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Follow the Money

Financial Flows linked to Artisanal and Small-Scale Gold Mining



A Tool For Intervention

March 2017

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Disclaimer

The analysis, results and recommendations in this paper represent the opinion of the author(s) and are not necessarily representative of the position of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

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The GIFF Project

Recognizing the need for a greater understanding of illicit financial flows (IFFs) linked to artisanal and small-scale gold mining (ASGM) to strengthen international responses, the Global Initiative Against Transnational Organized Crime and Estelle Levin Ltd. have partnered to undertake the Gold and Illicit Financial Flows (GIFF) Project. The GIFF Project works to achieve the following:

- Illustrate in what ways and to what extent IFFs are an impediment to the formalisation of ASGM supply chains;
- Emancipate marginalised ASGM from criminality into formality;
- Increase the effectiveness of programmes focused on ASGM; and
- Help public and private sector actors limit the potential for mineral supply chains to enable financial crimes.

The GIFF Project has adopted a three-prong strategy to achieve these aims, with work consisting of:

- Raising awareness. High-level roundtables and dialogues bring together a network of stakeholders, raising awareness of IFFs linked to ASGM. Events have so far included a roundtable in Washington DC (February 2016), a dialogue on the side-lines of the OECD Forum on RESPONSIBLE MINERAL SUPPLY CHAINS (May 2016), and presenting the GIFF Project at multiple stakeholder events.
- Increasing understanding and knowledge. Roundtables and dialogues increase understanding of the issue of IFFs in the ASGM sector, as stakeholders share knowledge, lessons learned, challenges and strategies. On-going desk research and field research in Sierra Leone are supplementing this process.
- Improving stakeholder capacity. The insight and guidance amassed informs GIFF tools, including this handbook, designed to strengthen stakeholder capacity to identify and combat IFFs in order to make responsible business, good governance and sustainable development more possible.

If you apply this handbook to a real-world issue, be it in gold or other natural resources, we would love to hear what your experience has been. This allows us to monitor take-up, application and ultimately the impact of our mutual investments in the creation and dissemination of this tool. Please contact us at info@estellelevin.com or secretariat@globalinitiative.net.



Global Initiative against Transnational Organized Crime

The Global Initiative Against Transnational Organized Crime is a network of prominent law enforcement, governance and development practitioners who are dedicated to seeking new and innovative strategies and responses to organized crime. It is an independent non-profit organisation headquartered in Geneva, where the Secretariat coordinates applied research and policy work.

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Acronyms and Abbreviations

AML Anti-Money Laundering

ASGM Artisanal and Small-Scale Gold Mining

ARM Alliance for Responsible Mining

ASM Artisanal and Small-Scale Mining

ASM-PACE Artisanal and Small-Scale Mining in Protected Areas and Critical Ecosystems Project

DFID Department for International Development (United Kingdom)

DRC Democratic Republic of the Congo

Due Diligence Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and

Guidance High Risk Areas

ELN National Liberation Army (Colombia)

FAQs Frequently Asked Questions

FARC Revolutionary Armed Forces of Colombia

FATF Financial Action Task Force

GFI Global Financial Integrity

GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit

GoSL Government of Sierra Leone

ICGLR International Conference on the Great Lakes Region

IFFs Illicit Financial Flows

IGR Institute for Governance Reform

KIIs Key Informant Interviews

KYC Know Your Customer

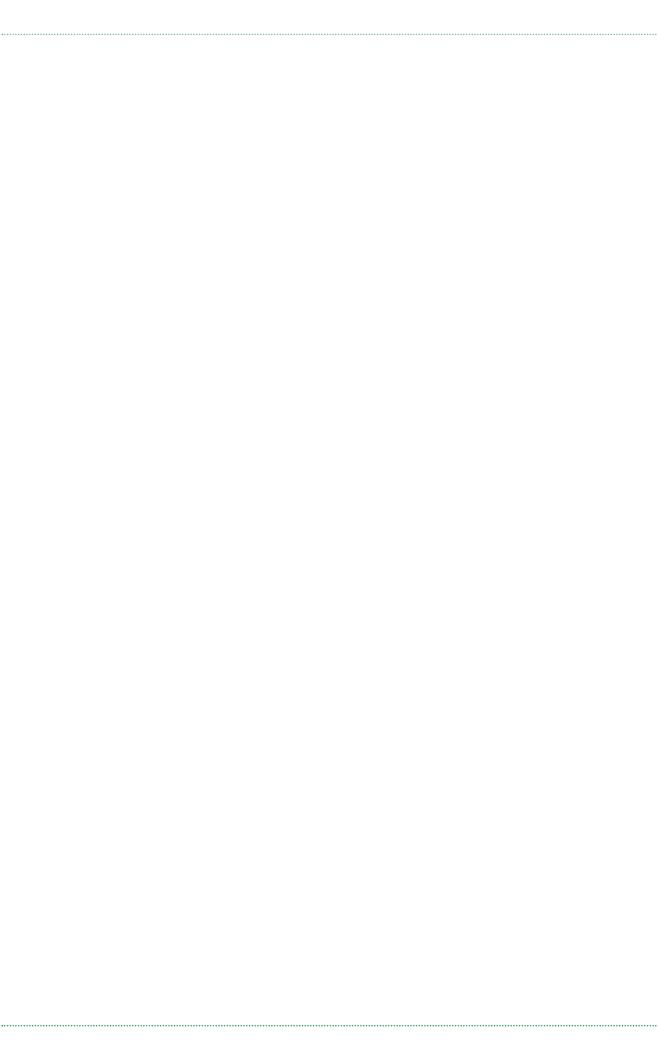
KYP Know Your Providence

LSM Large-Scale Mining

NGO Non-Governmental Organisation

OECD Organisation for Economic Co-operation and Development

PDA Personal Digital Assistant
PPP Public Private Partnerships



Introduction

This handbook is intended as a tool for due diligence and project planning by policy makers, development interventions, civil society, and downstream businesses operating in the artisanal and small-scale gold mining (ASGM) sector. The handbook will help actors to:

- increase their knowledge and understanding of financial flows, in particular illicit financial flows (IFFs)¹ linked to the ASGM sector;
- build their capacity to analyse and effectively capitalise on opportunities; and
- mitigate and respond to challenges and obstacles IFFs pose to the formalisation of the ASGM sector and other development objectives.

Our hope is that the handbook will also serve as a guidebook and resource to inform the evolving discussion around and examination of financial flows, IFFs, and ASGM. Ultimately, the toolkit should enable stakeholders to recognise the importance of financial flows and the influence of illicit activity on ASGM, and prescribe ways to address and ultimately prevent illegal activity in gold supply chains, thereby increasing the likelihood of achieving development, political, and commercial goals, and optimising the enormous opportunity that minerals offer for sustainable development.

Whilst this tool is oriented at the gold sector, it is also applicable across extractives industries with an artisanal and small-scale mining (ASM) presence, including diamonds, coloured gemstones, and other minerals.² It is hoped that the discussion of financial flows, IFFs and ASGM will also illuminate the interconnectedness across sectors and the broader issue of financing and value across all extractives.

Who this handbook is for

This handbook is designed to be used by actors seeking to intervene or engage with the ASGM sector, including development initiatives, government agencies, non-governmental organizations (NGOs), and businesses. This handbook will have utility amongst a broad group of stakeholders, including:

- **Governments** that are concerned with formalising ASGM, and/or mitigating the occurrence of white-collar crime within their borders.
- **Development Agencies** who are working to promote international development through engagement with the ASM sector.
- NGOs that are planning social or environmental development interventions in an ASGM community.

¹ Defined as 'money illegally earned, transferred or used'.

² This handbook can be adapted to mapping financial flows in other mineral sectors.

• **Businesses** that are conducting Know your Customer (KYC) or Know Your Product (KYP) on ASM provenance as part of conflict minerals due diligence, and are particularly interested in robust and impactful anti-corruption and anti-money laundering measures.

A nuanced understanding of financial flows and how they contribute to informality will empower stakeholders to channel their resources and political will to create better, more resilient, targeted policies and programmes for formalising ASGM and tackling IFFs as they relate to corruption, money laundering, and financial underdevelopment.

How to use this handbook

This is a research handbook, specifically designed for informing the development of research methodologies that examine financial flows, especially IFFs, linked to ASGM. Credible, comprehensive, and comprehensible data are desperately needed to better understand financial flows linked to ASGM. Research produced with this handbook should acknowledge, and where possible, engage with previous research and findings by building upon, validating, or even challenging previous work. The step-by-step instructions and tools provided equip the user to do the following:

- 1. Conduct a combination of desk and field research into financial flows linked to ASGM;
- 2. Carry out political and economic analysis of the data; and
- 3. Develop policy and programmatic recommendations.

This handbook is designed for application to the upstream of the gold supply chain, including the immediate pre-financing and trading stages, to the point of export (whether via smuggling or legal export).

The handbook's tools, techniques, methodologies, and pointers are designed to afford the user maximum practicality and utility in their application. They are flexible enough to be adapted to a specific context – for example, a small artisanal gold mining area in Mali – yet general enough to produce a comparative study between two vastly different contexts – for example, financial flows linked to a gold mining area in Mongolia, and one in Colombia. The handbook includes:

- A Primer on Terminology to ensure comprehension of the key issues;
- Analysis of the key issues pertaining to IFFs and ASGM, to create a solid foundation upon which additional research can be built;
- Investigation guidance: Guidance and tools to conduct robust, valid, and impactful research on financial flows linked to ASGM
- Data analysis: Guidance and tools to produce robust, valid, and impactful findings on financial flows linked to ASGM
- Guidance for shaping practical responses based on the findings of the research.

Illicit financial flows and artisanal and small-scale gold mining

ASGM provides opportunities to a broad range of actors. Some actors are continuing a traditional livelihood of their families and communities. Many others choose it as their preferred economic endeavour for a wide variety of reasons: it pays the best, it is a reliable income, or it best fits their lifestyle, amongst other reasons. At the same time, the sector includes some of the world's most vulnerable people: the poor, former combatants, orphans, displaced persons and refugees, and economic migrants. Whether it is a primary, secondary (often seasonal), or occasional (often opportunistic) economic activity, people typically mine or trade on a subsistence basis. The sector also includes business people or politicians making strategic decisions and participating in the sector for commercial or political reasons: local landowners, traditional authorities, government agents, and small business owners, many of whom rely on this sector for their own livelihoods or economic development.³



Figure 1 Reported countries with ASGM (Adapted from UNEP, 2013)

While the sector plays an important role as a livelihood option to millions of people around the world, **ASGM also presents opportunity for criminal exploitation**. While upstream ASGM activity is often best characterised as an informal livelihood activity, it is this informality that renders the sector and those involved vulnerable to exploitation, which increases the risk of illicit actors deriving illicit profits. There is a vast assortment of actors exploiting the ASGM sector, both in degree and culpability, ranging from small-time gold buyers illegally smuggling gold across borders, to designated terrorist groups directly engaging in the mining, smuggling and laundering of gold.⁴ **IFFs, defined as** 'money illegally earned, transferred or used', blinked to the ASGM sector are the product of such illicit activity.

IFFs linked to ASGM can take on many different forms. On one end of the spectrum, a trader may participate in petty, relatively benign illegal activities, while in other cases, the use of gold as a commercial tool, currency, or financial instrument can enable serious criminal activity. Figure 2 illustrates potential IFFs linked to ASGM. It illustrates how IFFs may be *generated by the sector* as a means of extracting value from it, and how *they penetrate and utilise the sector* as a means of maximising profit through it.

³ Levin,2015.

⁴ Wagner, 2016.

⁵ Global Initiative against Transnational Organized Crime, 2016.

Figure 2 IFFs linked to ASGM⁶

IFFs

Maximise profit through the sector

Money Laundering Gold Smuggling Tax Evasion

Extract value from the sector

Corruption & rent seeking by authorities Illegal payments to armed groups Forced labour through debt bondage

While the scale and frequency of transactions, depravity of actors, and impacts vary greatly, **IFFs have been identified in the vast majority of ASGM financial flows**. Furthermore, IFFs can play an instrumental role in shaping ASGM activity and flows. Due to the cyclical nature of ASGM financial flows, profits from illicit activity may be reinvested into gold operations (either to buy more gold or to finance mining operations), further perpetuating IFFs and obscuring their pathways. Moreover, **ASGM financial flows comprise a complex web of activity, materializing before gold even leaves the ground, making it difficult to identify and isolate, much less measure the impact of, IFFs.**

Particularly dangerous are ASGM IFFs utilised by actors to fund insecurity and conflict, which further undermines sustainable development. IFFs associated with ASGM have been found to enrich armed groups, which can make them a potent driver of violence, conflict and insecurity, in turn threatening human security and sustainable development. For example, organized crime and terrorist groups are deeply embedded in the Latin American gold sector, with gold profits thought to have surpassed cocaine profits.⁷ Actors exploiting the gold trade for profit can also parlay economic power into political power, which, if successful, results in 'agency capture'—control by criminal actor(s) over a government.⁸

Actors profiting from IFFs linked to ASGM often exploit vulnerable stakeholders, including mine labourers, who may have little choice but to operate in the informal economy. The lack of agency amongst mine labourers is exemplified by their lack of labour market power and access to resources, such as credit or capital and judicial protection. In other words, these stakeholders are often trapped in catch-22s: a lack of access to formal institutions (such as banks or judicial mechanisms) pushes them to the informal sector and to engage with actors who may be involved in illicit activity; simultaneously, their collusion with these same actors can disqualify them from pursuing their rights and being involved in efforts to formalise the ASGM sector. Complicating the issue is that activity and financial transactions often blur the lines between "good" and "bad"; It is entirely possible for an actor to be both the "victim" and the "perpetrator" in a supply chain, or for a financial transaction to be classed as both illegal and legitimate, as further explained in the section, 'Illicit financial flows'.

In addition to weak regulatory oversight of supply chains and the high value of gold, the pervasive informality and opacity of the sector heavily contributes to incentivising and enabling actors who exploit the sector for political or economic ends. This informality is an outcome of a potential variety of factors: bad law & fiscal policy, lack of extension services to support formalisation, poor governance, poverty, corruption, geography, and so on. Regardless of the formality of their operations, ASGM miners and traders are often supported by an informal economy due to the

Sector informality enables criminal exploitation (for example, via laundering money from illegal enterprises, such as drug cartels), as well as invites criminal exploitation (for example, government agents extorting bribes from miners).

fact that the majority of ASM occurs in underdeveloped or transitioning polities.9

⁶ For more on IFFs linked to ASGM see the Financial Action Task Force (FATF) report *Money laundering / terrorist financing risks and vulnerabilities associated with gold.*

⁷ Wagner, 2016.

⁸ See Reitano', Forthcoming.

⁹ For a definition and explanation of the 'informal economy' see the section Illicit financial flows.

Why should we work to formalise the artisanal and small-scale gold mining sector?

A broad range of stakeholders widely regard formalisation of the ASGM sector as the preferred intervention to the social challenges posed by ASGM, as opposed to eradication. Demands for formalisation come from a variety of stakeholders dedicated to a wide spectrum of goals, be it the fulfilment of human rights or the desire to optimise the mineral opportunity to the benefit of the nation-state, among others. Demands also come directly from miners and mining communities, such as in Colombia in 2014 or Peru since the 1990s.¹⁰

A wealth of research on the ASGM sector,¹¹ illicit activity and IFFs¹² has established that attempts to stamp out informal ASGM to curb IFFs are unlikely to be successful. There are a number of barriers to the eradication of ASGM. ASM offers a preferred livelihood to millions of people with limited options, as other means of support do not offer the same benefits. Moreover, security-based efforts are costly and may lead to deterioration in community relationships and human rights violations. Also, physical resettlement of ASM communities to other locations is socially disruptive and may be heavily resisted. While examples of peaceful and effective resettlement efforts exist, they are not typical.

Of greatest significance to this work, political and economic elites are often heavily invested in the informal ASM sector and may block efforts to eradicate the activity. This is due to a combination of the *inequality* between those driven into the sector by subsistence motivations versus those drawn to it by profit-making and/or political motivations. If these elites do not see benefit in formalisation, they are likely to resist formalisation attempts. Without adequate support, lower-level actors (who make up the vast majority of ASGM participants) are unable to engage with formalisation efforts due to a reliance on more powerful actors who are more likely to be engaged in illicit activity.

Evidence from Democratic Republic of the Congo (DRC) indicates that when President Kabila forced a ban on mining in the East of the country in 2010, artisanally mined gold continued to fund armed commanders and illegal armed groups nimbly shifted and diversified the economic sectors they prioritized for exploitation to recover economic losses in other mineral sectors; increasing their investments in illegal wildlife trade, charcoal, and trade in agricultural products.¹³

In turn, efforts to eliminate ASGM are far more likely to negatively impact marginalised populations than disempower criminal actors. Eradication need not be explicit policy to be counterproductive. In many cases, the creation or maintenance of laws that keep ASGM in a state of informality, such as insurmountable barriers to professionalization, and/or a lack of support for professionalization, are equally counterproductive.

Interventions which aim to formalise the sector are recommended. Formalisation of the ASGM sector

can be fundamental to the realisation of a host of objectives, including: the fair and efficient functioning of the justice system; government mobilization of natural resource wealth for investment in health, education, justice, security, and infrastructure; environmental protection and promotion (including issues relating to mercury usage by miners¹⁴); protection of vulnerable groups; and empowerment of miners to claim their rights, progressively professionalise and contribute to economic growth.¹⁵ A formalised mining sector is also more likely to be effective in reducing criminal exploitation of the sector. Efforts that seek to engage with the sector and draw it into the formal economy rather than eradicate ASGM, are more likely to see success and reduce negative impacts on local populations.

- 10 Echavarria, 2014.
- 11 See ASM-PACE publications at www.asm-pace.org.
- 12 See OECD & AfDB, forthcoming.
- 13 Bafilemba, Mueller, & Lezhnev, 2014.
- 14 UNEP, 2012.
- 15 For example: UNEP, 2011; SDC, 2011; Echavarria, 2014.

How do illicit financial flows impede the formalisation of the artisanal and small-scale gold mining sector?

Analysis of financial flows exemplifies how IFFs perpetuate and exacerbate informality in the ASGM sector. The gold sector is distinguished amongst mineral sectors by the diversity of economic forms that gold can take for its stakeholders, including:

- **Gold as a commercial tool.** Gold can provide a secure method to manage currency risks and costs associated with import-export businesses, as it eliminates the needs for currency exchange at borders. In such cases, gold is used as a financial tool to support alternative or additional businesses, such as a fabric shops or restaurants.
- **Gold as currency.** A day of low-skilled labour in a gold mine can be exchanged for a wage paid in gold which can be used to pay for either a daily need (e.g. cigarettes or food) or for a seasonal need (e.g. school fees). In such cases, gold is equivalent to cash.
- **Gold as a financial instrument:** In lieu of reliable banking services, and in cases of government fiscal mismanagement, gold can retain value better than cash, allowing a businessperson to save and accumulate transportable capital while guarding against inflation and/or currency declines. For example, gold can be converted into jewellery and used as savings (for example, for a dowry, or to make a large capital purchase like a home).

