed in the ASM management strategy. This may involve a separate government decree or order, or the integration of the new ASM requirements into a revised mining code. Changes to the legal framework can create uncertainty for ASM operators, and may prove to be difficult to adjust to, so a government should only make these changes if they are necessary to help with the implementation of the strategy. Sanctions, fines and other penalties must be set at a level that deters non-compliance. For new laws and obligations across the various types of ASM, the task force must ensure that they are easy to understand—for operators and officials—and to enforce. They should also be explicitly connected to licences, to simplify administration, monitoring and enforcement.

### For a license and regulate approach:

1. Create ASM licences for the types of ASM operations identified in Phase 2.
2. Make it illegal to operate ASM without a licence.
3. Legally adopt sanctions for operating without a licence.
4. Legislate to make unacceptable ASM practices illegal and, where appropriate, criminal offenses, where not already defined in law. This also applies when promoting good practices.
5. Legally adopt sanctions for engaging in unacceptable practices. Again, this also applies to an approach where you are promoting good practices.
6. Legislate and regulate to forbid all poor ASM practices category identified in Phase 2.
  - a. Write different laws and regulations for each type of ASM.
  - b. If each type of ASM has its own licence, connect laws and regulations to the licence type.
7. Legally adopt sanctions for poor practices, including the revocation of licences and shutting down operations.

### For ASM Zones:

1. Legislate to provide the government with the power to designate and manage ASM zones.
2. Write into law or grant the executive the power to change licensing laws, regulations and sanctions in and outside of ASM zones.

For both the licence and regulate approach and the combined approach, ensure that licences:

1. Are not the same as those used for large-scale mining.
2. Offer exclusive access to land to mine.
3. Can be transferred between owners, to encourage the development of a market for mining property and investment, along with the responsibilities of licencing.
4. Are long enough and can be renewed, so that they encourage investment.
5. Are short enough to discourage the speculative holding of licences, or include provisions that allow government authorities to revoke licences if the holders do not make the required, timely effort and investment to develop the deposits.
6. Are divided by prospecting, mining, processing and trading, regardless of the other ways the ASM sector is subdivided into categories.
7. Include license criteria described in Phase 2.

## DESIGN THE APPLICATION AND REGISTRATION PROCESS

The task force must also ensure that the process for applying for a licence is transparent, timely, clear and administratively simple. It should be open to individuals, cooperatives, companies or other

legal bodies. The application process must also be accessible: miners and operators should be able to get to relevant local or district offices to submit their applications for an ASM licence, without being restricted to the ministry offices in the capital. Obtaining and renewing permits should also be affordable, to reflect the economic realities of ASM communities.

Beyond licensing, for the registration of ASM operations the task force should design a process that makes registration possible at any licence application centre, and can be a service offered at low or no cost to encourage participation. A system should be in place to enable cross-referencing of licensing and registration, to ease monitoring of the sector.

## **RUN PILOT PROGRAMS**

Before implementing the full ASM management strategy, it can be useful for the task force and its partners to run smaller pilot programs to test the ideas included in the strategy. This will help to ensure that pilot programs, delivered on a small scale across a representative selection of areas and ASM types, can be reviewed and modified in response to on-the-ground implementation realities to increase the chances of larger-scale implementation success.

## **ESTABLISH ASM ZONES**

Prior to full implementation of the ASM management strategy, the task force may also have to establish ASM zones, if a combined approach is being taken to improving ASM practices. As previously described, these zones are areas in which ASM miners can operate under a separate system of administration, and in which laws and policies are more easily enforced. The good management of ASM zones depends on: capacities and incentives to manage the zones efficiently; good cooperation among ASM operations; strong M&E; effective education and training programs; and infrastructure assistance.

To determine where ASM zones should be located:

1. Allocate general responsibilities for the creation and administration of ASM zones to a single department or body, normally the Ministry of Mines.
2. Refer to the geological and land-use maps to decide where to set up ASM zones.
3. Appoint managers or authorities responsible for the administration of ASM zones or make the relevant offices of the Ministry of Mines responsible for them.

