

New report: A large-scale perspective on small-scale mining

The operation of large-scale mining (LSM) and artisanal and small-scale mining (ASM) within a shared physical environment presents a complex dynamic that is not well understood. We have explored this dynamic in our paper [A Large-scale Perspective on Small-scale Mining](#).

In the paper we use the term “interface” to characterise the many points at which LSM and ASM physically intersect at the asset level and the ways in which these interactions shape options and outcomes for both groups. Our objective is to show that by examining the LSM-ASM interface through the lens of large-scale resource development, we can achieve greater clarity about success factors for existing pro-ASM policy initiatives.



*Panning for gold in Papua New Guinea.
Photo: Assoc. Prof. Nick Bainton*

Historically, policy-makers approached ASM as a small-scale version of LSM, rather than a sector with its own distinctive characteristics. While there are similarities, there are many differences in scale, technology, mechanisation, formal recognition by the state, and engagement with systems of authority.

What Happens in the LSM-ASM Interface

There are many scenarios that can develop when the large and small-scale sectors form an interface. These include:

- totalising displacement in design – mining developments eliminate ASM activities by design
- co-existence through “live and let live” – the eviction of ASM from an area of LSM does not occur in all scenarios
- pit incursion and distinct commodity interests – both sectors have an interest in different commodities, in the one location
- waste, incursion and perimeter protection – LSM displaces ASM, but does not prevent an interface from forming

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- self-determination and indigenous territories – traditional authorities prohibit on the grounds that it has deleterious effects on local custom and belief
- forced displacement and alternative sites – LSM becomes involved in finding and securing alternative mining sites for ASM
- market-driven encroachment, criminal activity – complex challenges surface as the sectors each respond to market pressures and footprint dynamics
- alternative livelihoods at mine closure – an LSM-ASM interface forms at any stage of the mine lifecycle.

Known Risks in the Interface

There is no single LSM-ASM interface. In each scenario, the interface between the two sectors poses a variety of risks that require careful attention. Known risks include:

- displacement and resettlement compensation
- land rights and exclusive possession
- safety and security
- conflict and violence
- environmental impact
- incompatible regulatory frameworks.

Due to the country settings where LSM-ASM interfaces most commonly form, we know that these issues are made more difficult by the following factors:

- geographic remoteness
- developing country status
- generally high levels of poverty
- weak systems of state and corporate
- governance on this topic
- customary systems of land tenure
- presence of indigenous and other land-connected peoples.

Next Steps

There is an ever-growing interest in the ASM sector from international agencies, such as the World Bank and the IFC. Recent initiatives indicate a trend towards greater recognition of ASM rights to access and work geological resources. At the country level, this is articulated through efforts to “formalise” the legal standing of ASM through the granting of formal leases and permits by the state.

LSM standards on ASM are nascent. Early developments by a small number of LSM companies signal the potential for greater engagement on LSM-ASM interface issues.

While most major mining companies do not have dedicated ASM policies, they have established or endorsed other standards that indirectly relate to how the industry engages positively with people in their operating context and supply chain. Very few standards or instruments reference the physical LSM-ASM interface in direct terms. We identified six that engage the topic at hand, including [Working](#)



A “Chan fa” machine. A popular hammer mill used by small scale miners. Photo: Lynda Lawson

[Together](#), the [Responsible Jewellery Council \(RJC\) Code of Practice](#), [OECD Due Diligence Guidance for Meaningful Stakeholder Engagement in the Extractive Sector](#), [the Initiative for Responsible Mining Assurance \(IRMA\)](#), the [International Council on Mining and Metals \(ICMM\) Performance Expectations](#) and the [Maendeleo Diamond Standards](#). These standards include provide a helpful reference point for improving LSM-ASM interface dynamics.

The question of “legality” continues to complicate engagement between the two sectors. LSM companies are committing to work with legal ASM but, in most jurisdictions, ASM is deemed “illegal” by the state. This creates a challenge for companies who are open to engagement, but are reticent to engage with miners undertaking illegal activities.

Further Research

More research is needed to understand:

- the type and nature of interface dilemmas that currently exist
- how company personnel characterise the operating context and interface issues
- how different parties engage and experience interface dynamics
- what measures are put in place to ensure a safe functional environment is possible.

Full report [here](#).

Contact

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Through our regular Briefing Notes, we will offer perspectives on many of the critical sustainability issues in the mining and energy sectors. To [stimulate debate](#), we will share the diverse, sometimes divergent views of Council members and others. To [catalyze action](#), we will identify next steps and, where appropriate, serve as a platform for dialogue and the formation of partnerships.

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