All of the above uses of gold are correlated with underdeveloped, inaccessible, or non-existent formal financial sectors. When faced with overwhelming barriers to accessing formal financing options, those who want to engage in ASGM are forced to seek out and utilise informal financing options. This can include relying on financiers who are engaged in IFFs. In turn, before a shovel hits the dirt an entire ASGM operation is beholden to informal financing, making it vulnerable to exploitation and more likely to contribute to IFFs.

As such, downstream actors (i.e. investors and buyers who are more likely to be engaging in illicit activity) wield a great deal of influence over upstream activity at the mine site and over local buyers, shaping financial flows and supply chains. While legitimate business actors may be willing to formalise, actors profiting from IFFs will most likely resist if they see the change as a threat to their income. Consequently, actors whose profits depend on IFFS can prove to be powerful inhibitors to formalisation efforts.

Rationale for this handbook

Without a nuanced understanding of financial flows, especially IFFs, attempts to formalise the ASGM sector risk being ineffective and can contribute to informality. IFFs can profit criminal actors, enable other forms of illicit activity and undermine rule of law and development. However, at the same time, they can also form the crux of an informal sector that plays an important role in poverty alleviation and economic development, especially in rural communities.

Any attempt to formalise the sector must recognise the intrinsically intertwined nature of financial flows if it hopes to be successful without further marginalizing vulnerable populations. For example, by setting unrealistic regulations for miners to comply with in order to obtain a fully legal status, the sector is ripe for government corruption, further stripping off value and contributing to the status quo of informality, thereby impeding vulnerable people from building their individual and household resilience by means other than through patronage.

This toolkit will enable stakeholders to better understand financial flows linked to the ASGM sector, identify IFFs, and the ways in which they may pose a barrier to formalisation efforts. Greater effort to unpack financial flows linked to ASGM will allow revelation of both opportunities and challenges to ASGM formalisation.

¹⁶ Gold's high value to weight ratio is one of many factors that make a desirable financial instrument. In countries experiencing hyperinflation this is particularly pertinent.

- On the positive side, at every stage of ASGM gold production, value is created and disseminated to local stake-holders, such as payment to a woman washing gold, or as interest paid to a creditor. These financial flows provide vital financial resources, whether to fund mining activities or to support other businesses. By mapping and assessing financial flows, it is possible to identify how and to what degree the ASGM sector is positively contributing to the economy, development and the fulfilment of human rights (for example, through investment in infrastructure, improved housing and health, etc.), for not only local mining communities, but all along the gold supply chain. Formalisation interventions should seek to optimise these impacts.
- On the negative side, while IFFs can be identified in many, if not all, ASGM sectors, little is known about their scale or the degree to which they perpetuate informality and criminality. Formalisation efforts should seek to mitigate these impacts or at least convert the illicit into the formal.

Although ASGM formalisation efforts have identified a wide range of priorities and created tools, approaches and policies to realise their objectives,¹⁷ one missing tool from this arsenal is a financial lens through which to map and assess the relationship between IFFs and the formalisation of ASM. Analyses of the sector's social, political and environmental impacts are more common than attention given to its commercial functions or economic impacts.¹⁸ **This handbook is designed to satisfy this need, empowering stakeholders to investigate, map and analyse financial flows linked to the ASGM sector.**

The mandate to "follow the money" is the necessary first step in identifying actors profiting from IFFs, understanding the enablers driving financial flows, and generating effective responses. Mapping is of course only the first step: financial flows, once mapped, must be evaluated to identify whether transactions are informal and/or legitimate (i.e. positive for society), or illicit and nefariously criminal (negative for society). Analysis will also enable stakeholders to assess to what degree IFFs are driving or perpetuating informality and/or illicit activity, the level of

The mandate to "follow the money" is the necessary first step in identifying actors profiting from IFFs, understanding the enablers driving financial flows, and generating effective responses.

control individual actors or groups have over financial flows and gold supply chains, and impacts on a wider range of actors. In turn, stakeholders will be better positioned to develop, advocate for and implement evidence-based interventions and responses that are more likely to deliver the formalisation of the sector.

¹⁷ Examples include encouraging miners to change their behaviour via the application of various incentives; attempting to create a legal or legislative framework in which miners can operate; formalising what's already there in terms of mining practice; or utilizing technological fixes to induce formalisation, for example simple machines or techniques that can increase production in exchange for concessions on environmentally damaging techniques or resistance to obtain proper paperwork or licenses. For a robust literature review of ASM formalization approaches, consider the work of Felix Hruschka; (Hruschka, TBB, n.d.)

¹⁸ And often where studied, under-reported. The GIFF Project welcomes the work presently being led by Alliance for Responsible Mining (ARM) and Pact in East Africa for the UK Department for International Development (DFID) on 'Understanding the Economic Contribution of Small-scale Mining in East Africa', as well as the creation of a thematic group in the Sustainable Artisanal Mining projects International Knowledge Hub on 'Economic Strengthening through ASM'.

Sierra Leone Case Study

In developing this handbook, the GIFF Project undertook an investigation and developed a case study examining and mapping financial flows linked to Sierra Leone's ASGM sector from July to October 2016. The decision to undertake field research was informed by multiple high-level dialogues which revealed that not enough primary research had been done on the topic to adequately inform the development of the handbook alone. As such, a research methodology was developed and trialled in Sierra Leone in partnership with the local Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH office and the Institute for Governance Reform (IGR), a local partner. The investigation, in particular lessons learned, are shared throughout the handbook as an illustration of how to investigate and analyse financial flows linked to ASGM.

The case study can be found at: http://globalinitiative.net/iffs-and-asgm-in-sierra-leone/ and www.estellelevin.com.

Key Issues

This section will elaborate on key issues that must be grasped in order to understand how to interpret financial flows linked to ASGM. Specifically, these are:

- Untangling the terminology: formal, informal and illicit ASGM: It is impossible to cast broad definitions over ASGM around the world due to the complexity and wide variety of actors and operations engaged in ASGM. Efforts to classify ASGM operations are further hampered by laws and regulations that are often unclear or unrealistic for AGM operators to abide by. As such, terminology such as 'formal', 'informal', and 'illicit' have been adopted by practitioners to differentiate between different forms of small mining operations. This section will define relevant definitions and explain their importance as well as the need for greater nuance.
- Illicit financial flows: The concept of IFFs is relatively complex, further complicated by a lack of international consensus on terminology. This section defines and explains IFFs, in particular how financial flows linked to ASGM can qualify as IFFs. It also explains why unique characteristics of the gold sector make it especially attractive to criminal elements. Importantly, the section also highlights that while ASGM is often linked to IFFs, much of the sector is best characterised as informal, and development responses are appropriate.

While the abbreviation ASGM is used throughout this handbook, it is important to note that it does not necessarily refer only to the mining sector itself; it is important to consider ASGM as a whole supply chain with a variety of different actors, including: ASGM supporters, traders, exporters, investors, diggers, washers, assayers, downstream companies, refiners and the miners themselves. It is also important to note that these actors can be a mix of formal, informal, or illicit. As such, all actors along the supply chain require enabling frameworks nuanced to their role and capacity to enable the classification of an ASGM supply chain as formal.

Untangling the terminology: formal, informal, and illicit ASGM¹⁹

Key Takeaways

- Distinguishing between 'legal' and 'illegal' ASM is not simple. This section unpacks the different forms and shades of '(il)legality' and '(in)formality' that exist in the ASGM sector and the complexity around assessing the status of mining and trading operations.
- Being formal and operating formally are two different things. To be fully formal, an entity must be licensed (be formal) and run its business in line with the law (operate formally).
- Most ASGM around the world can be categorised as informal. Informal ASGM takes place outside of
 the legal framework. Within the informal sector, there are two sub-classifications: mining that has a
 high degree of legitimacy at the local level (technically illegal with high legitimacy); and mining that is
 making a demonstrable good faith effort towards formalisation but has not yet achieved it (in progress).
- According to the OECD, an ASM activity is considered illicit when: "It contributes to conflict and serious
 abuses associated with the extraction, transport, or trade of minerals..." ASGM that is actively violating
 human rights, inconsistent with national and international law, and possibly funding organized crime
 and/or terrorism cannot be condoned, and steps must be taken to halt its extraction and trade.

Distinguishing between 'legal' and 'illegal' ASM is not simple, since the sub-sector typically operates in jurisdictions where the 'law' is not fully aligned, enforced, or feasibly complied with. For this reason, we have dedicated some explanation as to the different forms and shades of '(il)legality' and '(in)formality' that exist in the sector. To start, it is helpful to unpack the reasons for the complexity around assessing the status of a mining and trading operation in the ASGM sector.

Using the Organization for Economic Cooperation and Development (OECD) framework, *FAQs on Sourcing Gold from Artisanal and Small-scale Miners*, ²⁰ is useful to classify ASGM activity taking place in a legally vacuous or ambiguous context as 'informal', unless it qualifies as illicit (see below). The OECD framework can be used to untangle the terminology around ASGM. It was developed to help businesses to constructively engage with ASGM, and so contribute to the development of the sector. This framework is outlined below, followed by a discussion of how each term can be applied to investigations of IFFs around ASGM.

¹⁹ Guidance, descriptions, and clarification on these terms and their distinctions draw from the work of Felix Hruschka, specifically his presentation at the GIFF Project International Symposium on "Defining legal, illegal, ilicit, and informal"; a condensed version of these remarks can be found here: http://www.estellelevin.com/mistaken-identity/, as well as Mr. Hruschka's 2013 blog for ELL's ASM-Pace project entitled "illegal Mining'...a factual or conceptual threat?', available here.

²⁰ OECD, 2016.

First, there are different ways in which ASGM can be 'legal'. A country with no legislation addressing ASGM (either allowing or prohibiting it) does not make ASGM 'illegal' by default. In some contexts, this would be called 'a-legal' or 'extra-legal'. In other contexts, if there is no legislative prohibition, ASGM is technically allowed.²¹ An example is Cambodia, which has no legal framework for ASGM although the activity is prevalent.²² Less extreme cases would also fall under this category. For example, in places where laws or codes – such as a national law versus a local law, or a minerals law versus an environmental law, – are unaligned, the ASGM activity could be simultaneously legal and illegal. In other scenarios, the contradiction is not between one body of law (e.g. statutory) but between different bodies of law (e.g. statutory vs. customary law) or rights frameworks (e.g., mineral rights, property rights, usufruct rights, vs. human rights).

Second, being formal and operating formally are two different things. To be fully formal, an entity must be licensed (be formal) and run its business in line with the law (operate formally). This distinction is exploited by some actors who intentionally straddle the legal and illegal spaces, funnelling illegally mined mineral into legal supply chains, or the transformation of dirty cash into 'clean' gold. In other situations, it is just an unfortunate reality that can create vulnerabilities to abuse by unscrupulous authorities.

Third, being formal or operating formally may be practically or commercially infeasible for artisanal and small-scale miners or traders. Various studies have presented the reasons for this along with potential strategies for addressing it;²³ some select factors that may thwart or discourage formalisation are shown in Figure 3.

²¹ This is not always the case. It would be a manifestation of a country adopting a specific political and governmental philosophy that "Everything which is not forbidden is allowed." This approach underpins the rule of law in the UK, and many of its former colonies, including the US. It stands in contrast to the philosophy: Everything which is not allowed is forbidden, sometimes ascribed to German political thought.

²² See further: UNEP, 2011

²³ Hinton & Levin, 2010; Barreto, et al., 2012; Hruschka, Comparative Analysis of ASM Strategies in four countries of Africa, Asia and Latin America, 2015. See also Kimberley Process (2012) and USAID, 2013b.

The Better Business Pathway to Sustainable ASM²⁴

Status	Illicit	Informal (Legitimate)	Formal	Certified 'sustainable'
What is it?	The unacceptable problem. Contributes to serious abuses associated with the extraction, transport, or trade of minerals as defined in Annex II of the Due Diligence Guidance.	The workable reality. Although not fully consistent with all applicable laws, in most of the cases it is not associated with the most severe forms of human rights violations and actors show a genuine demonstrable commitment to move towards being formal.	The market expectation. Actors are enabled by laws, infrastructure, policies, and their own volition to conduct legitimate commercial activities.	The aspirational goal Actors operate for- mally and are certified against a sustainability standard, such as Fair- trade or Fairmined.
Scenario	Criminal actors launder money through the sector. Corrupt officials or armed groups extort money from the sector. Mining in a protected area violating national law. Those in control of a mine site (such as an abusive state or nonstate armed group or criminal group) engage in serious abuses, as defined by the Due Diligence.	Much ASM around the world operates outside national legal frameworks but in accordance with local customs on management of land and natural resources. Serious social and environmental abuses are typical of this sector, though typically not the worst human rights abuses.	Compliant with national laws, and requirements of minerals initiatives, such as the Regional Certification Mechanism of the ICGLR. Few artisanal mines are within this category.	Fairtrade and Fairmined have certified mines around the world, but these remain a tiny proportion of all ASM and a niche product for refineries. It is inconceivable that at one point in time all ASM will be done this way owing to the realities of poor governance, inequality, economic and political turbulence and the rise in natural and human-made disasters, all of which are push factors into ASM
Relationship to risk man- agement	Others' vulnerabilities are opportunities to be exploited.	Risk management is not standard practice.	Risk management is standard practice on the worst issues or at least those covered by national and local law.	Risk management is standard practice, beyond legal compliance. Positive impact optimisation is a core feature.
	>>>>>>	>>> The Formalisation Pa		sation is a core realarc.

²⁴ The 'Better Business Pathway to Sustainable ASM' is an Estelle Levin Ltd framework that is utilised in a number of different ways. For further information see: www.estellelevin.com.

Figure 3 A Selection of Barriers to Formalisation



Formal ASGM

The OECD FAQs for Sourcing Gold from Artisanal and Small-Scale Miners²⁵ defines ASM activity as formal when:

- It is consistent with applicable national laws; and
- It demonstrates good faith efforts to operate within the legal framework; and
- It engages in opportunities for formalisation.²⁶

For ASGM to be formal, or 'legal', laws and regulations must exist which are possible for the actors therein to comply with. In the case of Mongolia, in 2010 the law was changed from a universal prohibition against ASGM to a more enabling approach to sectoral formalisation.²⁷ Mongolian miners are being organised into partnerships (mining entity), NGOs (mining association of partnerships) and the ASM Federation (national federation of associations). They are increasingly empowered and able to engage with initiatives.²⁸ Importantly, the Government began by acknowledging that the law would never be followed unless ASGM stakeholders were supported and empowered to follow it. The Government embraced its responsibility to make compliance with the law possible. For the ASGM sector, which in Mongolia had had a severely limited capacity, this has included understanding how and whether ASGM stakeholders can comply with the legal expectations, and enabling them to do so (although there is still much work to be done, as will be explored further below).²⁹

Informal ASGM

Formality is, in the majority of cases, an aspirational goal. In reality, most ASGM falls into the OECD category of informal, as it:

Takes place outside of the legal framework but is at the very least tolerated by many governments. Legislation varies across producer countries but artisanal miners generally should have some form of registration and/or identification and should ideally be organised in some form of legal entity (this could be a cooperative or ASM Operator for example).³⁰

Most ASGM around the world can be categorised as informal. Two additional categories are: mining which has a high degree of legitimacy at the local level (technically illegal with high legitimacy); and mining which is making a demonstrable good faith effort towards formalisation but has not yet achieved it (in progress). These definitions are explored below.

It is important to note, there can be negative impacts due to informal ASGM activity, including social and environmental abuses which are typical of the sector, though typically not the worst human rights abuses, as risk management is not standard practice. It is important to engage with informal ASGM and pursue formalisation efforts to introduce risk management in order to reduce these negative impacts.

Informal (Technically illegal with High Legitimacy)

ASGM that actively violates a law or prohibition can still be complex to classify. For example, if ASGM is performed as a traditional activity and then criminalised by a new law, the affected miners would be classified as informal, at least for a period of time. Such legislative changes can be a major cause of ASGM-related conflicts, particularly in

- 25 OECD, 2016. p. 6.
- 26 OECD, 2016., p. 6.
- 27 For more information see Sustainable Artisanal Mining Project at: sam.mn
- 28 SDC, 2014
- 29 For more information see Sustainable Artisanal Mining Project at: sam.mn
- 30 OECD, 2016, p. 6.

newly gazetted protected areas and national parks, which cannot have mining within their borders. The Artisanal and Small-Scale Mining in Protected Areas and Critical Ecosystems Project (ASM-PACE)³¹ catalogues several examples,³² including in Sapo National Park in Liberia.³³ Other challenging contexts include when a mineral deposit is discovered by artisanal miners, but rights to access it are secured by a large-scale mining (LSM) operation, which then attempts to displace the newly 'trespassing' ASM. USAID has published a robust introduction to the issue of disputed land and tenure rights for ASM.³⁴

Conflicting legal frameworks also fall under this category. A miner may be in full compliance with a robust local operating framework, including fees and permissions to their local traditional leaders, landowners or other land-users. Yet if they are simultaneously in violation of national law/s, they are left in a difficult, informal limbo. This can make miners extremely vulnerable to extortion by a variety of actors who seek to fine them on the basis of the miners' varying degrees of (il)legitimacy. This is further complicated when miners may not have any knowledge of, or the ability to comply with, national or regional regulations.³⁵

Informal (In Progress)

Progressive legal frameworks are often aspirational and may not take into account what can be achieved by miners within a reasonable timeframe, if at all. Even in countries like Mongolia, which has created a more progressive and enabling framework bolstered by significant public investment, only 8% of ASGM has been formalised.³⁶ As is emphasised by the GIFF Project, IFFs are thought to contribute to this low formalisation rate. It is useful here to consider the OECD's supplement on gold in the *Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High Risk Areas* (Due Diligence Guidance). It states that in cases in which the applicable legal framework is not enforced or immediately attainable, or in the absence of such a framework, assessments of the legitimacy of ASM operations should consider the following³⁷:

- The good faith efforts of ASM actors and enterprises (whether miners, traders, assayers, exporters, etc.) to operate within the applicable legal framework (where it exists); and
- Their engagement in opportunities for formalisation as they become available.

This approach advocates bearing in mind that in most cases, ASM actors will need support to build their technical and financial capacity, and their confidence in the government, in order to reach compliance.³⁸ The principle of 'legitimacy' is important in ASGM, as most activity takes place in a context where either the applicable legal framework is not enforced, or there is an absence of such a framework.

Illicit ASGM

Conversely, according to the OECD, ASM is considered illicit when:

"It contributes to conflict and serious abuses associated with the extraction, transport, or trade of minerals..."³⁹

- 31 ELL 2016. http://www.asm-pace.org/
- 32 Weinberg et al. 2011. http://www.abcg.org/action/document/download?document_id=258
- 33 ELL 2012. http://www.asm-pace.org/projects/liberia-case-study.html
- 34 USAID, 2013.
- 35 USAID, 2013.
- Levin & Singo, 2016. Continuing barriers to formalization in Mongolia include lack of decentralized assay, ongoing criminalization of the use of mercury, lack of access to land by ASM, fiscal complexity as a disincentive to enforcement. Levin, E. (2015). Sustainable Artisanal Mining Project.
- 37 OECD, 2012.
- 38 OECD, 2013.
- 39 OECD, 2013.