Before finalizing the location of ASM zones, the ASM task force will have to ascertain whether it is legally possible to designate the envisioned land as ASM zones, and whether there are viable deposits within the area to ensure participation of the ASM sector. The rules for operating inside and outside of the ASM zones should be clear and enforceable, and the lines of responsibility and authority must also be clear. You should have a clear understanding of what kinds of programs can be delivered inside these zones depending on the differing levels of available resources, and how you will manage influxes of miners into the zones that exceed the zone's carrying capacity. Finally, if a supply chain initiative is set up inside the ASM zone, the task force should have processes in place to ensure there is no contamination of zone-produced minerals and metals with non-compliant materials produced outside of the zone.

## **OUTREACH AND AWARENESS-RAISING**

Before implementation, the government should reach out to ASM operations to notify them about the implementation of its ASM Management Strategy and communicate all anticipated changes to ASM operations prior to those changes being put into place. If done properly, this can be an effective way of building up trust among stakeholders.

The sequence of these actions is important. If some programs begin before the legislative framework is changed, for example, then they may not be supported by the forthcoming changes to laws and regulations. If monitoring and enforcement begin before outreach, then ASM operations might justly feel that they are being expected to comply with rules that they have no reasonable way of knowing about.

The outreach effort should ensure that ASM operators and local communities are aware of the government's motivations and intentions, the nature of any regulatory changes, the newly applicable rules, the types of assistance needed and how to become eligible for assistance.

Outreach can be done through a number of channels, including but not limited to: licence applications, education and training programs, mass media, social media and visits by officials to explain the changes to local communities. Developing an outreach strategy—with target audiences, featured content and means of dissemination—prior to commencing awareness-raising will be critical to its effectiveness.

## 3.2 IMPLEMENT

There are likely to be a number of different components to the implementation of the ASM Management Strategy. Brief descriptions of some common aspects of ASM Management Strategies, and guidance on how to implement them, are found below.

### IMPLEMENT A STATE-SPONSORED BUYING SCHEME

If a state-sponsored buying scheme is included in the ASM Management Strategy, the task force should design a scheme that is run directly by the government, through a state-owned company, and that is accountable to an independent body and tasked with maximizing sales from regulation-compliant operations. The scheme should remain cost-neutral, and if possible could use a mobile phone-based transaction system to pay ASM operations and reduce the security-related costs of running buying stations. Buying stations should be set up as close to ASM operations as is feasible, to ensure that operators have access; they can even be housed in existing local government offices, wherever possible, to save costs.

ASM operations should apply to be registered as participating in the scheme. With registration, they would also be included in a system of regulation and monitoring. Upon successful completion of their first inspection, ASM operations would be included in a verified list of sellers, and would be subject to further periodic inspection to ensure continued compliance. ASM operations that are part of the scheme should be obliged to show their licences or offer other verifiable proof that they are members of the scheme. A risk-based due diligence supply chain system, as per the OECD Due Diligence Guidance, should be implemented as part of the scheme if the ASM operations are located in a conflict-affected or high-risk area.

### ENCOURAGE PARTICIPATION IN SUPPLY CHAIN INITIATIVES

The government can encourage and facilitate the introduction of an independent supply chain initiative for ASM production, as discussed. To encourage the entry of the supply chain initiative in the country, responsible entities (including the ministries of Trade, Economic Planning and Mines) should: write a feasibility study of the proposed initiative's entry into the country; advertise the potential of the domestic ASM sector's participation to the initiative; negotiate the initiative's entry into the country; and provide assistance where required and feasible.

To encourage participation in the supply chain initiative uptake by ASM operators, the same responsible entities should: develop promotional market information for potential downstream buyers working with the initiative; communicate the benefits of participation to ASM operators; facilitate discussions among interested parties; translate the supply chain initiative's standards for compliance



into regulation; and provide assistance to ASM operators to encourage compliance and the initiative's success in-country.

This will require that the task force, prior to bringing the initiative into the domestic market, evaluate downstream demand for initiative-compliant products, and the requirements of downstream companies before they consider sourcing from the country. The task force will also have to understand what the initiatives need to have in place before they will enter into a country, and whether meeting these requirements is possible. Finally, the task force must gauge whether there are ASM operations in-country that can be expected to meet initiative requirements.

## **RUN EDUCATION AND TRAINING PROGRAMS**

Education and training programs should be designed and rolled out early on in the implementation phase, to ensure that capacities are being built or are in place before most programs are delivered. These are most effective when ASM operators request the training, but governments should not be limited to responding to requests; education and training programs can be useful when linked to compliance requirements, when directed at ASM stakeholders and when recipients are unaware of the merits of the training prior to its delivery.

Education and training can be provided through a variety of channels to reduce participation costs for ASM operators/miners/stakeholders. These can include, but are not limited to: regional training centres, mobile and roaming trainers, on-call experts, government officials on other duties, online platforms, mass media and digital helplines. Trainers and teachers should be recruited based on technical knowledge, teaching expertise, experience in ASM, ability to speak the local language and whether they have the trust of the target audience. Where possible, the government should adopt a "train the trainers" approach, so that key members of local communities are taught how to deliver education programs before returning to their communities to train more ASM stakeholders.

## **ECONOMIC RESETTLEMENT**

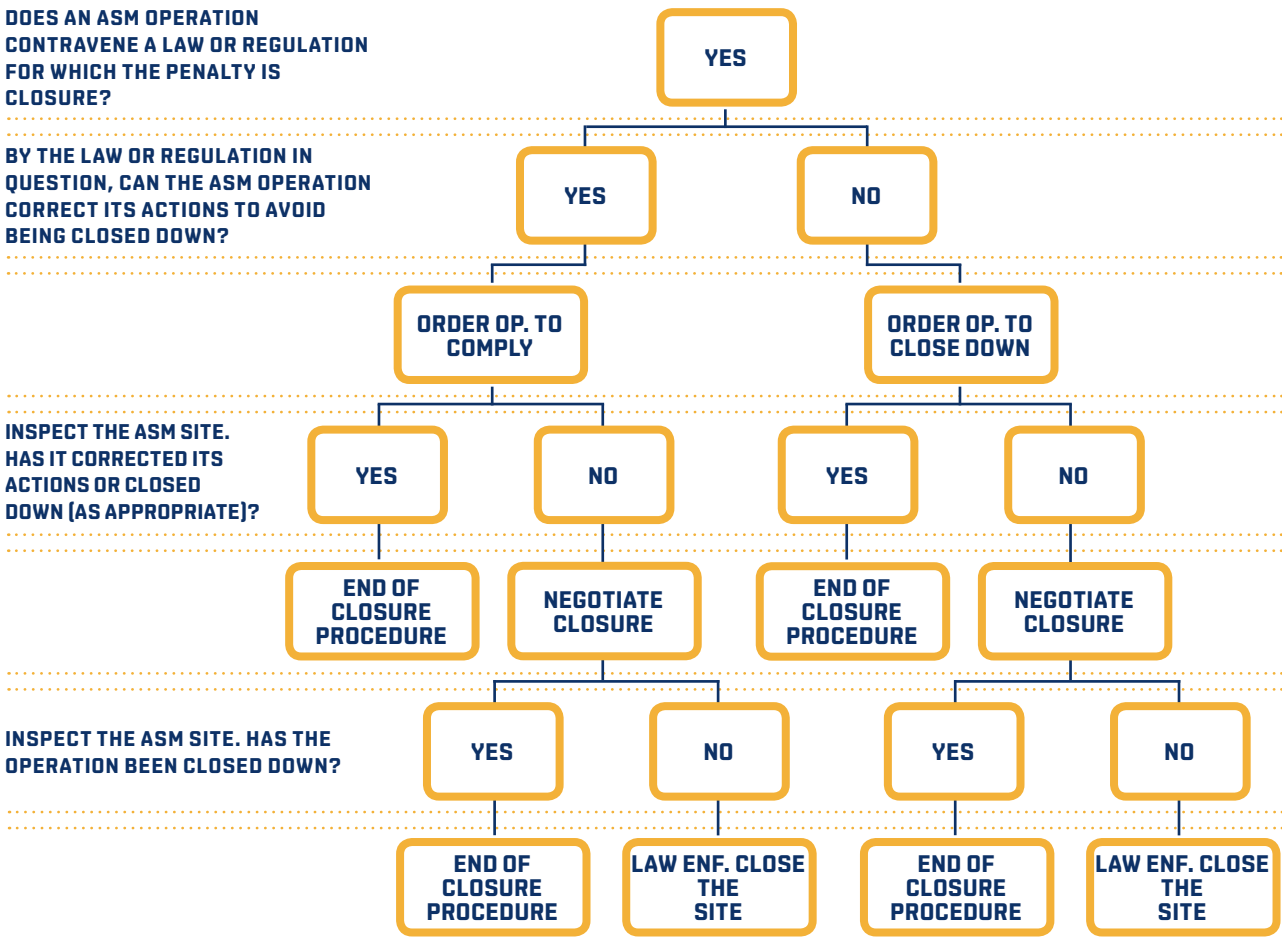
Economic resettlement is the process by which ASM workers and owners are provided with new employment or business opportunities in the context of a physical resettlement process. The International Finance Corporation's Guidance Note 5 on Land Acquisition and Involuntary Resettlement should guide the task force's approach to economic resettlement:

- Register ASM workers at the sites in question and any persons who live there, to prevent others who are not eligible for resettlement or compensation from fraudulently claiming it.
- Begin outreach and consultations in which ASM operators, workers and other stakeholders are informed about the process and are given meaningful input and influence over the decision to resettle them or not.
- Develop an ASM Resettlement Action Plan, which may encompass physical relocation, economic relocation or both. This plan should include budgets and concrete, achievable timelines.

A successful economic resettlement will need to be informed by an understanding of the economic and livelihood opportunities that the individuals or community could be provided with as a result of the resettlement process. Alternative economic activities should ideally offer similar work for the resettled to minimize disruption and the need for additional training and capacity building. New jobs should offer acceptable levels of pay and security to convince ASM workers to relocate, and to prevent ASM operators from simply returning to their previous mines after the resettlement. Choice is important: affected stakeholders should be given a set of possibilities with regards to jobs and livelihoods, and be empowered to choose. These options should be developed through consultations with ASM workers and their families.

### MODEL PROCEDURE FOR FORCIBLY CLOSING DOWN ASM OPERATIONS

Due to the complicated nature of forcibly closing an ASM operation (see Figure 21), governments should take particular care. Supplementary information about how to undertake this complex process are provided in the Annex to this guidance.



**FIGURE 21. FORCING THE CLOSURE OF ASM OPERATIONS**

### PROVIDE TRANSPORTATION INFRASTRUCTURE

Transportation infrastructure helps ASM operations and communities in a number of ways, including economically: connecting goods to market, facilitating the purchase of equipment, supporting the development of associated goods and services. At the national or district level, the ASM task force, in collaboration with the Ministry of Transport, can help the sector in this regard by using the supply chain map produced in Phase 1 to analyze ASM trade routes and decide where infrastructure investments can be made to improve market access and facilitate trade. Any changes to the design of transportation infrastructure should then be integrated into the government’s overall infrastructure planning. At the community level, the task force can work to improve the access of individual operations or small clusters of operations to transportation infrastructure. In addition, the government must continue to maintain and improve transportation infrastructure in general to avoid the economic impacts of infrastructure deterioration and disrepair.

## **PROVIDE GEOLOGICAL DATA OR EXPERTISE AND EXPLORATION SERVICES**

Geological information helps ASM operations identify where to establish mines and how to run them efficiently. This helps ASM operations economically, and can contribute to minimizing the negative environmental impacts of mining. As such, the government should establish whether there are gaps in the geological data available to ASM miners prior to intervening in the market, and how these gaps can be addressed. The government can help ASM operations acquire geological information by: updating national geological data and making geological data freely available to a broad audience; offering the support of geologists from the Ministry of Mines to the ASM sector; and subsidizing the costs of hiring private sector geologists.

## **PROVIDE INFRASTRUCTURE**

ASM operations can use significant amounts of water in the mining and processing of their minerals and metals. In addition, the miners and their communities require water for domestic consumption, livestock and agriculture. Through the provision of efficient water and sanitation infrastructure, governments can help to minimize water waste around ASM operations while also improving worker and community health. When designing and building such infrastructure, the government should try to ensure that the water provided will not be used in unsafe or environmentally damaging activities, and if it is, the ASM operations will be shut down.