According to the OECD, conflict and serious abuses are:

- i) Any forms of torture, cruel, inhuman and degrading treatment;
- ii) Any forms of forced or compulsory labour, which means work or service which is exacted from any person under the menace of penalty and for which said person has not offered himself voluntarily;
- iii) The worst forms of child labour;
- iv) Other gross human rights violations and abuses such as widespread sexual violence; or
- v) War crimes or other serious violations of international humanitarian law, crimes against humanity or genocide"40

The OECD's definition thus establishes a high bar for the classification of ASGM as 'illicit'. ASGM actors are not illicit if they fail to conform to relevant domestic laws; illicit ASGM means that actors are contributing to or enabling specific nefarious activities.

It is important to note that the OECD's definition of 'illicit' mining —that which contributes to conflict and serious abuses associated with the extraction, transport, or trade of minerals — privileges human rights over mineral, property and environmental rights. However, mineral, property, and environmental rights cannot be excluded from the narrative; they are intertwined with one another, along with human rights. A formalisation process should acknowledge the full spectrum of rights and work to progress the gold sector's workable reality (where these rights are not fully respected) into alignment with the formal gold sector's aspirational goal (where these rights are respected).

ASGM actors that are violating mineral, property and/or environmental rights must be engaged with (and their activities can be tolerated) in order to support their progressive reformation. This approach is vital to giving the sector the time it needs to formalise. However, ASGM that is actively violating human rights (based on the OECD definition) cannot be condoned or enabled. ASGM that has strong linkages to violence, human rights abuses, conflict, sexual exploitation, and possibly terrorism⁴¹ cannot be formalised, and steps must be taken to halt its extraction and trade. The tools outlined in this handbook can be used to shed light on the financial flows surrounding such supply chain activities, helping to illuminate methods that could successfully shut them down.

A distinction must also be made between two groups of ASGM: those who focus on self-employment, income generation, and survival, who could benefit from formalisation, and ASGM that uses torture, slavery, or the worst forms of child labour in their operations. The latter should be classified as "illicit"—a term that should be applied to the actors and the actions themselves, rather than the minerals or the industry. We also appeal to common sense, noting that both types of ASGM may be co-located in a mining community, and to differing degrees and in different ways between communities.

If an actor is contributing to these human rights violations, for example buying or refining gold supplied by a human rights violator, they too are complicit in these abuses. Furthermore, ignorance of complicity in human rights abuses does not imply innocence. The expectation for a business to not contribute to human rights abuses is outlined in normative documents such as the OECD Guidelines for Multi-National *Corporations*,⁴² international conventions,⁴³ and international and national laws.⁴⁴ Due diligence, an "ongoing, proactive and reactive process through which companies can ensure they are respecting human rights and do not contribute to conflict",⁴⁵ is increasingly mandated through legislation such as the United States' Dodd-Frank Act, Section 1502 and the pending European Union Conflict Minerals Directive.

⁴⁰ OECD, 2013.

⁴¹ Garrett, Levin, & Mitchell, 2008

⁴² OECD, 2011.

⁴³ United Nations General Assembly, 1948.

⁴⁴ See further: French & Stephens, ILA Study Group on Due Diligence in International Law: First Report, 2014.

⁴⁵ OECD, 2013, p. 13.

Illicit financial flows

Key Takeaways

- Financial flows linked to ASGM often comprise a complex web of legitimate, suspect and illicit financial flows;
- The broad definition of IFFs should not be translated into policy responses that characterise all ASGM actors as criminals. While ASGM communities are likely to be linked in some way to IFFs, they are often better characterised as an informal economy and treated as such;
- Although ASGM communities should not be demonized, the costs and harms of IFFs linked to ASGM should not be ignored. The sector's informality is exploited by predatory actors, who often perpetuate and/or increase the informal nature of the sector, and the associated harms; and
- ASGM and gold itself have a number of unique characteristics which make ASGM, gold smuggling, and other related activities very alluring to criminal actors.

Defining and identifying IFFs

IFFs, in their broadest sense, are defined as "value illegally earned, transferred or used". In practice, money equates to many financial instruments and commodities which confer value, including gold. This is the definition of IFFs used throughout this handbook. The definition of IFFs is intentionally broad in order to encompass a wide range of financial flows.

There are other definitions and methodologies to measure IFFs in use. For example, Global Financial Integrity (GFI) defines IFFs as 'illegal movements of money or capital from one country to another' and illicit flows as funds 'illegally earned, transferred, and/or utilised'. The GFI methodology to measure IFFs focuses on trade misinvoicing. While a valuable tool to examining IFFs at the macroeconomic level, the GFI definition and methodology is unlikely to contribute to a nuanced understanding of IFFs linked to ASGM and their impacts. First, GFI's definition, although similar to that employed here, neglects to account for domestic IFFs. In addition, as discussed in further detail below, gold is relatively easy to smuggle across borders, resulting in clandestine IFFs which can cross the globe before being captured by large-scale, trade data.

Without taking a broad, holistic approach, while in parallel appreciating the importance of domestic and microeconomic flows, it is impossible to fully capture, analyse and develop appropriate responses to IFFs linked to ASGM.

⁴⁶ Global Initiative against Transnational Organized Crime, 2016

⁴⁷ GFI, n.d.

⁴⁸ GFI, n.d.

Figure 4 Identifying IFFs in criminal economies

Licit Trade	Illicit Trade	
Licit Financial Flows	Illicit Financial Flows (IFFs)	Legal Goods (i.e. gold, cigarettes, etc.)
Illicit Financial Flows (IFFs)	Illicit Financial Flows (IFFs)	Illegal Goods (i.e. illegal narctotics - cocaine, heroin, etc.

IFFs are closely linked to **criminal economies.** This term refers to trade transactions that entail a component of illegality. This illegality may be how the goods were sourced or produced, how they were traded, and/or if they avoided taxation. In addition to illegal goods (such as illegal narcotics – cocaine, methamphetamines, opiates, etc.), this definition also encompasses legal goods that violate regulations during circulation (for example, via tax avoidance).⁴⁹ In relation to ASGM, gold and related transactions fall within the criminal economy when the people involved with their extraction, trade, financing, and/or export engage in illicit activity at some point in the commercial chain.

However, when identifying and measuring the scale and impact of IFFs linked to ASGM a strict application of the IFFs and criminal economies tests may not be appropriate. In practice, it can be very difficult to make the distinction and determine if an activity or financial flow is illicit or informal. This is particularly difficult in states or regions with an expansive informal economy, where many people in ASGM regions generate their livelihoods. Oftentimes the act of gold mining or the local trade in gold is best characterised as an informal activity or financial flow. However, financial flows directly linked to illicit activity, such as smuggling, corruption, or money laundering are classed as IFFs.

When assessing financial flows, the legitimacy, as well as the legality, of financial flows should be considered. Similar to the importance of considering legitimacy in ASGM, as discussed in the above section, the principle of 'legitimacy' is important to IFFs linked to ASGM, as most activity takes place in a context where the applicable legal framework is not enforced, or there is an absence of such a framework. Beyond the OECD definition of legitimacy, 'legitimacy' is understood to be social acceptability based on the norms, values, and beliefs of large groups in society. For example, a flow may be considered legitimate by local populations, yet violates the law. For example, it may be socially acceptable to take gold across the border without declaring it or paying tax. While considered legitimate by large groups of society, the activity and financial flow directly contravene a law that is being enforced in most nations. Although considering 'legitimacy' may complicate analysis, it enables a more nuanced understanding of financial flows and the impacts of IFFs, which in turns helps actors make better decisions on how to mitigate risks associated with these flows and impacts.

As such, when assessing whether a flow qualifies as an IFF and its impact, it is important to consider whether there is an applicable legal framework, if legislation and regulations are being enforced, the burden on or ability of citizens to comply with the law, and the magnitude of the offense if an individual does not comply with the law. In many cases, it is expected you will find the majority of the sector and financial flows to be informal rather than illicit.

⁴⁹ Reitano, forthcoming.

Impact of IFFs

Policy makers typically get caught in trying to measure the scale or value of IFFs rather than their impacts. However, IFF measures that focus solely on monetary value often fail to capture the extensive and multi-dimensional nature of harms that are derived from IFFs. They give disproportionate importance to the highest value flows without recognising other types of damaging impacts, including human rights abuses and environmental harms. Assessing the impact of IFFs is essential in the context of ASGM due to the significant role the sector plays in poverty alleviation and livelihoods and the complexity of linked financial flows. Aggressive interventions to change ASGM practices or prevent them altogether will have considerable impacts on the resilience and sustainability of communities, increasing their vulnerability. These distinctions are important for informing policy and programme responses to IFFs.⁵⁰

IFFs have the potential to undermine development in a multitude of ways. IFFs and their associated criminal economies are often underpinned and sustained by violence, reducing physical security. Of greater detriment, IFFs associated with ASGM also enrich armed groups in some regions, making them a potent driver of violence, conflict and insecurity. At the same time, those profiting from IFFs can fuel the unchecked exploitation of natural resources, which can result in irreparable damage to the environment and the livelihoods that depend on them, exacerbating long-term fragility.⁵¹

In addition, IFFs and criminality undermine the rule of law. Subsistence-level activities taking place in an informal economy, such as ASGM, are more susceptible to predatory behaviour from opportunistic authority figures and criminal groups seeking to capture profits and to extort actors. Those engaged in criminal economies may be able to parlay profits from IFFs into political power, which can result in 'agency capture'—control by criminal actor/s over the government. These actors can act with impunity, as they will not be held to account by government agencies, including the judicial system. The negative impacts of this can be profound, benefitting a minority (corrupt politicians, criminals) to the disadvantage of the majority and undermining sustainable development.⁵²

Rule of law may also be weakened when actors profiting from IFFs provide service delivery to local populations. A state's ability to provide service delivery is essential to a strong foundation of authority and legitimacy. Criminal actors may provide service delivery to protect IFFs or to create conditions which allow them to tax local flows, operations and communities. It may also be a strategy to build trust and acquire legitimacy with local populations, which can later be leveraged to win political office or undermine the state. Building legitimacy with local populations can be important when the income stream relies on a labour-intensive activity, thereby requiring the engagement and buy-in of the local population to continue.⁵³ Due to the remote location of most ASGM activities, which limits many governments' abilities to provide service delivery to local populations, as well as the labour-intensive nature of the work, it is not unforeseeable for actors profiting from IFFs linked to ASGM to provide service delivery (which can include the provision of security and livelihoods). Such action challenges state authority and legitimacy, handicapping long-term development aims.

Another important factor to consider in determining the impact of IFFs is where the IFF is earned or invested. When IFFs generate income locally, they grow the economy as a whole and create livelihood opportunities. If sustainable, these livelihood opportunities attract people from across the region and accrue local legitimacy. IFFs linked to ASGM often fall squarely within this category, fuelling or shaping financial flows which generate a great deal of income for local communities (albeit migrants in many cases). Where IFFs generate local income, they warrant the protection of those to whom the income accrues. Furthermore, IFFs play into local power hierarchies, thereby resourcing and strengthening those that control the flow. In the case of ASGM, this means actors who profit

- 50 Reitano, forthcoming.
- 51 Reitano, forthcoming.
- 52 Reitano, forthcoming.
- 53 Reitano & Hunter, 2016.

directly from IFFs and the communities they hold sway over are likely to attempt to defend against efforts made to restrict their incomes.⁵⁴

Assessments of harm will depend on perspective. Harms are realised differently depending on the stakeholders: upstream, midstream and downstream; individual, community, national or international level; and there may be differences based on demographics, gender and specific vulnerable groups. The nature of harm is subjective and there are no universal standards that can be applied. Thus, examining the impact and prioritising the question of harm is an exercise that needs to be shared with those experiencing it, in particular the most vulnerable stakeholders, with a view to enhancing their development prospects. Without a more granular analysis specific to the context and respondent, it is not possible to argue that one type of harm is more important, dangerous or urgent than another.⁵⁵

However in some cases, IFFs may deliver positive short-term impacts, such as providing livelihoods in a region with few alternatives, concealing long-term negative impacts. These more enduring impacts can be incredibly difficult to reverse and can have detrimental implications for local populations, governance, and the environment. For this reason, in addition to soliciting the input of local stakeholders, it is necessary to assess a number of development objectives (physical, societal, economic, environmental and structural/governance) and examine both immediate and long-term impacts of IFFs. In the case of ASGM, analysis ought not only to look at IFFs themselves, but also examine how they may perpetuate the informality of the sector and the lasting impacts of such informality.

Allure of gold to criminal actors

While both legal and illegal goods are susceptible to exploitation by illicit actors, gold possesses a number of inherent characteristics that make it especially appealing for criminal exploitation. Notably, this is true for all gold – including that which is derived from LSM and scrap. However, the fact the ASGM sector occupies a murky spot in the economy, often caught between the legal and illegal sector, makes it a relatively low-risk undertaking while delivering windfall profits. Compared to other enterprises, such as drug production and smuggling, illicit gold mining and gold smuggling are both easy to blend into the legal economy and carry far lighter sentences if detected. The fact that it has this alluring characteristic means that criminal networks and groups tend to exploit mining operations (collecting mining 'taxes' or other forms of payment) or capture all control of mining operations in pursuit of the benefits they can accrue.

A Financial Action Task Force (FATF) report describes a situation repeatedly seen in different regions around the world: A narco-terrorist group takes control of a territory where a gold mine is in production. This narco-terrorist group uses the mine illegally where part of the gold from the mine is sold to a legal business and the transaction is paid in cash. The cash is then used to buy equipment, munitions, medicines, and other supplies needed to continue with their terrorist activities. The remaining gold is safely kept for future transactions.⁵⁷

Smuggling of gold occupies a unique position in the gold supply chain, as it can serve the dual purpose of generating profits and moving funds. Like the mining of gold, terrorist groups may not engage in smuggling themselves, but rather tax the illicit flow. Gold smuggling can be very profitable when there is a high demand for gold and legal imports are heavily taxed. Groups that have been known to engage in gold smuggling, include al-Qaeda⁵⁸, FARC,⁵⁹ the Liberation Tigers of Tamil Eelam (LTTE), and Hezbollah.⁶⁰

⁵⁴ Reitano, forthcoming.

⁵⁵ Reitano, forthcoming. For more on how IFFs, and organized crime more broadly, threaten sustainable development and how to see Global Initiative against Transnational Organized Crime (2015). Organized Crime a Cross-Cutting Threat to Sustainable Development, Geneva: Global Initiative against Transnational Organized Crime.

⁵⁶ Meacham, Farah, & Lamb, 2014

⁵⁷ FATF, 2015.

⁵⁸ Farah, 2002

⁵⁹ Meacham, Farah, & Lamb, 2014.

⁶⁰ Clarke, 2015.

In addition, gold is an extremely attractive vehicle for laundering money and terrorist financing. As it is almost untraceable, possesses a high level of liquidity, and holds its value, gold is often preferred to other modes of currency. Moreover, internationally enforced anti-money laundering (AML) measures are influencing a shift in criminal behaviours towards methodologies with lower law enforcement visibility. When compared to other financial instruments, gold is weakly regulated. These factors make gold highly attractive to criminal syndicates wishing not only to maximise profits, but also to hide, move or invest their illicit proceeds. As it is almost untraceable, possesses a high level of liquidity, and holds its value, gold is often preferred to other modes of currency.

Other intrinsic characteristics of gold that make it susceptible to criminal exploitation include the following:

Gold offers easy anonymity. Largely exempt from international reporting requirements for financial transactions, the anonymity generated from the properties of gold make tracking its origins very difficult to do. Informal transactions involving gold typically occur anonymously, with little to no record identifying the seller or purchaser, of gold. Currently it is nearly impossible to forensically assess the origins of gold. This means that law enforcement agencies or downstream buyers have little to assist them in identifying what the source of the gold is or the identity of the person who sold it. It may be difficult to refute false claims about the source of gold due to the challenges in correctly identifying gold. Furthermore, gold brokers can "layer" transactions that further confuse the paper trail and gold is readily susceptible to false invoicing and other fraudulent schemes.

Gold is easily smuggled: Valuable commodities like gold offer a convenient method for transmitting value across borders. Gold is particularly convenient because it can be easily smelted into any shape and disguised for easy transport. Because the exact amount and/or value of gold can be easily concealed, smuggling gold is an ideal method of moving value from one location to the next, either domestically or to international jurisdictions where it can then be refined. The classification and description of gold as an excuse to move value are techniques used by criminal organizations to give the appearance of legality to the flow of funds of licit or illicit origin, and allow the gold itself to be transferred to places more conducive to their ongoing criminal activity.⁶⁶

Gold's value is relatively predictable and the weight and quality of gold can be assured. Gold is an especially reliable form of transportable payment during times of strife, when fiat currencies are heavily devalued or not easily convertible. Its weight, quality and price can be easily determined.⁶⁷ In addition, in times of uncertainty and civil strife, gold can be more secure than national currencies. Gold can act as a better insurance policy, hedge against devaluations, bribe currency and source of transportable wealth.⁶⁸

Gold's inherent value makes it a global currency. Gold has been a haven of wealth since antiquity, used in various cultures as a medium for exchange or payment. Even with the modern use of fiat currencies, precious metals remain an alternative means of payment due to their high intrinsic value and ease of exchangeability.⁶⁹ Further increasing its value is the integral part gold plays in the cultural heritage of many countries. Due to the inherent value of gold, and its worldwide exchangeability, retail gold is a readily acceptable medium of exchange anywhere in the world. As such, it is often seen as a viable alternative to cash to settle debts and distribute profit from criminal activity.⁷⁰

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61 Weir, 2012.
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⁶² FATF, 2015

⁶³ This is a topic of current forensic research. See for example, R.Dixon http://www.lbma.org.uk/assets/Speeches/AR13/AR13_S7_Dixon.pdf

⁶⁴ FATF, 2105

⁶⁵ Cassara, 2007.

⁶⁶ FATF, 2015.

⁶⁷ Prasad, 2016

⁶⁸ Cassara, 2007.

⁶⁹ Fiat currencies 'fiat currencies' have no intrinsic value and are used solely as a means of payment.

⁷⁰ FATE, 2015.

Examples of criminal capture of ASGM include:

- Colombia: The FARC (Revolutionary Armed Forces of Colombia) and ELN (National Liberation Army) are deeply involved in the vast majority of areas in which gold mining takes place in Colombia and increasingly use illegal gold mining to generate revenue. Government authorities have estimated that the FARC obtains approximately 20% of its funding through gold mining. Funding is obtained by directly controlling mines, as well as by extorting miners and mine owners. In Tolima, for example, the FARC reportedly charges 10% of their gold. In Caqueta, the FARC both have their own dredges and charge miners. The ELN reportedly generates most of their illegal mining-related revenue by taxing mines, charging miners and bringing heavy machinery into areas that they control. ELN files recovered by police indicate that they force associations of miners to pay them up to half of their earnings.⁷¹
- **Côte d'Ivoire:** In Côte d'Ivoire, illicit ASGM and gold smuggling is a key component of Lieutenant-Colonel Issiaka Ouattara's, commonly known as "Wattao", business empire. According to UN investigators, some 15,800 diggers are active at the Gamina mine site he controls, which produces about 2.5t of gold annually. At these mining sites, gold is bought and sold in a closed-pipe circuit, forcing diggers to only sell to specific buyers at a fraction of the gold's value. UN investigators estimate that in addition to his gold earnings, Wattao makes more than US\$1.7 million a year in fees for the security he provides around the mines. It is believed much, if not all, of the gold produced by Wattao's mining sites is smuggled out of the country. Based on annual production and security fees, it is estimated Wattao's mines generate enough revenue to fully cover the salaries of the 500 armed elements, representing a parallel force to the military that threatens the stability and security in Côte d'Ivoire. A
- Afghanistan: There is evidence the Taliban movement generates considerable assets through the direct or indirect illegal exploitation of natural resources in Afghanistan. According to Afghan officials, the Taliban have established an illegal gold mining operation in the Badakhshan province. The Taliban's role includes either direct involvement in the extraction of natural resources or acting as "service providers" for unlicensed mining operations, providing "security" by preventing government forces from taking control of the area surrounding the mines. Various Afghan officials described the income from these activities as significant, with estimates approximating at least several dozen million US dollars nationally each year, second only to revenue generation from narcotics.⁷⁵

⁷¹ Wagner, 2016.

⁷² Bavier, 2015.

⁷³ UN Security Council, 2015.

⁷⁴ Hunter, Forthcoming.

⁷⁵ UN Security Council, 2015.

Investigation

This section contains the guidance the GIFF Project believes is necessary for informing robust qualitative research into financial flows linked to ASGM. It provides the following advice and information:

- Research:
 - o How to conduct desk research into financial flows linked to ASGM;
 - o How to develop a research hypothesis, or hypotheses, based on the identified scale and direction of financial flows linked to ASGM;
 - o How to map stakeholders in ASGM;
 - o How to protect sources, and why it's so important to do so;
 - o Important questions for investigating financial flows linked to ASGM; and
 - o Guidance on research questions.
- · Analysis and reporting
- · Shaping informed responses

This advice is aimed at practitioners who are already competent in the fundamentals of qualitative research, including in mining environments. Noting the challenges in conducting research without a local intermediary, it is advisable to work with local researchers or stakeholders if you or your organisation are not locals and/or do not have strong contacts in the mining sector. If you are new to qualitative research or conducting research on ASM it is recommended that you reach out to organizations or stakeholders who have experience in conducting research and review literature on conducting qualitative field research.

Desk Research

Key Takeaways

- There is very little information available on financial flows linked to ASGM, and it is highly unlikely you will find information available on the specific geographic region you are investigating. As such, it is important to compile information from several different sources, providing insight on financial flows (in particular IFFs) and ASGM from several different angles.
- Topics to research include, but are not limited to, are:
 - o Geography
 - o Population
 - o The structure of ASGM supply chains
 - o Import and export statistics
 - o Economy
 - o Mineral sector and financial sector legislation and regulations
 - o Mining rights and licensing

The lack of *high quality* data on financial flows, especially IFFs, in the ASGM sector is a major barrier to implementing effective policies and initiatives designed to address this issue. A key finding of GIFF Project roundtables was that IFFs, as well as broader financial flows, linked to ASGM are not well understood; more and better data and information are needed. For example, at one GIFF Project event, participants reported that many of the governments they work with also request data. As one participant stated: "governments are in the dark, especially in regards to the impact this is having on economies." ⁷⁷⁶

In developing a desk research plan, the following questions should be asked:

- What is the context in which research is taking place? (i.e. what are the key issues, settings or people that need to be taken into account when conducting your investigation?)
- What theories, beliefs, and/or prior research findings will guide or inform your research, and in what way?
- What literature and personal experiences will you draw upon for understanding the people or issues you are studying?77

Areas to research include:

Geography: It is important to determine where gold mining is or could potentially take place in the region you are investigating. This will partially inform the geographical scope of your field investigation. Potential resources include reports by the national government, large-scale mining companies, academia, civil society and consultancy organisations where available.

- Seek out information on the geology and landscape of the area, including where confirmed and potential gold deposits are located.
- As permitted, investigate the geography of trading and mineral flows and processing. For example, the terrain may be such that there are only a few possible routes gold can take from mines to reach trading hubs.

Population: Demographic indicators should be collected on the population being researched, if possible. If only country-level data is available, such information can be adapted and meaningfully applied to the local context with input from other information sources. This will help to illuminate who might be engaging in ASGM and the gold trade.

The structure of ASGM supply chains: It is important to draft a detailed situational analysis of ASGM in the region/s under investigation. Potential resources include publications by civil society and development organisations, as well as the government and industry actors. If possible, researchers should compile production estimates on the quantity and value of gold being produced by ASGM operators all along the supply chain. It is important to pro rate value estimates against purity (known or estimated).

Import and export statistics: Reliable trade statistics on gold may not exist, or may be difficult to obtain. If this problem arises, in addition to the country or countries being investigated, researchers should try to obtain trade statistics from neighbouring countries and potential destination countries. When gold is smuggled it is often exported out of neighbouring countries (for example, gold smuggled from DRC into Uganda). The report *Contraband Gold in the Great Lakes Region: In-region Cross-border Gold Flows Versus Out-region Smuggling* offers an illustration of how trade data can be analysed to assess the scale and direction of gold flows, as well as related financial flows.⁷⁸ (The report itself is an excellent resource for researchers gathering information on financial flows linked to ASGM in the International Conference on the Great Lakes Region (ICGLR)). The study took a largely numerical approach, assembling a data set of ASGM gold exports and imports for the years 2003-2012 consisting of the following data:

• official export figures (or reasonable estimates) for ASGM gold from all the principal gold producing nations of the ICGLR;

⁷⁶ ELL and Global Initiative against Transnational Organized Crime, 2016.

⁷⁷ USC Libraries, 2017.

⁷⁸ Blore, 2015, p iii

- official figures for imports of AGSM gold by Dubai from the principal gold producing nations of the ICGLR;
- royalty rates by year for these nations;
- the average price of gold by year.⁷⁹

The study analysed this data to estimate both the size of the ICGLR ASGM sector and the extent to which ASGM gold produced in the region is smuggled either across local borders or out the region completely.⁸⁰

Economy: Understanding the economy is necessary to understanding the role ASGM, and the gold industry more broadly, play in a country. The following questions should be asked across all scales (community, province, nation):

- What is the current status and short-medium term outlook for the economy?
- What proportion of GDP is derived from the gold sector?
- Who dominates gold production in the country (ASGM, medium-scale mining, or LSM)?
- What are the annual production levels of gold?
- What are the other major industries?
- What alternative livelihoods are available in areas of gold production?
- What is the percentage of unemployment (amongst youth in particular)?
- What, if any, incentives are in place that would make ASGM more appealing than other livelihood options for miners and traders?
- What function does the gold sector play in individual's livelihood strategies and in businesses' strategies for growth and resilience?
- What are the economic linkages at all supply chain tiers, with a focus on how gold or gold miners and traders are integrated into other sectors?

This information may help you understand the importance of the sector to political and economic actors, and the nature of relations between the gold sector and other sectors. It may assist in the estimation of how many miners and traders are directly engaged in the sector, and how many dependents they may be supporting. Resources for this research can include national economic, academic and civil society reports.

Mineral sector and financial sector legislation and regulations: It is important to understand the legislative framework governing the operation of the gold sector, what (if any) legal framework governs the ASM and financial sectors, and how feasible compliance would be for miners, traders, and exporters. Furthermore, many governments do not view ASGM favourably, or only grant its actors limited rights or legal avenues to operate under. By understanding a government's approach to the management of this sector (i.e. criminalising, tolerant, enabling), researchers will be better positioned to understand the motivations of ASGM operators and why they may operate outside the legal sphere. It is also important to note whether gold or financial flows cross international borders. All relevant legislative and regulatory regimes should be taken into account as this can heavily influence financial flows.

Mining rights and licensing: Determine who owns mining rights in the country or countries being investigated. In some cases, only the locations of rights held by large-scale operations will be available in the national cadastre. Be sure to differentiate between the type of licenses (exploration v. excavation, large-scale v. small-scale, etc.). Also, in assessing legal rights, it is important to differentiate between mining *rights* and mining *licenses*. Mining rights give you access to a defined area while a license gives the holder licenses to explore or mine for minerals. This information enables the researcher to determine who is mining in the country/region, plot the locations of mining/exploration activities, and the potential value

⁷⁹ Blore, 2015, p iii.

⁸⁰ Blore, 2015, ii.

of the gold trade. By having knowledge of factors such as the number of licenses granted, geographic areas for which licenses have been granted, and fees charged per license you will be better positioned to estimate things such as how many individuals are active in the trade, the geographic spread of activity, and the scale of government revenue being derived from mining licenses.

Hypotheses

Key Takeaways

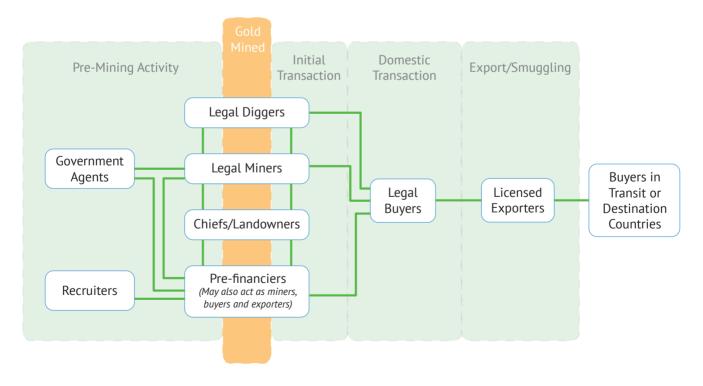
- Your hypotheses, or conceptual frameworks, will help you to organize data, define your goals, develop and select realistic and relevant research questions and methods, and identify potential validity threats.
- Due to the complexity of financial flows linked to ASGM you may initially have trouble visualising your hypothesis. To overcome this barrier, map a simpler flow, such as how financial flows should look or the gold supply chain, and then build on the framework, adding activity and financial flows you suspect are taking place.

As the research is being undertaken, hypotheses of the scale and direction of financial flows will be continually developed. These hypotheses will help to organize data, and potentially draw the researcher's attention to particular events or phenomena that might be misinterpreted or go unnoticed. It will also help the researcher to further define and refine the study's goals; develop and select realistic and relevant research questions and methods; and identify potential validity threats to conclusions.⁸¹

Two basic frameworks for researching financial flows in ASGM are presented below:

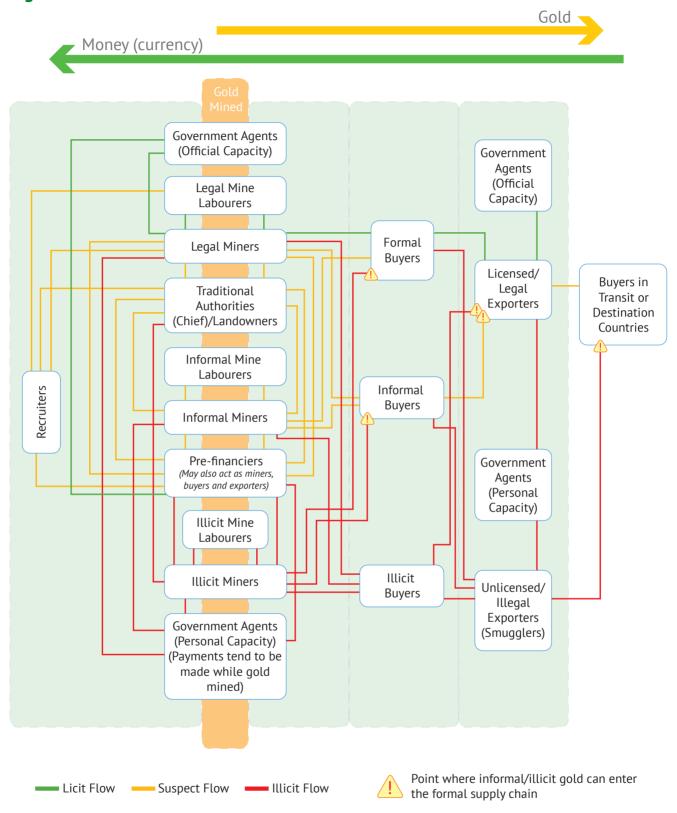
- What financial flows should look like in the country under examination (based on legal requirements).
- What suspected financial flows actually look like based on existing knowledge of them.

Figure 5 Legal financial flows



81 Maxwell, 2009.

Figure 6 Financial flows linked to ASGM



Due to the complexity of financial flows linked to ASGM you may initially have trouble visualising your hypothesis. A strategy to overcome this hurdle is to start by mapping a simpler flow, such as how financial flows should look like or the gold supply chain. You can then build on these frameworks by adding activity and financial flows you suspect are taking place. Your desk research on the ASGM supply chain, mineral sector legislation and regulations, and mineral rights and licensing should heavily inform your hypothesis.

While these frameworks may be helpful, the researcher must note that that their own theories or preconceptions may bias the research, or send it in the wrong direction. This could prove fatal to the study.⁸² As such, researchers must always be willing to change any hypothesis, whether adopted or their own, in response to new information. It is most likely that the final analysis will not match the original framework, but be an adaptation that was necessitated by the discovery of new information.

Stakeholder Mapping

Key Takeaways

- Stakeholder mapping should be as comprehensive as possible, taking into account all the stakeholders that operate in, provide services to, regulate, and could be impacted by the sector.
- Once a list of key stakeholders has been compiled, the researcher should compare it to the conceptual framework, identify as many actors as possible that may be able to contribute insight to the study and tailor interview questions to the likely knowledge of that actor.
- Stakeholder mapping should be a continuous exercise, regularly updated as new information is uncovered and individuals are identified.

Stakeholder mapping is a vitally important research tool in investigating financial flows. It plays a role in developing hypotheses, research and data collection, and analysis. Accurately identifying stakeholders enables the researcher to:

- Develop a conceptual framework;
- Identify who they should be talking to and in what sequence, and what questions should be asked, and
- Understand which actors are involved in the trade and what role they play (when conducting subsequent analysis).

To start stakeholder mapping, the researcher should brainstorm all the stakeholders that operate in, provide services to, regulate, and could be impacted by the sector. This should include the whole ASGM economy: ASGM supporters, traders, exporters, investors, diggers, washers, assayers, the miners themselves, businessmen providing money and other supplies and other stakeholders. It should also include relevant civil society, government officials, financial institutions, international organisations, and anyone else who is believed to potentially hold useful information/insights. Once a list of key stakeholders has been compiled, the researcher should compare it to the conceptual framework, and ask:

- Where do they fit within the framework, if anywhere?
- Who would have information about the different actors or flows that are assumed to operate in/take place along the supply chain or financial flows?
- What are the risks of contacting them?
- What is the best way to engage them (timing, method, language you will use)?

Once contact information for each stakeholder has been collected, the researcher should endeavour to interview actors who can shed light on a variety of different parts of the financial flow, both upstream and downstream.⁸³ They should also be sure to tailor questions to the likely knowledge of that actor (a miner is unlikely to be have knowledge of the details of an export transaction, for example). However, this is not a hard and fast rule, and the researcher must remain open to new information.

- 82 Maxwell, 2009.
- 83 ASM-PACE, p. 22.

Sierra Leone Pilot: Stakeholder Mapping

The stakeholder mapping done in preparation for the Sierra Leone case study is shown below, in Figure 7. The orange triangles indicate points in the financial flows the researchers decided to focus on or further explore in the investigation. The points were identified as a result of desk research and a hypothesis of which actors were engaged at different points, as well as key questions to ask. Potential stakeholders were then matched against this hypothesis to ensure the researchers were identifying stakeholders who could offer information on the entire financial flows linked to the ASGM sector, and not limiting research to a specific point or flow. In addition, this mapping was used to review the interview questions, with the goal of ensuring interviews covered all flows respondents may have had knowledge of. The result was a complex web of strings connecting different actors to avenues all along the financial flows. The complexity of investigating financial flows is well demonstrated in this stakeholder mapping.

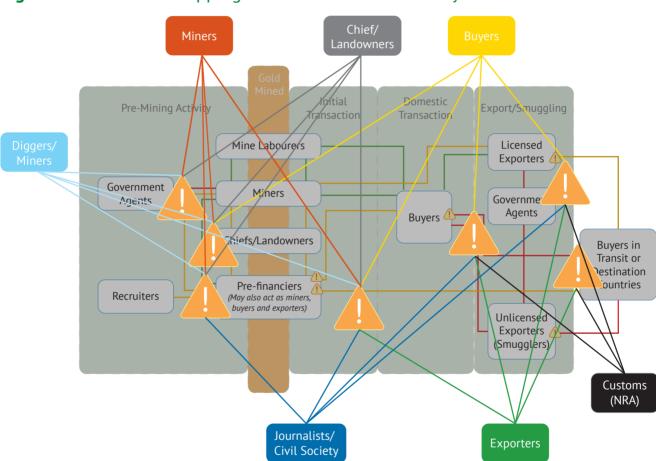


Figure 7 Stakeholder mapping for Sierra Leone case study

Research Questions

Key Takeaways

- Taking time to develop a concise, cohesive set of research questions is important as it directly links to the other components of the research design.
- Your study should comprise of a handful of research questions which are supplemented by sub-questions that quide your investigation and the development of interview questions.
- Recommended research questions to adopt in undertaking an investigation of financial flows linked to ASGM are:
 - 1. Why do people engage in the ASGM sector?
 - 2. How much gold is produced/bought? (estimate)
 - 3. How much turnover and profit are actors generating?
 - 4. What is the gold flow? (Where is gold coming from and going?)
 - 5. What proportion of the value of the gold is retained in the local economy?

Research questions serve two main functions: to help the researcher focus the study and to give them guidance on how to conduct it. They frame the study in important ways, influence decisions about methods, and justify focusing on specific areas. Research questions will generally be the result of an interactive design process, entailing research, and reference to the researcher's own knowledge (or that imparted in this handbook). As new information comes to hand, the researcher must be open to adapting the questions as deemed necessary.⁸⁴

One challenge in designing research questions is determining scope. Overly general research questions create difficulties for conducting the study, while research questions that are too narrow may lead you to overlook relevant areas or cause you to pay too little attention to important, unanticipated phenomena and relationships. Qualitative studies, such as this, should have no more than a handful of research questions (5), which are further flushed out by sub-questions. Annex 1: Interview Questions, illustrates how research questions can be supplemented and addressed by sub-questions and interview questions. Research questions may evolve over the course of the study. For example, upon completing your desk research or after starting your field investigation you may find they are too broad or irrelevant to the research goal.

The GIFF Project has developed the following research questions and supporting guidance as inspiration for other researchers:

1) Why do people engage in the ASGM sector?

When examining financial flows linked to the ASGM sector, it is important to develop an understanding of the motivations of different actors. A key research aim is to distinguish between actors engaging in ASGM for livelihood reasons, business reasons, or criminal reasons. ⁸⁶ Questioning the motives of actors in this way can clarify the culpability of actors; are they intentionally flouting the law to maximise profits or are there other factors at play such as excessive taxation or obstructive exportation procedures which are preventing individuals from acting legally who otherwise would?

Unpacking the motivations of actors is critical to developing responses. Different motivations require very different responses if governments and other stakeholders hope to reduce IFFs, without exacerbating inequality and

⁸⁴ Maxwell, 2009.