Governments are also sometimes the only suppliers of electricity infrastructure. Electricity can be generated privately on-site at ASM operations, but it can be unsafe and expensive. Providing electricity is economically beneficial to ASM operations, and can make operations safer and less environmentally damaging. The ASM task force could consider providing grid access to ASM operations (non-conditional) or providing small- or medium-sized generators near clusters of ASM operations (which can be conditional). The task force can also explore whether there are opportunities to install small or micro-hydropower plants near ASM operations. As water, sanitation and electricity infrastructure is long lasting, the task force should prioritize support for operations with longer expected life spans.

## **IMPROVE ACCESS TO CREDIT OR INSURANCE**

The ASM task force can also consider improving the access of ASM miners and operations to credit and insurance, to help facilitate growth and manage risk. The task force should first understand why market-based credit is not reaching the ASM sector, and can then work on providing these services to those operations most in need. This assistance can include helping to form credit associations, promoting credit for future purchasing, organizing ASM operations into larger groups, subsidizing credit, using government monitoring and enforcement mechanisms to support repayment, encouraging the development of the market and supporting mobile banking technologies.

## **PROVIDE EDUCATION TO WORKERS**

Providing subsidized or free education to ASM workers will have positive social impacts. Where that schooling is vocational, it can also have a more direct economic impact, and can potentially direct miners into alternative livelihoods that diversify local economies and lessen environmental impacts. Educational programs can be made conditional upon compliance with regulations. (This excludes the education of ASM workers' children, which should be universally offered). Such programs are less effective when they target seasonal ASM workers; exposure to schooling should be constant rather than intermittent.

## **PROVIDE TECHNICAL EXPERTISE AND PROVIDE OR SUBSIDIZE THE SALE OF EQUIPMENT AND INPUTS**

The government can decide to provide technical expertise, equipment and subsidies for equipment and inputs to help ASM miners improve their practices and expand their operations. ASM operations are often too small to employ technical specialists full time or to afford equipment. To overcome these barriers, ASM operations should be encouraged to organize into larger groups (e.g., cooperatives) where possible; organized groups with a critical mass are better placed to employ technical specialists and purchase equipment that is suited to or can help achieve greater production volumes more effectively and more responsibly. In addition, ASM operations use many inputs other than equipment, such as electricity, petrol, water and chemicals. Subsidizing inputs is distortive, but may be desirable to make ASM operations comply with regulations.

A government should verify whether there is a market failure in third parties providing either technical expertise or equipment before proceeding. The government should also establish whether there is a direct case for improving ASM practices through the government provision or subsidization of technical expertise to ASM operations. Technical expertise, equipment and inputs can be made conditional on compliance with regulations, but only if they are needed periodically. Where feasible and affordable, a government should procure expertise, equipment and inputs locally.

## **SPONSOR CLEAN PROCESSING PLANTS**

Clean processing plants are needed when existing processing methods are too dirty or are hazardous to public health. Clean plants employ improved technology and better processing methods, and once established would process minerals or metals for ASM operators for a fee.

For the scheme to work, the clean processing plants must offer cheaper services than regular or “dirty” ASM processing plants, which may require a government subsidy. The government can also increase sanctions or fines for using dirtier technologies to increase their relative costs and incentivize the use of clean processing plants. Clean plants should also be established close to ASM operations to reduce related transportation costs.

## **SPONSOR DEMONSTRATION PLANTS**

Demonstration plants are used to complement or substitute for education and training programs. They are small and naturally contained projects that are set up to demonstrate best practices and to show ASM operators that it is in their interest to adopt these techniques. They should demonstrate practices that are profitable and can be feasibly adopted by ASM operators and miners. A government might: finance and run a demonstration mine directly; sponsor a mine by providing technical assistance, equipment or finance; or encourage others to sponsor such an operation. If a mobile demonstration plant can be assembled, it will reach more ASM operators.