⁸⁵ Maxwell, 2009.

⁸⁶ ELL and Global Initiative against Transnational Organized Crime, 2016.

poverty. This question will aid in identifying which actors will be more prone to engage with formalisation efforts. In addition, in many regions, enforcement mechanisms are exceedingly weak. As such, more effective responses would have to consider appropriate incentives or regulatory or legislative changes which make the formal sector more ASGM friendly.

While this is an important line of questioning when conducting investigations at the mine site and interviewing mine labourers and miners, this is an especially important question

Unpacking the motivations of actors is critical to developing responses. Different motivations require very different responses if governments and other stakeholders hope to reduce IFFs, without exacerbating inequality and poverty.

to unpack when interviewing investors, creditors, gold buyers, and gold exporters. In many instances mine labourers and miners have few, if any, alternative livelihood options that offer the same economic returns. In contrast, other actors along the supply chain, such as buyers and exporters, often do have other options to generate income. As such, it is important to understand why these actors are choosing to engage with the ASGM sector. Your interview should uncover if these actors are making enough profit to provide them with a meaningful return on investment and if there are other livelihood opportunities available which would offer similar returns. Questions such as "why are you an investor/buyer/exporter?" and "what other livelihood options (or commercial solutions) are available?" and "what is it about the gold business that is particularly beneficial to you?" should help to shed light on this issue.

Similarly, when interviewing government officials, you should also enquire into why they are engaged with the ASGM sector. For example, how did the official come to work in the gold area? Is it preferable to work in the gold mining area rather than in other areas? Why? Is there competition amongst officials to work in the mining area? How do you assure you get to work here? Or was the official simply assigned to position by a superior? With what expectations? In addition, enquire about their plans after they leave the government position. There have been reports of officials in various regions around the world leaving government positions to enter into the ASGM sector because it is a more lucrative employment option. If you find this to be the case in your own research, it can clarify why government officials, who are often paid very little and at times can go without pay, are disposed to collecting extra-legal payments (bribes) from ASGM operators.

General questions that can be asked of all respondents include asking about where the respondent was working prior to entering ASGM/ the gold trade, why did they start working in the ASGM and/or the gold trade, and if they had other employment options should be used to assess what other livelihood options are realistically available to the respondent and comparable to ASGM in terms of risk/reward. In addition, ask questions clarifying if mining, buying, or goldsmithing is a traditional or family occupation. For further guidance, including sample probing questions see Annex 1

Be sure not to limit your analysis to actors directly engaged in the ASGM and gold sectors. Also include actors such as chiefs and landowners who are also potentially extracting value from the sector. Like other actors, they may be motivated to collect payments as 'customary practice', out of economic necessity, or purely as a source of rents.

It is important to note that every situation is unique. While these points provide some guidance, it is important to rely on your own research and reflections when isolating actors' motivations.

2) How much gold is produced/bought? (estimate)

Governments and other stakeholders are often unaware of how much gold the ASGM sector is producing, much less where it is going, who is profiting from its extraction and trade, and what the size of those profits are. Not knowing the economic scale of the ASGM sector is a setback for stakeholders. The lack of quality data is a barrier to designing and implementing effective policies and initiatives. The scale and nature of some IFFs are more egregious than others, but without more information it is difficult to identify where to prioritise action.

You should do your best to compile indicators of the scale of production and sale of gold. It is unlikely that respondents will be able to give you straightforward or accurate data, and you will likely have to piece together various data to build an estimate of production. For this reason, sample probing questions have been provided in Annex 1 to help gather the information required to ultimately triangulate data and generate a reliable production estimate.

For example, an interview with a miner during the rainy season might go something like this:

Question	Answer
How many pits do you own?	I have 5 active pits.
How many pits do you normally have at one time?	4-6 pits
How much does one pit produce each week?	I don't know, it depends on the pit and the season.
What is the most gold a pit will produce in a week?	Maybe 250 grams of gold. That's happened a few times.
What's the smallest amount of gold a pit will produce in a week?	Probably 50 grams of gold.
Does that happen often?	No, it's usually more. Maybe 100 to 150 grams of gold?
Are these numbers for the rainy season?	Yes, this is about what we're producing right now.
Does production change much during the dry season?	It increases a lot. We get maybe 150 – 250 grams of gold per week. It's still pretty uncommon to get more than that during the dry season, although we might if we find a really good pit.
Do you mine all year or do you take weeks off?	We take a month off during the rainy season because it is too hard to pump the pits, but other than that we are mining.

Using this information, we can calculate an estimate for this miner's gold production.

	Low	Med	High
Pits	4	5	6
Gold per week per pit (rainy season) – 20 weeks	50	125	250
Gold per week per pit (dry season) – 26 weeks	50	175	250
Estimated Gold Production [(pits x rainy season gold production x weeks worked in rainy season) + (pits x dry season gold production x weeks worked in dry season)]	9.2 kg/year	35 kg/year	60 kg/year

The other information you will need to make broader estimates includes the following: how long the seasons last; how many pits are open at a mine site; how many mine sites are in a region; how many pits are at each of the mine sites; the average production of other pits; and any other questions you would deem relevant to your specific ASGM political economy.

It's also useful to gauge what typical production is per capita, so you can counter this method of production with data gathered about individual mine labourers. The larger the sample size (sites visited, people interviewed) the more accurate your data will be. With this information, you can do similar math as that shown above to calculate gold production for the country or the region. However, there is also a fundamental need to ensure the reliability of data, which goes to the validity of your study as a whole. To enhance the reliability of data, employ appropriate sampling techniques and do not extrapolate beyond what the data can actually be interpreted as meaning.

Buyers, exporters and other upstream actors can also shed light on gold production in an area. For example, an interview with a buyer might go something like this:

Question	Answer
About how much gold do you buy every year from the mines?	I don't know. It varies a lot and so it is too hard to say.
How about in 1 week, how much gold would you buy a week on average?	Weekly I might buy 200 grams of gold. I can buy a lot more though. If I get a big order I can buy 1kg or more.
Do you often get big orders?	Maybe once every few months. 3-4 times per year. I usually get 1 or 2 around the holidays.
Do you buy from many mines?	I have 2 mines I buy regularly from. People also come to my shop and sell to me.
How regularly do you buy from those two mines?	I stop by every other week and buy all the gold they have.
How much gold do the mines sell you on these visits?	It depends, but I can usually count on getting at least 100g of gold. Sometimes they'll have double that.
Do you know if the mines sell to any other buyers?	No, I don't think so. I have a good relationship with the miners. If they need money for medical bills or something they know they can ask me.
Does the amount of gold they produce vary much from the rainy to the dry season?	A little. During the rainy season they usually only have 100g and sometimes less. During the rainy season they always have more. Usually like 150g. I've bought as much as 250g from one of the mines.
Do you know how many mines are around here?	No, I couldn't say. I know there's a few gold buyers in town who buy from other mines. There's one big buyer. He would probably have a better idea of how many mines are around.
How many buyers are there in town?	Hmmmmmm, I'd say maybe a dozen.
Do they all buy as much gold as you do?	No, I'm a small or medium buyer. A few of the other buyers are a lot bigger and have an agent working for them.
You said earlier that you might buy 200g of gold per week, if I was to estimate how much gold you buy each year is this a good number to use?	Yes, I guess so. Although it can vary and I do get those few big orders every year. That is probably a low estimate. If you are interested in buying gold I can buy you a lot more.

For a rough figure, you could estimate this buyer was buying about 10.4kg of gold per year (200g x 52 weeks). However, in presenting your figure there are other things you should note in your analysis. For example, you will need to

adjust for the purity of the gold (to the best of your ability). Purity levels, while usually around 90% for alluvial mining, can range from less than 45% to more than 99%.⁸⁷ Also, determine as best you can the length of time the respondent takes off each week and each year. Also, from the last answer, it appears that the buyer may think the interviewer may be interested in buying gold and could be inflating their numbers in an effort to entice the interviewer into buying gold. If you feel this is the case, be sure to note this in presenting your estimate. Lastly, the buyer's answers about the mines can be used to cross-check production estimates you calculate from other interviews.

Note, however, that it is very difficult to estimate gold production and **triangulation of information is key.** As such, presenting a range (from the very lowest estimate to the highest), as well as what you believe is the closest number (probably somewhere in the middle), is useful to your readers and strengthens the validity of your research. Also, be sure to show how you calculated the production and the evidence used to generate the estimate.

Triangulation of information is key to developing production estimates Production analysis is also very important for addressing the next question: How much turnover and profit are actors generating? Without having a reliable estimate of the amount of gold being produced and sold, it is difficult to estimate the potential size, as well as the direction, of financial flows and specifically IFFs, should they be present.

3) How much turnover and profit are actors generating?

This question is the first to explicitly address IFFs—determining who is extracting value from financial flows and to what degree. You need to ascertain how much of an entity's turnover in gold or a local economy's value of gold is being mined, traded and exported each year. For example, does the value of gold leaving the country match the value (give or take) coming in, most probably in cash, to pay for this gold?

Once you know value, you must look at the origins of that capital: Is it 'clean' or 'dirty'? For example, is it derived as legitimate profit from someone's local business, or derived as illegal earnings from a coca operation? One way of ascertaining this is to know the price being paid to the miners; if miners are paid close to or above 'London Spot Fix', 88 it is a red flag the gold is not being treated as a commodity, but as a financial instrument for managing other commercial issues. Your answers to the research question, why do people engage in the ASGM sector' will also help you know and understand the commercial logic of the traders in particular.

It is essential that you take a commercial head to the calculation of turnover, profit, and income. In determining turnover and profit ask who gets paid what amount for what reason, in what way (i.e. type of financial instrument)? Also, is this a legal payment prescribed by law or commercial norms? Only with good accounting skills on the numbers before you can you make sense of things. To aid this, we have set out some basic terminology below to guide you.

While those directly engaged in ASGM and gold transactions are relatively obvious (digger, miners, buyers), it is as important to look at the turnover and profit of other actors such as investors, chiefs and landowners, and government officials who are often also benefitting. Investors, chiefs and landowners may have legitimate reasons for taking a share of things. The chiefs as local regulators; the investors as there is a cost to borrowing money which may be paid in shares or other ways, and the landowners because they are allowing the value of their asset,

By determining turnover and profit, mapping flows, and considering their commercial and legal legitimacy you can start to see which flows are a function of exploitative practices and criminality (sucking value), and which are reasonable (adding value).

⁸⁷ Veiga, et al., 2006, p. 8-9.

⁸⁸ A price per ounce for each of the precious metals (gold, silver, platinum and palladium) determined daily at 10:30 and 15:00 GMT by a brief conference call among the five members of the London Gold Pool (Scotia-Mocatta, Barclays Capital, Deutsche Bank, HSBC and Société Générale).

the land, vis-à-vis other productive activities to be degraded (forest clearance, destruction of agricultural land, etc.). These transactions may be positive, commercial relations that enable mining to happen in the first place or direct reinvestments back into the economy, or they may be harmful, exploiting marginalised ASGM communities, or they can even be a mixture of both. Without investigating turnover and profit across all sector beneficiaries and at the community level, it is not possible to identify who is extracting value and the impacts of the flows.

By determining turnover and profit, mapping flows, and considering their commercial and legal legitimacy, you can start to see which flows are a function of exploitative practices and criminality (subtracting value), and which are reasonable (adding value). When actors who are 'subtracting value' from the sector are identified, governments and other change makers are better positioned to target interventions at the actors and points in the supply chain that are most likely to have an impact.

BASIC ACCOUNTING TERMINOLOGY: PROFITS V. INCOME V. TURNOVER

At the level of the mining or trading organisation:

- Turnover is the value of gold being sold to the next buyer in a given time period, i.e. it is the value of all sales in a given time period.
- Expenses will include overheads (fixed costs) and direct costs (costs incurred only if a particular project is taken on). Expenses may include labour costs, licensing, tools, equipment hire, fuel, mercury, cost of credit, bribes, weapons, 'tips' for the labourers, and, for a trader, premises, scales, assay equipment, 'insurance' (bribes, weapons), hospitality, etc.
- Gross Profit is calculated by deducting direct costs from turnover. Net profit is calculated by deducting overheads from Gross Profit.

At the level of an individual, Income

- May be equal to net profit, e.g. in cases where someone is self-employed, mining for themselves and can keep the profit margin in its entirety, choosing whether or not to invest part of it in future mining or trading activities.
- May be a proportion of net profit, e.g. where the mine labourers are ascribed a share in the profit, along with the landowner, financier and potentially traditional authorities.
- Is simply a daily wage or subsistence costs covered with a bonus for good finds, in the case of some mine labourers (and thus an 'expense' for the employer).

Here is a totally hypothetical example that should show you the utility of this approach. Let's assume a trader is in his third year of doing business. He is backed by his buyer, a legal exporter who buys only in cash. The trader does not know the origin of this cash. He works 50 weeks in the year. He is licensed. In his first year his typical weekly accounts are as follows:

- A trader buys \$10,000 worth of gold a week (direct cost).
- He sells it for \$15,000 a week (Turnover).
- His Margin is \$5,000.

Direct Costs

He incurred other costs associated with this specific purchase besides the cost of the gold.

- He hired a bike to go to/from the mine site, at a total cost of \$20 including fuel.
- He had to buy food and drink to make the journey (\$5).
- On the way into the mine (which was on an LSM concession), he had to pay a bribe to the mine police (\$5).
- His other direct costs were there for \$20+\$5+\$5 = \$30.
- His Gross Profit is therefore \$4,970.

Gross Profit

He makes 50 such purchases a year, giving him a gross profit over the year of \$248,500 on an annual turnover of \$750,000.

He has fixed costs (overheads) associated with running this business that total \$2,755 a week (remember he works 50 weeks a year).

- He rents an office in town for \$200 a week.
- His other office costs are \$5 a week.
- His annual license fee, and costs associated with getting it, is \$5,000.
- He must pay 'transport' (i.e. a facilitation fee) to the Government Inspector every week when he comes of \$5 a week.
- He pays a monthly tribute to the town chief of \$100 a month, so \$25 a week.
- He pays an agent \$250 a week plus a 30% commission on the margin on any purchases that dealer makes. That dealer did 20% of his sales this year. (\$500,000*0.2*0.3/50) =\$30,000/50=\$600 a week. Total weekly pay is \$850.
- He has to give money to miners on a daily basis as 'support' in order to incentivise them to bring their gold to him. He thinks he must pay about \$10 a day in this way. \$70 a week.

 He has 5 groups of miners working for him. The average running cost per group including tools, food, medication, transport, fuel, etc. is \$60 a day = \$300 a week = \$1,500 for all 5 groups. Of this amount, \$5 a day is for bribes, or \$30 a week (they don't work one day a week).

Net profit is \$4970 - \$2,755 = \$2215 a week = \$110,750 a year.

Of this net profit, he puts aside 25% to sponsor more mining groups in the following year, retains 25% for other eventualities, and pays himself 50% as income. His annual income is therefore \$55,375. With this income, he uses \$25,000 to live on locally, buys 10 cows at \$400 (\$4,000) and invests the balance in his wife's agricultural enterprises.

Overall then, the financial flows are:

- \$3,125 invested in the local economy (informal) per annum
- \$65 a week pays bribes and informal taxes (IFFs generated by this entity), or \$3250 per annum.
- \$0-\$15,000 a week being laundered from the criminal economy (IFFs utilising this entity we do not know if the money being used to back the trader is from a legitimate source), or \$0-\$750,000 per annum.
- \$X week providing stimulus to other criminal activities (we do not know if the trader or his miners engage in activities that support other illegal activities such as drug abuse, prostitution, child labour, bush meat consumption from protected species, etc.)

Interview questions directly aimed at how much the respondent makes from ASGM and/or the gold trade are relatively straightforward. Questions for mine labourers and miners may include: How much are you paid? How much of the gold mined or the value of that gold do you get to keep? How much do you sell your gold for? Do you have to pay any rental fees for machinery or any other expenses (transportation provided by mine owners/concessioners) related to your mining activity. Similarly, questions for buyers would include: how much do you buy gold for? How do you calculate this price? How much do you sell gold for? How do you calculate this price? When asking any questions about the price of gold sold, be clear on whether that's prorated for purity or not and whether or not the buyer seeks to also market 'waste' and by-products (e.g. silver).

The more difficult aspect of your investigation will be determining which other actors are benefitting from the trade

and how much turnover or profit they are generating. This is why questions such as: do you get support from anyone? Do you have to pay anyone to mine and/or buy gold? Do government officials ever visit you? What for? are important. Another way to get at this is to sit with the miner or trader and have them explain to you all their direct costs. What are your costs of doing business? What costs are stable, and which are unpredictable? What are the risks to your business? What measures do you take to mitigate those risks? Questions like these (adapted to be understandable to the interviewee) may reveal strategies that include paying off officials or building business relationships with more powerful people without asking on these points directly.

As much as possible, try to get numbers, even if they're just estimates. If someone says they are paid or sell 100g of gold, ask them how much this is worth. In particular, ask how much they sell and how much they buy that amount for, as the number will most likely be different. Also, ask about the purity and quality of gold, as this will also impact the value and financial flows.

You will need to do a similar analysis as when developing production estimates. However, rather than triangulating data from one person, you will triangulate the production estimates and interview questions on turnover and direct costs from multiple actors to build a picture of turnover and profit, including IFFs. To conduct analysis, you will want to try to estimate the turnover and profit (daily, weekly, monthly, etc.) of different actors profiting from the ASGM and gold sector and the number of actors at each level. By multiplying these numbers, you are better positioned to estimate overall turnover and profit levels of the different actors.

It must be heavily emphasised, these are estimates. In many cases they can best be characterized as an educated "guess-timate". Be sure to make this clear in your report, and not give too much credence to your estimates as it may reduce the credibility of your report.

4) What is the gold flow? (Where is gold coming from and going to?)

This research question focuses on geography and the physical movement of gold. While at first glance, this line of inquiry may seem to be focused on gold supply chains, to the exclusion of financial flows. However, mapping out gold flows is very important to understanding associated financial flows. By understanding where gold is coming from, where it is going, and how it is being moved, you are in a much better position to understand who is extracting value from the trade and how. It is likely you will uncover a flow or actor you did not originally think to include when you map out the gold flows.

When conducting your interviews, to the greatest extent possible always try to determine where gold is coming from and where gold is going. This is also an important first step in mapping out financial flows. Visually, it is much easier to map out financial flows when they can be linked to specific areas and/or activities. This map can then be adapted to capture the nuances of financial flows and the various actors and financial flows that take place.

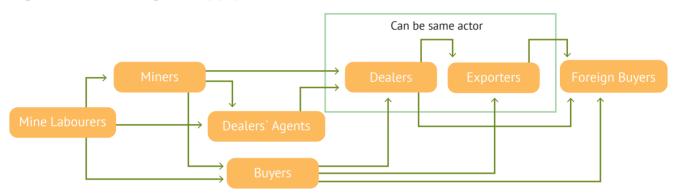
In addition, mapping gold supply chains is important to uncovering smuggling. Smuggling is a key component of ASGM IFFs, and often the core component moving ASGM financial flows from the informal to the illicit. However, to determine if gold is being smuggled you must know where the gold originated and where and how the gold was moved over borders. This phase of the gold supply chain and financial flows also often involves ancillary payments to actors enabling the trade, such as bribes to customs or border guards. However, without tracing the gold flow, it is difficult to substantiate these theories or narrow down where they are taking place.

To analyse the gold flow, it is recommended you draw out a flow chart, mapping the movement of gold from the ground to export points and beyond. Also, you should identify which actors are present or involved at each point. You can also highlight routes or transactions that tend to be more common or are used to carry larger volumes of gold by using a different colour or thicker lines. The figure below is a very basic representation of gold flows uncovered in the Sierra Leone case study. You will note the Miner-Dealer's Agent-Dealer-Foreign Buyer flow is shown with thicker lines to highlight that this is a dominant flow. This is a very simplified representation and yours may be more complicated.

This flow chart does not reflect all financial flows linked to ASGM. For example, none of the flows that take place prior to mining are shown. As such, financial flows such as pre-financing and paying for land and mineral rights are missing. In addition, no ancillary financial flows are shown, such as fees or bribes collected by chiefs, landowners, and government or law enforcement. This approach helps to bring sense to a very complex web of activity, and it is recommended that you start with a simple base like this one and build on to it.

Another strategy is to map the gold flows on a map. Your desk research on geography and gold deposits will be very useful here, in addition to your field research. By mapping out gold flows you can build a detailed picture of gold supply chains, which can be very useful in developing responses. Furthermore, depending on how complicated flows are, you can combine your flow chart with your map to depict which financial flows are taking place at which locations as well as who is involved.

Figure 8 Common gold supply chains



5) What proportion of the value of the gold is retained in the local economy?

An important consideration when determining the impact of financial flows is how much of the gold's value is retained in the local economy and domestic economy versus how much is realised abroad. As discussed in the section 'Illicit financial flows', there is a considerable difference in the impact of IFFs, as well as financial flows more broadly, depending on where the value is realized and invested. Financial flows that remain in the community, country or region contribute to informal eco-

By determining where IFFs linked to the ASGM sector are earned and invested, stakeholders are better positioned to assess the scale and impact of the harm (or lack thereof).

nomic activity, which can generate income locally, growing the economy as a whole and create livelihood opportunities. With few viable legitimate livelihood opportunities within the formal economy, informal forms of trade and industry, albeit illicit at times, are often subsistence-level activities that should be considered informal economic enterprise.

In contrast, IFFs that are accrued or invested abroad or outside the local economy can have a very negative impact. This is particularly true in the cases with a finite resource and a potentially irreversible impact on the environment. Examining the impact of harm is an exercise that needs to be shared with those experiencing the harm. By determining where IFFs linked to the ASGM sector are earned and invested, stakeholders are better positioned to assess the proportion of the gold retained in the local economy, and in turn the scale and impact of the harm (or lack thereof). This greater understanding of the impacts of IFFs linked to ASGM is key to developing evidence-based policy and programming responses.

When answering this question, and in conducting your investigation, endeavour to determine what proportion of value extracted from the gold trade is being reinvested back into mining activities, other economic sectors, or goods and services of value to the community (in the private and public sectors). Goods and services may include taxes, healthcare, education, water or infrastructure. Reinvestment does not necessarily mean direct taxation on mining activity. It can be the result of philanthropic activity on the part of ASGM actors, payments to chiefs, or local spending by ASGM actors. In

the case of local spending, the ASGM trade can be a powerful economic driver, injecting life into what may have otherwise been a languishing economy.

In determining the value retained in the local economy, you will want to ask respondents questions about how they spend their money and if any money is donated to the community for things like schools and hospitals. Are they spending money locally or is being sent elsewhere or spent abroad? In general, the more downstream you move, the more likely it is that profits will be invested elsewhere.

In addition to interview questions, you will want to consider other indicators to determine the economic impact of ASGM on communities. For example, consider the quality of housing. Is housing in mining communities of better quality than that found elsewhere, for example in farming communities? Map out the other businesses connected to or funded by the mining. Speaking with local businesses can be invaluable: how has mining impacted their business and their standard of living? Also, look to see what, if any, high-price or luxury items can be found. Is there a high number of entertainment venues or does every house have a motorbike? Is this common throughout the rest of the country, or is this community seen to be better off than others? Also, consider the health or residents. You can also ask about education, and in what ways the mining sector has led to improvements or decline in the quality, availability, accessibility or utilisation of local education services.⁸⁹

A darker, but also important aspect of this line of research is whether any money is being invested into other illegal activities. In some regions of the world, ASGM is linked to the drug trade, the arms trade, and human trafficking. Surplus generated from ASGM and gold trading businesses and ancillary services may be invested in other illicit activities. The male-dominated culture, which tends to be present in rush ASGM communities, and expendable income may also stimulate demand for other illicit activities, e.g. local drug trade and use, prostitution, etc. Understanding the commercial, political, and social bridges between these illicit economies can be instructive as to where power coalesces, and thus helps inform strategies to formalise the sectors.

One such illicit activity is human trafficking and sexual exploitation. It is not uncommon for prostitution to be linked to ASGM, and due to the remote nature of the sector, it is often more difficult to control the sexual exploitation of women and girls (who are the typical victims). Types of recruitment include deceptive recruitment, in which victims are offered jobs in bars and restaurants, and forced recruitment, in which victims are sold for work as prostitutes inside and near mining camps. 1

Indicators of sexual exploitation, provided by the UN Global Initiative to Fight Human Trafficking (UN.GIFT) include:92

- Women moving from one brothel to the next or work in various locations
- Women being escorted whenever they go to and return from work and other outside activities
- Women having tattoos or other marks indicating "ownership" by their exploiters
- Women working long hours or have few if any days off
- Women sleeping where they work
- Women living or travelling in a group, sometimes with other women who do not speak the same language
- Women having very few items of clothing or mostly the kind typically worn for doing sex work
- Women only knowing how to say sex-related words in the local language or the language of the client group

⁸⁹ When considering the impact ASGM has on education and children in a community, be aware that mining can be a double-edged sword. While mining may act as an economic driver, improving living conditions and educational opportunities for children, it may also draw them to the ASGM sector itself. It is not uncommon for children to enter into ASGM to earn money. As such, be on alert for indicators of either of both themes

⁹⁰ Men, women and children can be victims of forced sexual labour. In many cases, women and female minors make up the great majority of victims. As such, the term 'women' is used here.

⁹¹ Hidrón & Koepke, 2014.

⁹² UN.GIFT.

- Women having no cash of their own
- Evidence that suspected victims have had and/or cannot refuse unprotected and/or violent sex.
- Advertisements are placed for brothels or similar places offering the services of women of a particular ethnicity or nationality.
- It is reported that sex workers provide services to a clientele of a particular ethnicity or nationality.
- It is reported by clients that sex workers do not smile.

Usually, NGOs working in these areas are aware sexual exploitation is or may be taking place, as well as other illicit activities, and should be consulted before entering mining areas. If a woman or a young girl openly asks for your help, you should be prepared to provide them with a name and a number for a victim assistance organisation active in that area. Also, if possible, prepare notes for a debrief with local NGOs about your interviews and observations so they are better able to help victims. As this issue is not unique to work with ASGM stakeholders, additional best practices and guidance can be garnered from protection of vulnerable groups practices applied to other sectors.

These questions go to the core issues of the scale of flows (both in gold volume and monetary value), direction, and benefits to local actors and communities. They are a suitable basis for any research into financial flows linked to ASGM; however, they should not be the only questions asked: the researcher must expand upon them whenever necessary to ensure the desired information is captured.

Source Protection

Key Takeaways

• It is essential to maintain confidentiality and to keep informants anonymous unless you have explicit, informed, written, consent that you can identify them in your report. Such sources must be counselled about the potential risks of being named prior to their consent being sought/accepted.

When conducting any qualitative investigations, it is important to understand and appropriately employ the principles of confidentiality and anonymity. The sensitive nature of IFFs heightens the urgency. Researchers must fully grasp the risks associated with interviewee participation and respect issues of privacy and security. Individuals or entities (companies, etc.) that agree to participate in research must have their anonymity or confidentiality protected. These terms can have different meanings depending on the context. Here, we use them to distinguish between discretion in the handling of information versus the attribution to a source:

- **Confidentiality**: Information shared confidentially means you cannot publish it directly or verbatim. It can be used to assist you in your investigation, for example clarifying your understanding of an issue or informing your understanding of the context, or shaping your questions, but the content and source of that information is always withheld. In journalism, this would be understood as 'off the record': "restricts the reporter from using the information the source is about to deliver. The information is offered to explain or further a reporter's understanding of a particular issue or event, but can never be published."94
- **Anonymity**: Information provided anonymously can be used or published in summary form or verbatim, with a coded citation, or 'anonymous' citation, depending on the level of sensitivity. The source's name or identifying information must never be disclosed and their identity should be closely guarded. In journalism, this would be described as information provided 'on background': "a kind of limited license to use what [information] the source gives you without using the source's name. In effect, it confers anonymity on your source, but allows you to work with the information the source has provided." ⁹⁵

⁹³ If you can confirm the information with another source who doesn't require confidentiality, then it can be published.

⁹⁴ NYU, 2007.

⁹⁵ NYU, 2007.

The only time you can use identifying information is if you have explicit, informed, written consent that you may identify the interviewee. Informed consent requires you to counsel sources about the potential risks of being named prior to their consent being sought and accepted.

Furthermore, to maintain anonymity, descriptions of respondents in your report must not be so detailed so that the individual is easily identifiable. For example, if there is only one hotel in a town you conduct research, you must not use the description "the owner of hotel in X town said…".

A coding system that removes the need for recording names should be developed prior to conducting field research and shared across team members. For example, the coding system adopted by the GIFF Project for the Sierra Leone case study identified participants by using an assigned code (see box below), the date, and a letter if more than one respondent fit the description. So, if the GIFF Project interviewed two miners on 7 July 2016, they would receive the codes MIN070716a and MIN 070716b. By using codes was possible for the research team to maintain confidentiality while still being able to organise interview notes in a way that was easily accessible

Sierra Leone Pilot: Interview Codes

- BUY: Buyers and Dealers
- CIV: Civilian a person not directly engaged in the ASGM sector. May be tangentially engaged.
- DIG: Digger or other non-management person at mine site. Includes machine operators
- EXP: Exporter
- FIN: Financial institution or actor
- GOV: Government
- GSM: Goldsmith
- LAU: Local Authority (Chiefs)
- MIN: Mine Labourer, Mine Manager, Foreman, etc.

Analysis and Mapping

Key Takeaways

- Not all transactions within financial flows linked to ASGM are illicit themselves. Often, it is the few IFFs that drive overall flows and can be the biggest obstacles to formalisation efforts. By mapping financial flows linked to ASGM it is possible to identify IFFs, and develop more informed interventions.
- In conducting analysis and mapping financial flows, you will want to map the scale and direction of flows, the degree to which actors are extracting value, and how much value is being retained by communities.

For further guidance on analysis see the sections 'Untangling the Terminology: formal, informal, and illicit ASGM' and 'Illicit financial flows'

In conducting analysis and mapping, you will **draw together the conclusions and findings from your research questions into a coherent narrative.** When bringing your research together, be sure to consider the extent to which the people, gold, turnover, geography or economic linkages are indicative of financial flows, specifically IFFs, and in what ways. In addition, endeavour to answer questions regarding who is adding value to or extracting value from the trade and in what ways.

Not all transactions within financial flows linked to ASGM are illicit themselves. In fact, in many cases you will find many are informal and some are completely legal. However, a few illicit or nefarious flows can drive overall flows, heavily influencing the direction and scale of financial and gold flows. It is these same actors and flows that can be the biggest obstacles to formalisation efforts as they often have the greatest motivation to ensure the sector remains informal. By mapping financial flows linked to ASGM it is possible to identify IFFs, and develop more informed interventions.

When conducting research and compiling your interview notes and other evidence, it is important you **organise and manage your research.** This is critical to not only being able to easily access information and provide evidence should your results be questioned, but also makes conducting analysis much easier. Once all your evidence has been collected, review the research with the goal of identifying common themes. Analysing patterns allows the evaluation to move from a more descriptive role to an analysing role. It is advisable to have a second person also review the notes to bring a fresh perspective, as this may confirm the themes, lead to new themes, or discussion as to the interpretation of the information.⁹⁶

While you conduct your analysis, you will want to assess the validity of your research. Questions to ask yourself are: How might your results and conclusions be wrong? What are the plausible alternative interpretations and validity threats to these, and how will you deal with these? How can the data that you have, or that you could potentially collect, support or challenge your ideas about what's going on? If you have the time and resources, you may decide additional research is necessary to improve the validity of research. For example, if there is a plausible alternative financial or gold flow than what you are proposing, you may want to conduct specific

We aren't going to totally eliminate illicit networks, so what you're trying to do is put a pebble in the stream big enough that the river will reroute, have a big enough ripple, that even for a little moment, we can be ahead of the game and possibly affect change. The question is, where should that pebble be placed? Where can it cause the biggest ripple? And when and how do we place it? And what do we do during that brief point of impact?98

research on this point to either confirm or rule it out as a possibility.97

You will want to **start your analysis with a basic flow.** This will likely be either your map of gold flows (from Research Question 4) or your original hypothesis. If your hypothesis was very accurate this may be a good starting point, but it is likely you will have uncovered a number of new or alternate flows from that which you had thought existed. It is recommended you start with the map of gold flows to avoid having any pre-conceived notions of financial flows that skew analysis. You will then want to add your Stakeholder Mapping to this chart. Stakeholder Mapping will be based on your desk research and previous experience, as well your investigations and additional stakeholders you have identified. Research Question 3 is also helpful, as that analysis will help identify actors who are extracting value from the ASGM trade.

It is at this point you will also want to **focus on identifying IFFs.** Questions to ask are:

What are the routes (entity, geography, people) by which IFFs are generated by the ASGM sector? This question is

⁹⁶ Evaluation Toolbox, 2010.

⁹⁷ USC Libraries, 2017.

⁹⁸ ELL and Global Initiative against Transnational Organized Crime, 2016, Launch and Roundtable: Summary Report.

largely focused on corruption and extortion, on the one hand, and illegal export of gold and profits on the other. Examples include:

- Instances of smuggling or tax evasion.
- Physical weak spots in an international border.
- What weakness(es) in the formal structure is provoking corruption? For example, are government agents tacitly allowed to keep the funds generated through raids or inspections?

What are the routes (entity, geography, people) by which IFFs are laundered through the ASGM sector? This question is largely focused on the exploitation of the sector by organized crime or senior politicians who may seek to launder criminally earned money through the sector. For example, a regional politician or a close family member, has a business relationship with a trading entity and provides cash to pre-finance. The trader buys gold, exports it, has it refined, and it is paid into another business's metal or currency account in a country such as Switzerland, Dubai, or offshore financial centre with strict secrecy codes. The politician is a minority shareholder in this OFC-based business, and so beneficial ownership checks won't pick this up unless standards are high.

You may find it easier to consider generated and laundered IFFs separately. In either case, these questions will help you unpack the IFF drivers, the methods for challenging them, the opportunities for resistance and advancement, and the stakeholders or groups who can be your allies.

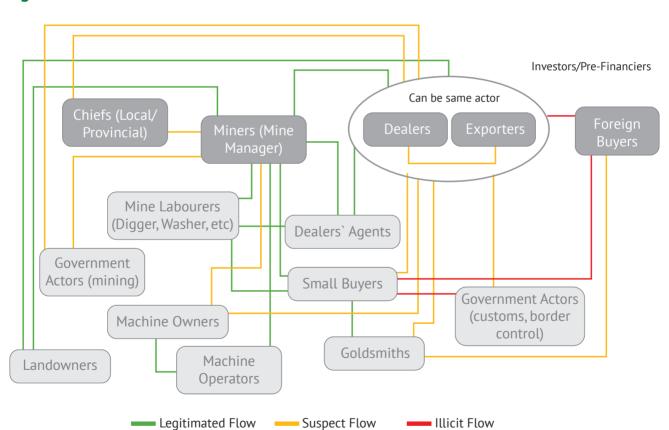


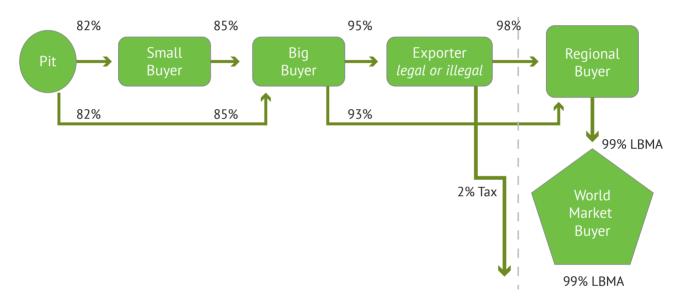
Figure 9 Financial flows linked to ASGM in Sierra Leone

Now that you have a map of financial flows, you will want to assess to what degree actors participating in ASGM are extracting value. In particular, you will want to do your best to estimate the value of IFFs, although this will likely be very difficult. If you are only tracking a very small ASGM sector or your diagram is relatively simple, you may be able to combine this information into one visual graphic. However, in many cases, you will already have a very complicated web and trying to add this additional information would make the graphic undecipherable. In

presenting your findings you will likely want to limit the scale and turnover and profit figures to text or develop a second graphic.

Secondary graphics may highlight certain points or phenomena. For example, in assessing the value actors are extracting from the ASGM sector and the value of gold that is being retained in the local community, it is useful to calculate the percentage of the 'London Spot Price' each actor is being paid. This can then be visualised on either your map of the gold supply chain or your financial flows map. For an example of this type of analysis you can refer to the Sierra Leone Case Study. Similarly, the report *Contraband Gold in the Great Lakes Region In-region Cross-border Gold Flows Versus Out-region Smuggling* undertook a similar mapping exercise, as shown in the figure below. The percentage figures represent the prices paid for ASM gold at each step in the chain, expressed as a percentage of the LBMA world gold price; figures in red represent the illegal ASM chain (smuggling), while figures in green represent prices in the legal ASM chain.

Figure 11 Typical value distribution along Great Lakes Region ASM gold chain (Source: Blore, 2015)



Once you have mapped out the direction, stakeholders, scale, and turnover and profit, you will want to **estimate how much value is retained by local economies.** While a precise estimate will be impossible without extensive, in-depth research, rough sketches can still be informative. The amount or degree will likely vary by level of transaction, decreasing as gold moves further upstream. In presenting your findings, you can use either the financial flows map or the graphic showing scale, turnover and profit. By calculating the percentage value of the gold each actor realized along the supply chain (ascertained from mapping the gold flow and assessing the turnover and profit of actors) you can then estimate the value retained by actors. When this is combined with interview questions that fall under Research Question 5, researchers are able to judge whether value is being reinvested and spent locally or abroad.

This level of analysis is important for informing policy responses. For example, if you find that value retained by miners and local buyers are being reinvested into communities, you may want to encourage governments and other stakeholders to adopt a development approach and engage with these actors. Alternatively, you may find buyers are investing abroad in luxury goods and real estate or exporting profits as capital flight in order to make investments abroad for business reasons, such as inflation or access to more secure financial institutions. Here, responses may focus on improving the business environment so that actors have a business case to retain greater profit in the local community – give them a reason to invest locally.