# CHECKLIST

Does each ASM management strategy:

- Have an implementation plan that
  - Sets clear objectives?
  - Refers to ASM operations by region, subtype, practices and characteristics, as appropriate?
  - Spells out how actions will achieve the stated objectives, step-by-step?
  - Includes a budget?
  - Assigns roles and responsibilities for oversight, management and funding?
  - Sets out clear roles for all staff and organizations involved?
  - Spells out the phases and processes that make up this plan?
  - Sets milestones and dates for each part of those processes?
  - Spells out, in the main text or an annex, the procedures that officials should undertake under different conditions?
  - Includes ways to measure these objectives?
- Have cross-departmental support in government?
- Have the support of relevant stakeholders?
- Have reliable, long-term funding?
- Have appropriately trained staff?
- Have appropriate equipment?
- Have sufficient technological support?
- Directly serve the overall ASM management strategy?
- State under what conditions the program will become unnecessary and will be closed?
- Include provisions for successor programs, or conditions under which there should be no successor programs, if the program is to run for a fixed time period?

## 3.3 MONITORING, EVALUATION AND IMPROVEMENT

The ASM task force should be responsible for the ongoing overall M&E of the ASM Management Strategy's implementation. Keeping track of all associated activities and programs and responding to a changing context requires a strong M&E system, developed prior to implementation and used for the life of the Management Strategy. The development of the M&E system will include the setting of baselines, development of indicators and setting of targets. These targets will be matched to key milestones and timelines to ensure that the task force knows whether the ASM Management Strategy is working, or whether it needs to be adjusted in light of on-the-ground realities. This allows for the periodic review of the ASM management strategy's design and implementation, which will help ensure its ongoing success.

Once the M&E plan—including activities and their baselines, indicators, targets and milestones—has been developed by the ASM task force, in consultation with key relevant stakeholders, the process of monitoring, evaluating and improving the implementation of the ASM Management Strategy should include five activities:



1. Each stakeholder group that runs a program included in the ASM Management Strategy should collect and collate relevant data about their performance at the rate established in the M&E plan. Examples might include data about the number of inspections carried out in a given quarter, or the number of ASM licences granted to gold miners in a month. Collection of this data should be built into program design and be routine or automatic wherever possible.
2. The ASM task force should monitor the performance of each program on a rolling basis and intervene to revise programs and make ad hoc amendments to the ASM Management Strategy when programs underperform or opportunities arise to improve them.
3. Each implementing group that manages a program under the strategy should submit an annual report on their program to the ASM task force. This report should summarize data and evaluate performance against the targets set out in the M&E plan.
4. The ASM task force should then compile these reports into an ASM management review, which evaluates the design and performance of the ASM Management Strategy as a whole.
5. Based on the findings of this review, the ASM task force should review and revise the ASM Management Strategy as and when necessary.

## CHECKLIST: MONITORING, EVALUATION AND IMPROVEMENT

- Does each program:
  - Collect data about what actions are taken?
  - Collect data about what the program achieves?
- Does each program compile that data so that it can be analyzed at the national and subnational levels?
- Does the data that is collected allow the ASM task force to analyze whether it is meeting the targets set out in each program's implementation plan?
- Do the stakeholders responsible for each program:
  - Periodically review the data collected from the corresponding program?
  - Submit annual reports to the ASM task force detailing progress made toward program goals?
  - Revise their plans, leadership and strategies in order to improve programs' performance, as required?
- Does the ASM task force:
  - Review these reports from each department?
  - Revise budgetary support, sanctions and leadership for the relevant implementing stakeholders, as required?
- Does the data and analysis in these reports allow the ASM task force to analyze whether it is meeting the targets set out in the ASM implementation plan?
- Does the ASM task force:
  - Periodically update and review the data across programs?
  - Periodically submit a report that summarizes progress made toward the objectives set out in the vision?
  - Review and, if necessary, revise the ASM Management Strategy
- Does the ASM task force integrate data collected during M&E into future research?



## ANNEX: ADDITIONAL RESOURCES ON ASM

The relative amount of data and information on the ASM sector remains minimal, a product of the sector being predominantly practiced outside of formal legal and economic structures. This Annex provides an overview of the organizations, projects and resources that can further aid users in the management of their own ASM sectors. The list is by no means exhaustive; only a selection of the relevant initiatives and resources is presented here.