⁹⁹ The Sierra Leone Case Study can be found at http://www.globalinitiative.netor www.estellelevin.com.

¹⁰⁰ Blore, 2015, p. 40.

You will also want to compare the motivations of actors to your overall analysis of financial flows. As discussed earlier, enforcement efforts are often not sufficient to curb IFFs linked to the ASGM trade. In turn, resources ought to be targeted at IFFs and actors that are likely to have the greatest impact and must take into account the motives of actors. By conducting this analysis, you will be better positioned to advocate for certain policy and program initiatives that are evidence based.

Ultimately, your analysis should assess what the implications of your findings are, especially for vulnerable individuals and communities. This line of analysis will feed directly into your recommendations for action and intervention.

Conclusion: Shaping Informed Responses

As stated in the Introduction, ASGM plays a critical livelihood option for millions of individuals, families, and communities in some of the least developed places on Earth. ASGM represents a fellowship of the world's most vulnerable and least protected, joined by the powerful, the wealthy, and in some cases, the criminal and the exploitative. To reduce the negative impacts of ASGM and support the achievement of sustainable development objectives, formalisation is necessary. It is fundamental to the realisation of a host of objectives both in the sector, and in the broader economy.

Although financial flows are a significantly understudied aspect of the ASGM sector, especially when compared to environmental, social, cultural, and political influences and impacts, this handbook should help you in closing this gap. Through the application and adaptation of this toolkit, you are better equipped to trace and analyse financial flows, identifying the extent to which actors and flows are informal and legitimate (i.e. positive for society) or illicit and nefariously criminal (negative for society).

While a strong knowledge foundation is important to tackling IFFs linked to ASGM and furthering formalisation efforts, data alone is not enough to instigate action. You must reinforce the validity of your investigation and mobilise your findings to ensure the greatest traction amongst stakeholders.

IFFs need not remain an insurmountable obstacle. Through an examination of key issues, explanation of investigation and analysis techniques and methodologies, and briefing on how to strengthen and mobilise findings, stakeholders are better equipped to investigate, analyse and respond to IFFs linked to ASGM and to support formalisation efforts.

Reinforcing investigation and conclusions

Upon completing your investigation and analysis, consider whether your research may benefit from strengthening, enrichment, or validation prior to propagation or implementation of its recommendations. Additional steps to strengthen the quality of your research and the utility of your findings can include:

Strengthen your findings: If you find upon completing your research that it is not definitive enough to inform concrete interventions, a next step is to continue your research and enrich your findings. This could be the case if, for example, you find your knowledge of a specific type of flow is weaker than other flows, which could jeopardise the validity of your overall findings.

Rinse and repeat: ASGM and associated financial flows are not static entities. This is especially the case if criminal actors are extracting value from the trade: illicit networks are notorious for quickly adapting to regulatory and legislative actions and market demands. As such, your research should not be static. Use of the handbook is intended to produce a snapshot of a finite number of mines and stakeholder groups, although the process is intended to be scalable to a major research undertaking. Using the handbook again in other contexts or at a later time will enrich the findings from the first application. While you may vary the specific mine sites or trading hubs you visit, by keeping your knowledge on financial flows linked to ASGM current you are better positioned to develop and advocate for effective interventions.

Seek out research techniques that investigate and analyse downstream financial flows: This handbook will have enabled you to determine the financial beneficiaries of upstream ASGM activity with relative certainty through interviews and visits to mine sites and buying offices. As ASGM supply chains are notoriously secretive – with each actor often knowing only the actors one step away – there is a very low probability you will be able to draw definitive conclusions on end users or buyers several stages removed. However, these actors are thought to be the hidden drivers of illicit activity in the ASGM sector. They may be investing large amounts of money in ASGM and engaging in transnational gold export and smuggling, capital flight, and/or tax evasion. They are also the ones ultimately exploiting the labour and resources of other ASGM participants.

A sophisticated investigation will be required to ascertain the identity and motivations of larger, influential downstream actors. Adopting other research techniques, such as forensic accounting, to examine other aspects of the supply chain will enable you to contextualize and verify your research. ¹⁰¹ Analysing and understanding financial flows further downstream, and identifying IFFs, require alternative research tools, namely forensic accounting tools. Therefore, to build on your research, seek out additional tools and opportunities for collaboration and sharing in order to strengthen your research and knowledge foundation.

Mobilising findings

As discussed in the Introduction, there is a lack of information available on financial flows linked to ASGM, hand-icapping stakeholders working to formalise the sector and reduce the scale and impact of IFFs. This handbook is designed to help close that gap. By increasing the capacity of stakeholders, it is hoped they will be better positioned to effectively mitigate and respond to IFFs, ultimately increasing the likelihood of organisations achieving their development, political, and commercial goals. However, to optimise the chances of successfully achieving such goals, it is not enough to simply have the knowledge base; stakeholders must also successfully translate the information into knowledge-based responses.

Designing a robust, defensible, communications strategy is paramount as part of any intervention you intend to make. This is not just a matter of promotion or vanity: this means a thorough consideration of how the project will and should be perceived and engaged with. Perception can make or break any intervention regardless of how well informed or designed it is.

Further, what you share, how, and when, could affect security for all stakeholders connected to the project. In determining how to share data and design responses, it is important to recognise that due to the sensitive nature of the topic, **findings may be sensitive and could be politically explosive**. Contributing factors which may significantly increase risk of publishing findings include the value of the sector (if it is a high-stakes business) and if there is a history of corruption and/or violence being used to silence whistle-blowers or activists.

In this same vein, **discretion** in the disclosure of your findings should be employed. It may be that they are initially shared on a needs-to-know basis, with close partners involved in project planning, security, and monitoring. To illustrate, consider how a heightened level of discretion would be necessary in each of the following situations:

• An NGO that is seeking to end nefarious activities by pressurising businesses or government players to take action could initially reach out directly to the targeted business or government to give them an opportunity to review the findings and address the issue discretely;

An illustration of the product of this line of inquiry is the work of Khadija Sharife, a journalist contributor to the Panama Papers leak and subsequent reporting in 2016. Her filing on gold's connection to international finance and tax havens can be found here: http://www.timeslive.co.za/africa/2016/04/04/Panama-Papers-The-DRC%E2%80%99s-Gold-Standard. And a discussion of forensic accounting's applicability to ASGM formalization, IFFs, and the GIFF project is part of a blog series available, here: http://www.estellelevin.com/follow-the-money-how-to-formalise-the-gold-sector/

Developing Policy Responses and Recommendations

Key Question	Discussion
What are the primary drivers of financial flows (especially IFFs)?	What are the contextual realities that motivate people or entities to behave informally or illegally and seek to extract value rather than add value to the sector?
What are the opportunities for addressing these drivers?	 Where do you see the entry points for changing the incentives that drive the generation of IFFs by the ASGM sector? Is there an anti-corruption commission and should you bring your findings to their attention? Is there a focus on transparency and accountability mechanisms in another program that could be leveraged? Can you connect a clamp-down on corruption with a political figure's political ambitions or strategy? Who might see a political or economic opportunity in helping you tackle some of these entry points?
What are the barriers for addressing these drivers in these ways?	 In what ways might barriers put your project / organization / individuals for whom you are directly responsible at risk? Can this be adequately mitigated? Beneficiary groups who might resist? Vested interests? Politics? Resources? Geography? Consider not only armed resistance from a place of strength but also passive resistance and 'weapons of the weak'¹⁰²
In what ways might attempting to address these drivers put vulnerable people more at risk? Can each risk be adequately mitigated?	 This can require an additional process such as conducting an impact assessment, materiality assessment, or risk mitigation planning prior to conducting any program or intervention. Is there a group that could be scapegoated for changes to the status quo? What safety nets already exist for vulnerable groups or could be created?
What other stakeholders or initia- tives need to be considered?	You may need different strategies for each of these different groups
What role could these stakeholders play in helping/hindering achievement of your mission?	 What roles do you foresee for each in helping push for disruption? Or do they just need to know some of your findings to achieve their own missions independently? Is there an opportunity for coordination?
What is the right timing for your intervention?	 How urgent is the intervention? How much planning is required? Are there upcoming events in the political, sector or cultural calendar(s) that provide an opportunity for intervention or could derail an intervention?

See further James C. Scott's work on "Weapons of the Weak" which examines the distinct, though often no less effective, methods weak parties utilize to resist or effect change. Examples include foot dragging, gossip, feigned ignorance, quiet disobedience,

- A development organisation evaluating a number of locations for an intervention project could discretely consider each location's viability for alternative financing interventions based on the relative embeddedness of illicit actors in the financial value chain; or
- A mining company seeking to manage illegal mining on its concession might need to delay disclosure of findings on financial flows between its artisanal miners, local law enforcement, and private security guards until they can ensure the security of their staff.

In addition, be wary of privately sharing findings with government officials, in particular those who are located near mining locations. As this handbook has made clear, government actors may be extracting value from the sector through corrupt transactions and may have an interest in maintaining the informality of the sector. In other cases, government actors may be interested in capitalising on the information you share; for example, they may choose to take out a mining concession at a location you have found to be a very profitable ASGM spot and later attempt to remove the ASGM community. In many cases government actors will, hopefully, be very supportive of formalisation efforts, but this is a risk you should be aware of.

Your findings will inform the recommendations on how your target stakeholders can address financial flows, in particular IFFs, contributing to ASGM sector informality. In the table above are general questions that you can consider after your investigation and analysis to help you develop solid policy responses and recommendations for interventions.

If you intend to take or call for actions or interventions based upon your findings, how and when the status quo will be interrupted must be extremely well planned and strategic. Ideally, interventions will disrupt the status quo in a way that is beneficial and productive rather than destructive or corrosive. 'Beneficially disrupting' the status quo of ASGM informality will ideally pull ASGM from the informal sector into the formal sector, consequently furthering human rights and sustainable development goals.

Beneficial Disruption: interventions that lift the sector towards optimisation of the ASGM opportunity for sustainable development.

A beneficial interruption could come in the form of a government intervention to provide a legal framework for rapid, small-scale financial transactions; a development organisation's programme to provide licit streams of funding for pre-financing of ASGM activities; or a licit business venture attempting to engage with an ASGM sector. All cases will be more likely to succeed if informed by the application of this tool, the mapping of

financial flows, and the analysis of the strengths, weaknesses, benefits, and losses of the relevant stakeholders.

The following are key principles to consider as you are planning your next moves so that you can disrupt beneficially. These focus on human rights, protection, and security, which must be paramount in any action. Additional planning and guidance, drawing from best practices and nuanced to your particular context, should inform any interventions.

Key considerations to Beneficial Disruption

Principle	Discussion & Key Questions	
Keep the data secure	What is your protocol for data management on devices, in paperwork and in communications? How will you protect computers, USBs, phones, etc. from being lost, copied, or hacked? How will you prevent field notebooks, materials from team planning sessions, etc. from getting into the wrong hands? What procedures and statements around confidentiality, disclaimers, secure delivery, NDAs, etc. will you put in place?	
Assess, understand and mitigate the impact of your findings on people's physical security.	Either through an intentional communication or a data leak, if your raw data (e.g. interview transcripts, recordings) or findings are either communicated unwisely or get into the wrong hands, you could put people's lives at risk. Giving consideration to people's security is paramount at every step of the way. See Source Protection at page 38.	
Assess, understand and mitigate the impact of your findings on people's social security.	Avoid increasing untargeted people's vulnerability to non-physical exploitation violence, other human rights abuses, or economic disadvantage.	
Leverage others and empower them to take action.	Financial flows in the ASGM sector is a systemic issue with many different types of actors complicit in or accustomed to the status quo of power relations and cost/benefit distributions that they generate. Tackling IFFs in the ASGM sector will mean working with the powerful, and you will need to assess which people in government, business, or civil society have their interests aligned with your own mission and which do not. This will undoubtedly include working with actors whose actions heretofore have been part of the problem.	
If it is likely to have traction and not alienate, use the language of human rights as a framework for your intervention.	This positions government as duty bearers to protect rights, businesses as having the responsibility to respect rights and can reframe how the public and private sectors think about their relationship to society, providing motivation for taking action. One-off conversations making this point are unlikely to have impact, but embedding HRBA into the ethos and logic of your interventions, or mobilizing support from others who are focused on protecting human rights could be an effective framing for empowering people to take action. ¹⁰³	
Where human rights will not have traction, consider how your findings align with the political preferences of government and business in your field of intervention.	and attention is placed (e.g. Ethiopia), and in others saving face and hierarchy are	

¹⁰³ For more on this topic, see: http://oecdinsights.org/2016/03/16/mongolias-artisanal-miners/



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Annex 1: Interview Questions

Mine labourers

Research Question	Key Interview Questions	Sample Probing Questions
	1. What is your name?	
Introductions	2. What do you do here (at the mine site)?	
	3. When did you start working here (at the mine site)?	
	4. Where were you before?	Where were you born?Have you ever done other work? How much did that pay?(If young looking) Do you go to school?
Why do people engage in the ASGM sector?	5. Why did you start mining?	 Did you fall into mining by chance? Did you start because mining looked good or something else looked bad? How much money would you make if you did something else?
	6. How did you know to come here?	Did you know any of the other mine labourers or mines before you started working here? How?
	7. Where do other workers come from?	What nationality/ ethnicity/ tribe are they?Do people from the neighbouring villages work in the mines?

	8. About how much gold do you get per day/ week/ month?	 How many days a week do you work? How many hours per day? How often does the mine get gold? (Ex. How often is gravel washed?) Does everyone get the same amount? How much does the mine manger keep? Is the amount or the percentages fixed?
		 How much does this change during rainy/ dry/ etc. season? Do you work the whole year?
How much gold is produced (estimate)?	9. What is be the best/ worst day/ week the mine would have? (production value)	 How much does this change during rainy/ dry/ etc. season? How often do you have good/ bad days/ weeks? How long has the site been open? How long will you mine a site for?
	10. How much is 1 gram (or other unit of measurement) of gold worth?	 How much does the price fluctuate? Why does the price change? What was the lowest price ever? What was the highest? Does this price take into account purity? How do you know how pure your gold is?
	11. Are there other mining operations around here?	 How many? Where? Are these as productive / profitable as this one?

How much turnover and profit are actors generating?	12. How are you paid? (How much?)	 How does your payment work? Do you get a share of profits or bonuses? Are you paid a daily wage or weekly or monthly salary? In cash? Gold? Do you prefer to be paid in gold or cash? Why? Do people think cash is reliable? How much are other people paid?
	13. Where did the money/ capital you and/or the mine started with come from? (Pre-financing)	 What equipment is used to mine or process gold? Where do you get your equipment from? How much does it cost? How long does it take before you hit the productive gravel or rock? How many people have to work for that time to get to the gold? Did you receive any money or goods from someone before you started mining / buying / trading? (money, equipment, mercury, food, accommodation, etc.) What terms did they give you for advancing you these things? If you didn't find any gold for a few days and you needed a loan. Who could you ask? How much could they lend you? Do they work at the mine?
	14. What must you do to get access to the site?	 What must you do to get access to the site? Who is your agreement with? How does site management work? Who is in charge? (The boss?) Do you ever have to pay anyone else to protect your access to the site or to your pit? Who? Why? (how much? How often?)
	15. Does the government ever come here?	 How often do they come? What do they do when they're here? Is this part of their legal duties or something else? Is their presence helpful? If not, do they give anyone a hard time? Do they ever ask for money or something else from you? When? Why? How much money do they take?

What is the gold flow? (Where is gold coming from and going?) 17. Is anything done to	16. Who do you sell your gold to?	Is it the same person every time?How do you build trust?When do you sell your gold?Have you ever not been able to sell your gold?
	17. Is anything done to the gold to make it more pure?	Are mercury/ chemicals/ etc. used?Who is in charge of that process?Who supplies the materials you need to purify the gold?
What proportion of the value of the gold is retained in the local economy?	18. What do you spend your money on?	 Do you have a family and/or children? (If sending money) How do you get it to your family/ friends/ etc.? What do you do with extra money?
Conclusion	19. Can you show me the pit/gravel pile/etc. you're working on?	

Miners

Research Question	Key Interview Questions	Sample Probing Questions
Introductions	1. What is your name?	
	2. What do you do here (at the mine site)?	 Are you in charge of anyone else? How do you recruit your workers? How do you retain them?
	3. How long have you been mining here?	Do you live in the area?Where were you born?Where are you from?How long do you plan to stay?
	4. Why did you start mining?	What did you do before? How did you decide to start mining here?
	5. How many people are working at this mine site?	How many men/ women/ children are at this site?
Why do people engage in the ASGM sector?	6. Where do other workers come from?	 What languages do people speak? Is everyone from the same region? What nationality/ ethnicity/ tribe are they? Do people from the neighbouring villages work in the mines? Is anyone connected? For example, are there any families or relatives here?
	7. How does the mining process work here?	 Walk me through the process you went through today/ this week. Is this typical? If not, what is unusual about it? How is that process governed? Who's responsible for what? And who sets the rules on how things should work around here?
	8. About how much gold do you get per day/ week/ month?	 Smallest amount? Largest amount? What is be the best/ worst day/ week the mine would have? (production value) Does it change? (Ex. Dry season v. wet season?)
How much gold is produced? (estimate)	9. How much is 1 gram (or other unit of measurement) of gold worth?	 Do you know how pure the gold is? How much is 1 gram (or other unit of measurement) of gold worth? What's the best price you've ever received? When was that? What's the worst? When was that?
	10. Are there other mining operations around here?	 How many other mining operations are there in the area? Does everyone know each other, or do you think there are mining operations going on secretly?

How much turnover and profit are actors generating?	11. Where did the money/ capital you and/or the mine started with come from? (Pre-financing)	 Do you have other business interests besides working in gold? Which is the primary business? Gold or the other business? What function does gold serve then in the overall business that you do across sectors? Do you use banks or other formal financial service providers to manage your savings, to borrow money, to run current accounts? If not, why not? What is the advantage or disadvantage of doing business with the bank(s)? Did you get money from an investor/ supporter to start mining? How much does the supporter/ investor buy gold for? Do you have to sell your gold to your investor/ supporter? If yes, what happens if you don't sell to them? Do you also pre-finance the mine labourers? If so, where do you get that money from? What terms and conditions do you set? Why these?
	12. What must you do to get access to the site?	 Do you have to pay a chief or landowner to mine here? How much do you have to pay them? How often? Do you know what the money is used for?
	13. How much are mine labourers paid?	 How do mine labourers get permission to work here? Do you give mine labourers food or other payment? How much do you buy gold for? How much do you pay mine labourers for the gold you buy from them?
	14. Does the government or law enforcement ever come here?	 Does anyone ever give you trouble or bother you? How much do they charge each visit? Why do they charge you money? How often do they come?

What is the gold	15. Who do you sell your gold to?	 Can you tell me about the buyers? Are there any you particularly like to do business with? Why? And not? How do buyers come to the site or place an order? How many buyers come to buy your gold? How much do you buy gold for? How much do you sell your gold for? How do you know how much to buy and sell gold for? How big of orders do you get for gold?
flow? (Where is gold coming from and going?)	16. Do you have to pay any unofficial fees, taxes, or bribes?	Does the Ministry of Mines come here?What happens when they come?Do they ever give you any trouble?
	17. Do you know where/ who to buyers sell their gold?	 How do you know buyers sell their gold here? How do you know buyers sell to that person?
	18. Is anything done to the gold to make it more pure?	Have you heard about other people refining or purifying gold?
What proportion of the value of the gold is retained in the	19. What do you spend your money on?	 How much of your income is spent on food, water, shelter, and tools? Do you have any earnings saved/left from last week? What did you spend it on? How much of your profits would you say you or other family members invest into other sectors? Which sectors? Why these ones? Tell me about something you saved up your money for to purchase. How much does a [local status symbol e.g. motorbike, watch, phone, prostitute,] cost. How do you keep track of how much money you take in or spend?
local economy?	20. What do other people (mine labourers, buyers, etc.) spend their money on?	 How much income do people spend on food, water, shelter, and tools? Where do you shop? After a really successful day at the mine, will everyone go celebrate? If so, how? Will anyone not come? Why? What can someone buy that shows they are really successful?
	21. Do you ever give/ do- nate money back to the local community?	 Why or why not? Do you or the digger ever do charitable work?

Conclusion	22. Is the gold/ ASGM sector growing?	 Is gold a good business to be in right now? Will you invest more money? Are new buyers coming into the market? Who are they? Are they coming to settle or do they come with cash to make one-off purchases?
	23. Can you show me the pit/ gravel pile/ etc. you're working on?	How did you pick this pit, this location?

Buyers

Research Question	Key Interview Questions	Sample Probing Questions
	1. What is your name?	
Introductions	2. How long have you been buying gold?	• is this your primary business?
	3. How did you start as a gold buyer?	Where are you from?Did anyone teach you how to buy gold?
Why do people engage in the ASGM sector?	4. How do other people become gold buyers?	 Do a lot of people become gold buyers the same way you did? Do mine labourers and/ or miners ever become buyers? If yes, how often does this happen?
	5. Is gold a growing business?	 Which is bigger or gold? (ex. Diamonds) Why? Is the gold business changing? Why is the gold business growing/ shrinking/ staying the same?
How much gold is produced /	6. How much gold are mines producing?	 Do you buy directly from the mines? How many mines do you buy from? At the mines you buy from, do the miners/ mine labourers only sell to you? How many active sites are there in this area? How often do people start new mines? What is the quality or purity of the gold produced? Where has high quality gold? How do you know the quality of the gold is good or bad? If I said I wanted to buy 10kg of gold, how long would it take to get it? Where would it come from? How much gold could you buy in 1 week?
bought? (esti- mate)	7. Does the amount of gold being produced change?	When does it increase/ decrease?Why do production rates change?How much gold is produced during rainy/ dry season?
	8. How much is gold worth? (price?)	 How do you know the gold price? If I wanted to buy 10kg of gold, how much would it cost? Do you purify your gold? How? How else do you add value to your gold? If there were refineries here would you use them?
	9. How much gold do you buy?	 How often do you buy that much? In what form is the gold when you buy it?

	10. Who is pre-fi- nancing mining and trading operations?	 Who buys the equipment and tools for mine labourers/ miners? Where does investment money come from? How many mine labourers/ miners get funding before they start mining? Do you invest any mining operations? Do you support any mine labourers or miners? If yes, do they have to sell their gold to you? If no, why don't you invest in or support any mining operations? Do other buyers invest in or support mining operations? Do you do any prospecting?
	11. What is the breakdown of profits at the mine site?	 How much business did you do last week? Last year? What value or volume of gold was traded? (Turnover) What would you say are the direct costs of running your trading business? So annual profit is probably X, is that right? How would this differ across the different types of buyers in this market? Do you know how much of the gold profits mine labourers and miners get? Do you know how much mine labourers/ miners are paid? Do you know how much of the profits investors get?
over and profit are actors gener- ating?	12. Do people work for buyers?	 Does anyone work for you? How many people work for you? Does anyone work for other buyers? Is it a good job to work for a buyer? (How much would you make working for a buyer?)
	13. Is there competition between buyers?	 How many buyers are there like you? How many other (types) of buyers are there?
	14. How much are you buying gold for?	How do you decide the price?
	15. How much are you selling gold for?	How do you decide the price?
	16. Do you have to get permission or pay anyone to buy gold?	
	17. How much does a gold buying license cost?	 Do you have a license? How do you get a license? How much does a license cost? Do you have to pay any extra payments to get a license? (bribes?) How often do you have to renew a license? Why would someone get/ not get a license?
	18. How much do government or law enforcement officials profit from the gold trade?	 Do police / customs/ law enforcement ever give you trouble? How much do you have to pay to get out of trouble? How often does this happen?

What is the gold flow? (Where is gold coming from and going?)	19. Who do you buy gold from?	 Why do you buy from? What is your relationship with the people you buy from? Do you buy gold directly from the mines? Do people come to you to sell their gold? If yes, who? Do mine labourers/ miners only sell gold to investors/ supporters? Do mine labourers/ miners have a choice of who they can sell gold to? What happens if they don't sell to someone they have an agreement with who has given them money? How do you pay for gold? (currency?)
	20. Who do you sell gold to?	 Why do you sell to? Who wants/ needs gold? How often do you get orders? How do orders for gold work? What is the average order size? When you go to to sell gold, how much do you take to sell? How often do you go to to sell gold? Where do big orders come from? What is the biggest order you've ever received? Can you tell us about the big buyers? (Who is the biggest buyer?) Who do the people you sell your gold to sell to? How are you paid for gold? (currency?)
	21. Where does gold go?	 How do you transport your gold? How do you insure it? Do you ever take your gold somewhere else to sell it? Is gold taken out of the country? If yes, where? How much of the gold goes to (country)? Who takes gold to (country)? Would you ever want to be an exporter? Why or why not? If your business gets bigger where will you take your gold? Is gold ever used as a currency?
	22. Is gold smug-gled?	 Why is it better to take gold out of the country rather than selling to a local buyer/ exporter? Do you get a better price in (neighbouring country)? How much higher of a price do you get in (neighbouring country)? What route does gold take? How do people move it?

	23. What types of access to credit options do they have?	
	24. What is the purpose of gold buying in their bigger commercial strategy?	• Is it the ends or the means?
What proportion of the value of the gold is retained in the local economy?	25. What do you spend your money on?	
	26. What do other people spend their money on?	How long would it take a digger/ miner/ buyer to buy? (ex. Motorbike)
	27. Is money ever invested into the community?	Do mine labourers/ miners/ buyers ever donate money to schools or hospitals?
Conclusion	28. Do you have any recommendations on how the gold sector could be improved?	Do you have any suggestions on how the system could be changed?
	29. Can we see your buying equipment?	

Goldsmiths/Smelter

Research Question	Key Interview Questions	Sample Probing Questions
Internal continue	1. What is your name?2. How long have you doing your work?	
Introductions	3. Tell me about your gold products,	• e.g. coins, jewellery? What sells best? Why this? What do people use this for?
	4. How did you start as a gold-smith/smelter?	 Who trained you? Did you apprentice? Did you do any jobs before?
	5. How do other people become goldsmith/smelter?	 How many other goldsmiths/smelters are in town? Do you have any competitors? How do they differ in what they do?
	6. Is gold a growing business?	What changes have you seen in the last year or so in the people who come to you to refine their gold?
Why do people engage in the ASGM sector?	7. Who are the other ASGM sector stakeholders?	 Do you ever process gold that isn't raw (from a mine?) What can you tell me about the people who bring in gold to recycle? What about the people who come in to purchase gold
	8. How much gold are mines producing?	 Are more or less people coming to get their gold refined this year versus last year? What changes have you noticed in the quantity of the gold people are bringing? What about the quality? Does the amount of gold being produced fluctuate?
How much gold is produced / bought? (estimate)	9. How much is gold worth? (Price?)	 How do you know the quality of the gold? How can you tell where the gold comes from? When you refine the gold, do you ever add anything, like an alloy? What might they add? For what purpose? If someone wanted a 100g gold bracelet, how much would it cost if they brought their own gold?

How much turnover and profit are actors generating?	10. How much gold do you buy?	 Do you ever buy gold? How much are you buying gold for? How much are you selling gold for? Do you have to get permission or pay anyone to buy gold? If you wanted to buy the gold, how much would it cost per gram? If someone wanted to buy from you a 500 gram gold necklace, how long would it take you to get it? Do you ever extend credit to dealers or miners? Why?
What is the gold flow? (Where is gold coming from and going?)	11. How much does a gold smith/smelting license cost?	
	12. Is the gold smelted to smuggle it out of the country?	 Do the bringers of gold powder all want one thing made, or lots of different things? Do you ever just do a brick or an ingot? How big?
	13. How much do government or law enforcement officials profit from the gold trade?	 Do government/law enforcement officials ever come to visit you? What happens when they come? Do they ever give you any trouble?
What proportion of the value of the gold is retained in the local economy?	14. Who do you buy gold from?	Where do you clients come from? Are they local?
Conclusion	15. Could you walk me through the process you use to refine the gold?	What tools, techniques, processes do you use?Do you ever use chemicals to test or purify the gold?

Chiefs/Landowners

Research Question	Key Interview Questions	Sample Probing Questions
	1. What is your name?	
Introductions	2. What is your position?	What are your duties as a?
introductions	3. How long have you been in your position?	 Who was in the position before you? How did you come to be in this role?
	4. How long have people been mining gold in your district/ province/ land etc.?	When did it start?Why did they begin mining?
	5. How many people are engaged in ASGM?	 How many people work at a mine? Has the number of people mining gold in your district/ province/ land etc. increased?
Why do people engage in the ASGM sector?	6. Where do mine labourers/miners come from?	What nationalities/ethnicities are they?What language do they speak?
	7. What percent of people in your area mine?	 How many men mine versus how many women mine? And boys and girls? What other occupations do people have? What are the growing livelihood and economic sectors? Which are in decline?
How much gold is pro- duced / bought? (esti- mate)	8. How much are gold mines producing?	 How long would it take a local mine to get 1kg of gold? How pure is the gold from the mines? Is anything done to the gold to make it purer? How many mines are there is your area? On average, how much gold does each mine produce every week/ month?

How much turnover and profit are actors generating?	9. How do people access land?	 Do they need to get permission from you or someone else? How does the process work? Do people have to pay to access land? If yes, how much? Who? How often? How do you decide which land is ok to mine?
	10. What are the roles of chiefs/landowners in mining?	 Do you regulate mining at all? Do you collect payments from mine labourers/ miners? If yes, why? how much? How often? How do you protect mine labourers/ miners/ community members/ etc.?
	11. How are mines financed?	 Where do mine labourers/ miners get their equipment from? Are there any big investors/ supporters/ bosses around here? Where do investors/ supporters get their money from? Do mine labourers/ miners have to sell to investors/ supporters?
	12. How much is gold being bought and sold for?	How often does the price change?
	13. How much are mine labourers/ miners paid?	 How much are people making from mining? Do you know how profits are split at mine sites? Do you know how much of the gold profits mine labourers and miners get? Do you know how much of the profits investors get?
What is the gold flow? (Where is gold coming from and going?)	14. Who buys the gold from mine labourers/ miners?	 Do you know any gold buyers? Are there any big traders? How does the gold buying system work? Do the gold buyers do business in other sectors also? Which ones? Is gold their primary business or a secondary one? What benefit does dealing in gold bring to their other businesses?
	15. Where is the gold going?	 How does it work after the gold leaves the mine? Where do the exporters take the gold to?

What proportion of the value of the gold is retained in the local economy?	16. Is money from gold mining invested back into the community?	 What do you do with the money you collect from miners? Do miners ever give directly back to the community? If yes, how is money spent in the community?
	17. What do people spend their money on?	 What necessities will everyone buy first? If someone has extra income, what will they spend their money on? How do mine labourers/ miners/ buyers spend their money in the community? How dependent are local shop keepers on money from gold mining?
	18. What is good/ bad about mining?	What is the biggest benefit gold mining has brought to your community?What is a challenge that gold mining has brought to your community?
Conclusion	19.	

Government

Research Question	Key Interview Questions	Sample Probing Questions	
	1. Can you tell us about the department/ unit/ etc.?	 What does the department/ unit/ etc. focus on? What are the department/ unit/ etc.'s priorities? Can you tell us more about project? 	
	2. Can you tell us about what you do?	Can you tell us about your job?What are your duties?What are your functions in relation to the gold sector generally?	
Introductions	3. Where is the department/ unit/etc. based and/or operate?		
	4. What is the interaction between department/ unit/ etc. and other government branches?	 Who is the prosecuting authority? What is the process like for enforcement? Do you work with development or civil society organizations?	
	5. What are the biggest challenges you face?	 Do you have enough resources to do your job? What assistance/tools would be most helpful to you for your work? Has there been progress in your work? 	
	6. Do you monitor ASGM?	 How often do you visit mine sites/gold offices? How many do you visit a month? What happens when you find illegal gold operations or illegal gold practices? Is there a culture of impunity? 	
	7. What are the differences between artisanal, small-scale and large-scale mining?	 How do you define artisanal/ small-scale mining? What happens when someone brings an excavator or other piece of machinery to a site? 	
Overview of ASGM and gold sector	8. Can you tell us about licensing? (Process, cost, number of people licensed, etc.)	 Can you describe the process to get a license? How do you pay for a license? How much do you have to pay mining official/ chief/ landowner/ etc.? Can you negotiate prices or fees? Is it possible to have more than one license? (Maximum number?) 	
		 How long does the licensing process take? How long does a license last for? How many people come in each month to get a license?	

Why do people en-	9. Who is engaged in ASGM?	 Who are? What percent/ fraction of mine labourers/ miners/ buyers/ etc. are? What can you tell us about mine labourers/ miners/ buyers/ etc.? 		
gage in the ASGM sector?	10. Is there a group or figures you associate with the gold sector?	What types of people dig/ mine/ buy gold/ export gold?		
	11. Where do people come from?	 What country/ region? What other occupations do they leave to mine?		
	12. How much ASGM is happening?	 Is there illegal mining? (Proportion of miners who are illegal?) What happens when there's illegal mining? 		
How much gold is produced / bought? (estimate)	13. How much gold is (country /region/ area) producing?	 How do you think the official figures vary from unofficial production? What are some differences between how the national government perceives things and how things are perceived at the local level? 		
	14. Do you know much the gold trade is worth? (Turnover, profit, direct costs)	Who is making the most money in the trade?		
	15. Where is the money coming from to finance mining? (Who loans money or equipment?)	 Who loans money or equipment to miners/mine labourers? Are there lots of pre-financiers (supporters)? 		
How much turnover and profit are actors generating?	16. What would be an example of illicit activity related to importing (money, equipment?)			
	17. Who is profiting?	 How do you know is profiting? Does also pre-finance ASGM operations?		

	18. How much ASGM is happening? (Where?)	 Do you see seasonal changes? Changes year to year? How does ASGM compare to other artisanal mining? Why would someone do one kind versus the other? Where do most of the miners and mine labourers stay? 	
What is the gold flow? (Where is gold coming from and going?)	19. Are you seeing gold smuggling?	 How do you know people aren't declaring gold exports? Are people forging documents? What is the export tax/royalty on gold exports? What happens when you find gold that's been smuggled? How much gold has been confiscated? (What has been done with it?) 	
	20. Where is the gold going?	How is it moved?	
	21. What do people do with gold? (Refined, used as money, money laundering, etc.?)	 What does group do with the gold? Who are the groups or actors engaged in? How do people make gold more pure? 	
What proportion of the value of the gold is retained in the local economy?	22. Does any benefit or money go back to communities?	 Who do people in the community benefit from gold mining? Which shops or services are dependent on gold mining? Have you ever heard instances of miners making charitable donations to the local community? Why would they do that? 	
	23. Is there anyone we should talk to?	Do you know any?Can you put us in touch with any?	
Conclusion	24. Do you have copies of any reports/ licenses/ applications/ etc.?	Is information available online?	

Civil Society/Journalists

Research Question	Key Interview Questions	Sample Probing Questions
	1. Can you tell us about your work?	 What does your organization focus on? What are your organization's priorities? Can you tell us more about project?
Introductions	2. How do you work with and/ or know about ASGM and/or the gold sector?	Can you tell us about your job?Can you tell us about your work with ASGM communities?
miloductions	3. Where is the organization based and/or operate?	
	4. What are the biggest challenges you face?	 Do you have enough resources to do your job? What assistance/tools would be most helpful to you for your work? Has there been progress in your work?
Overview of ASGM and	5. Do you monitor ASGM?	 Where do you conduct your work? How often do you visit mine sites/gold offices? How many do you visit a month? What happens when you find gold operations?
gold sector	6. Can you tell us about the ASGM sector?	
	7.	

	8. Who is engaged in ASGM?	 Who are? What percent/ fraction of mine labourers/ miners/ buyers/ etc. are? What can you tell us about mine labourers/ miners/ buyers/ etc.? 	
Why do people	9. Is there a group or figures you associate with the gold sector?	What types of people dig/ mine/ buy gold/ export gold?	
engage in the ASGM sector?	10. How/why do people start working in ASGM?	How does ASGM compare to other artisanal mining? Why would someone do one kind versus the other?	
	11. Where do people come from?	What country/ region?What other occupations do they leave to mine?	
	12. Are government or law enforcement involved in the ASGM and/or gold sector?	• If yes, how so? What roles do they play?	
How much gold is produced / bought? (estimate)	13. How much ASGM is happening?	 How many mines do you know of? Where are mines located? How many people are working at mine sites?	
	14. How much gold is (country /region/ area) producing?	 Do you know how much gold is being produced? How much gold do you think is produced by a single mine? How do you think the official figures vary from unofficial production? What are some differences between how the national government perceives things and how things are perceived at the local level? 	
	15. Where is the money coming from to finance mining? (Who loans money or equipment?)	 Who loans money or equipment to miners/mine labourers? Are there lots of pre-financiers (supporters)? 	
How much turnover and profit are actors generating?	16. How much are people paid for their gold?	 What determines how much people are paid for their gold? How much do sell gold for? How much do buy gold for? 	
	17. Who is profiting?	 How do you know is profiting? Does also pre-finance ASGM operations? Who do you think is making the most money? 	

	18. How much ASGM is happening? (Where?)	Do you see seasonal changes? Changes year to year?Is there someone who controls lots of gold mines?	
What is the gold flow? (Where is gold	19. Are you seeing gold smuggling?	 How do you know people aren't declaring gold exports? Are people forging documents? Why would someone smuggle gold?	
coming from and going?)	20. Where is the gold going?	How is it moved?	
	21. What do people do with gold?	 Refined, used as money, money laundering, etc.? What does group do with the gold? Who are the groups or actors engaged in? How do people make gold more pure? 	
What proportion of the value of the gold is retained in the local economy?	22. Does any benefit or money go back to communities?	 How do people spend their money? Do people in the community benefit from gold mining? Which shops or services are dependent on gold mining? Have you ever heard instances of miners making charitable donations to the local community? Why would they do that? 	
Conclusion	23. Is there anyone we should talk to?	Do you know any?Can you put us in touch with any?	
	24. Do you have copies of any reports or publications?	Is information available online?	