### RESEARCH AND POLICY

A series of broad resources set out the role of ASM in good extractive sector governance in general. Users seeking to affirm the role and potential of ASM in mining or extractive industry policy in general can reference the IGF's **Mining Policy Framework**, the **Natural Resource Charter** and the **Africa Mining Vision**.

A set of documents and initiatives act as the hosts of ASM knowledge and programs. An important resource is the International Labour Organization's (ILO) seminal document on *Social and Labour Issues in Small-scale Mines* (1999). It provides information on the setting of ASM, child labour, women in ASM, occupational health and safety, legislation, relationships with the large-scale sector and a summary of important discussion points. Complementary initiatives include the **Communities and Small-scale Mining** (CASM) project, which was supported by the World Bank and worked as a knowledge centre and a networking hub for the sector. While CASM has been discontinued, the **International Institute for Environment and Development** (IIED) has informally taken over some of its functions. It too is a source of further information, and prior to this new role, it ran the Mining, Minerals and Sustainable Development program, which published a **Global Report on Artisanal & Small-Scale Mining**. This report and the country-specific reports behind it, numbered Reports 70 to 83, exhaustively document characteristics of ASM sectors, ASM issues and profiles of good practice. Similarly, the **Socio-Economic Impacts of Artisanal and Small-Scale Mining in Developing Countries** is an edited volume that users can turn to for chapters on a long list of ASM topics from a range of experts.

More recently, the Swiss Development Corporation and its Mongolian Sustainable Artisanal Mining Project have in 2016 begun the launch of an International Knowledge Hub on ASM. Its early shape aims to have four thematic areas: (i) Empowering the ASM sector to create a confident and positive self-image and public image; (ii) Strengthening the enabling environment for ASM; (iii) Assuring the well-being of the ASM communities; and (iv) Promoting responsible business practices in ASM.

Users may also turn to a body of more focused policy-relevant research and toolkits. Some of best developed materials concern the reduction or elimination of mercury use in artisanal and small-scale gold mining. The Minamata Convention binds signatory states to a series of actions on artisanal and small-scale gold mining. It is worth mentioning here that although mercury may seem to be a singular and focused issue that does not address the broad aspects of ASM, the mercury issue as elaborated through the negotiations of the **Minamata Convention**, has arguably raised the awareness of ASM to high-level government delegations more than any other initiative. Further, to its credit the Minamata Convention Secretariat, throughout the negotiations, quickly realized that only a holistic and broad approach to ASM would provide significant reductions in the sector's mercury use.

Related, the Global Mercury Project (2002–2007) and the initiative that succeeded it, the United Nations Environment Programme's (UNEP) Global Mercury Partnership (active since 2010 and currently growing) developed a series of resources for policy-makers and interested parties that are available on its **website**. Among the resources available are a **technical guide** on mining and processing techniques that minimize or eliminate mercury use, and a **technical guide** on health issues related to mercury and ASM. The UNEP Global Mercury Partnership is finalizing a **Guidance Document** for Minamata Convention signatories to guide them in the development of national action plans to reduce and eliminate mercury use in ASM.



Additionally the **Canadian International Resources and Development Institute** has further resources on ASM and associated mercury use, including ***Small Gold Mining Can Be Beautiful***, which offers a holistic account of issues associated with mercury and ASM and possible solutions. The Alliance for Responsible Mining developed a draft ***Legalization Guide for Artisanal and Small Scale Mining***, and ***UNEP's Analysis of Formalization Approaches in the Artisanal and Small-scale Gold Mining Sector Based on Experiences in Ecuador, Mongolia, Peru, Tanzania and Uganda*** documents five governments' efforts to formalize ASM.

For resources about policy instruments and ASM more broadly, users can refer to the United Nations Economic Commission for Africa's ***Compendium of Best Practices in Small-scale Mining in Africa***. For research about ASM livelihoods, users should turn research commissioned by the UK Department for International Development (**DFID**). For research and policy recommendations about buying programs, users should see the report entitled ***State Gold Buying Programmes***.

There are a number of new publications concerning workers' rights and ASM: Human Right Watch has produced a **series of reports about child labour in ASM**; IIED has published ***Artisanal and Small-Scale Mining: Protecting Those 'Doing the Dirty Work'***; and the Alliance for Responsible Mining produced a toolkit called ***Addressing Forced Labor in Artisanal and Small-scale Mining***. The ILO has a handbook, ***Safety and Health in Small-Scale Surface Mines***, and through the International Programme on the Elimination of Child Labour, it has launched the **Minors out of Mining Partnership**. The World Bank published a ***Rapid Assessment Toolkit*** regarding gender and ASM, which is the most detailed resource available on gender and ASM. Lastly, WWF supported a program entitled **ASM Pace**, which looks at ASM in ecologically sensitive and protected areas.

## PRACTITIONERS

A number of international organizations and national development agencies are involved in the ASM sector, including: the World Bank, UNEP, The World Health Organization (WHO), the United Nations Development Programme (UNDP), the United Nations Industrial Development Program (UNIDO – implementer of the Global Mercury Project), the International American Development Bank (IADB), APEC and its mining task force, and the ILO and its ongoing labour projects in ASM. Donor organizations working on ASM include: DFID, the German Society for International Cooperation, the Swiss Development Corporation, the Swiss Economic Cooperation Organisation (and its Better Gold Initiative), Global Affairs Canada (GAC – bilateral development projects), the United States Department of State (USDoS) and the United States Agency for International Development (USAID). A significant future initiative that will begin in late 2016 is the Global Environment's Facility's GOLD program (GEF–GOLD), which is aimed at engaging the financial sector to help improve ASM by providing easier access to capital.

In addition, other organizations with extensive experience in the sector include the **Artisanal Gold Council pact**, **Solidaridad**, the **Alliance for Responsible Mining**, **RCS Global** and **Estelle Levin Limited**, who retain up-to-date blogs and document libraries shaping policy around ASM.

## ASM AND LARGE-SCALE MINING COMPANIES

Several resources are available to inform interactions between large-scale mining companies and ASM. The World Bank's ***Mining Together*** offers guidance about engagement between large-scale mining companies and ASM operations. **Working Together** provides a detailed list of tools that large-scale mining companies can use in engagement with ASM operations. **IIED** hosts a number of resources that users may refer to concerning cooperation between ASM operations and large-scale mining companies. Recently the USDoS and USAID have launched a public–private partnership to bring the large-scale mining companies and other private sector stakeholders together to stimulate lasting business developments that can contribute to the improvement of the ASM sector.



## DUE DILIGENCE AND SUPPLY CHAIN INITIATIVES

As the guidance describes, due diligence initiatives play an important role in setting industry standards and shaping ASM policy. The leading standard of supply chain due diligence that is the most relevant to ASM is the **OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas and its metal-specific supplements**. This guidance sets out standards of supply chain traceability, due diligence and risk assessment. Equally, the OECD has further resources that offer advice and explanation about how to implement those standards in practice, and several initiatives meet these standards, including: the **Fairmined Standard**, the **Conflict Free Sourcing Initiative**, **iTSCi**, the **Responsible Jewellery Council Code of Practices and Chain of Custody Certification**, the **Better Sourcing Program** and the World Gold Council **Conflict-Free Gold Standard**. Two further initiatives that seek to put some of those standards into practice in the gold sector are the **Better Gold Initiative** and **Oro Verde**. **IIED** has produced resources about the scale-up of certification initiatives. Lastly, the **Kimberley Process** and associated initiatives seek to ensure the exclusion of conflict from diamond supply chains, using a customs-based assurance mechanism.

## MINING SECTOR INITIATIVES

ASM is a significant part of the mining industry, and so general initiatives about mining are also relevant to ASM management in particular. Chief among these is the **Extractive Industry Transparency Initiative**. While most of their work has concerned large-scale mining and hydrocarbons, transparency and ASM will become increasingly relevant in the future. The **Voluntary Principles on Human Rights and Security** were designed for extractive sector companies, primarily large-scale companies. However, the principles that they espouse are relevant for governments in ASM management and are referred to several times in this guidance.



**IGF**

INTERGOVERNMENTAL FORUM  
on Mining, Minerals, Metals and  
Sustainable Development