

*Keywords:*

Informal sector, informal economy, mining, artisanal and small-scale mining (ASM)

## Policy pointers

**Efforts to formalise** artisanal and small-scale mining (ASM) by registering property-like mining claims typically benefit wealthier and more powerful individuals.

**Formalisation efforts** need to be more inclusive of those 'at the bottom' of the labour structure, who are often vulnerable to exploitation and marginalisation.

**Developing 'inclusive'** formalisation schemes, which can offer benefits to workers, employers and government alike, will require a thorough understanding of existing labour arrangements, and how risks and benefits are distributed.

**A case study describes** seven challenges facing efforts to formalise ASM in the Philippines, and potential policy responses to these.

# Artisanal and small-scale mining: protecting those 'doing the dirty work'

Informal labour is a defining characteristic of artisanal and small-scale mining (ASM), and is seen as an underlying cause of many social and economic challenges facing the sector. Approaches to formalising ASM mostly consider it a poverty-driven subsistence activity and take legalistic approaches, emphasising the need to recognise local people's property claims. But these policy responses can misunderstand the complex and multi-tiered labour structure that exists within informal ASM. More inclusive formalisation policies are needed — policies that particularly seek to understand and improve the position of ASM's large, mobile and often marginalised workforce. Using empirical evidence from the Philippines, we identify the opportunities and challenges posed by a more inclusive approach to formalising ASM, and recommend potential policy responses.

Despite government attempts to formalise artisanal and small-scale mining (ASM), informality remains one of the sector's defining features. Informality and ineffective government regulation is often associated with problems including health risks, child labour, environmental degradation, and armed conflict over 'lootable' mineral wealth.

While some operating in the sector still see ASM as dominated by opportunistic fortune-seekers, many more see a poverty-driven subsistence sector with few 'barriers to entry' other than a pick, a shovel and a strong back.<sup>1</sup> This 'poverty-driven narrative' is akin to 'dualist' notions that treat ASM as a safety net running alongside formal employment in large-scale mining and providing income to the poor and the unemployed in times of crisis.

Where governments have brought ASM under regulatory control, policy often emphasises issuing licences to extract minerals from a

particular area. But such efforts to formalise mineral tenure often don't regulate the increasingly complex labour systems that now characterise ASM in many countries, and thus fail to protect a massive and vulnerable labour force.

Indeed, explanations for why formalisation efforts frequently fail often take a legalistic approach,<sup>2</sup> arguing that persistent informality stems from the formal sector's exclusive and elitist character. They point out that various entry barriers (for example, registration costs, complex formalisation procedures, remote state agencies) stop poor and undereducated ASM-operators formalising their businesses, and instead benefit the rich and powerful. This may well be true, but treating ASM as a homogeneous subsistence sector misses much variation.

Taken together, dualist and legalist notions of ASM as a predominantly informal activity feed into policy recommendations aimed at simplifying and

## *Formalisation needs to take a more inclusive approach that protects the labour force*

'democratising' registration procedures, and setting aside land where ASM can operate legally.

### Alternative ways to understand ASM's informality

In many countries, subsistence mining persists alongside more capitalised ASM operations that have a complex and multi-tiered labour structure.

Risks and benefits are rarely distributed evenly across the sector. Rather, benefits accrue to those with power, skills and capital — often the very same people that are able to secure formal mining licences. Meanwhile many

doing the actual dirty work have no formal legal recognition, making them highly vulnerable.

So formalisation needs to take a more inclusive approach: one that protects not merely 'ASM entrepreneurs', but also their labour force. This requires a better understanding of the sector's employment arrangements. Here, 'structuralist perspectives' on the informal sector can help.<sup>3</sup> A structuralist perspective attempts to understand how ASM evolved within a specific sociopolitical environment, and within the broader system of production relations in the mining sector as a whole.

### ASM in the Philippines

This briefing reports a study of how ASM is organised in the Philippines,<sup>4</sup> and a case study on the opportunities and challenges for developing policy interventions that attempt to engage and protect ASM-labour.<sup>5</sup> It shows how structuralist perspectives provide valuable insights into the sector's vested interests and power relations, and how risks and benefits are distributed. Not considering such structural realities may mean policies not only fail to regulate ASM's various social and environmental problems and inequalities, but actually exacerbate them.

Ultimately, understanding informality in ASM needs to integrate insights from dualist and legalist perspectives with a structuralist concern for power, inequality, and exploitation.<sup>6</sup>

### Rapid expansion

The Philippines has a long history of artisanal gold mining but ASM has expanded tremendously since the 1980s, particularly on the southern island of Mindanao.<sup>7</sup> Rural livelihoods were in crisis, with debt-driven growth hindering socioeconomic development. A deteriorating investment climate and reduced international mineral demand also caused a severe crisis in large-scale mining, creating a pool of unemployed semi-skilled miners. Together with a more diverse

group of rural poor, these miners started digging for gold. Initial tunnelling activities were truly small-scale, involving rudimentary extraction and processing, and equal revenue sharing among the miners and usually the landowner.

Throughout the 1980s, 1990s and 2000s, the ASM sector became increasingly dominated by a varied group of mining financiers. They expanded promising tunnels and invested in more sophisticated processing facilities. This group included former miners who had struck it rich, local merchant and agricultural elites, army and rebel commanders, and engineers (often previously employed in large-scale mining). Over time, some gained key positions in the local state, giving them more control over the ASM sector.

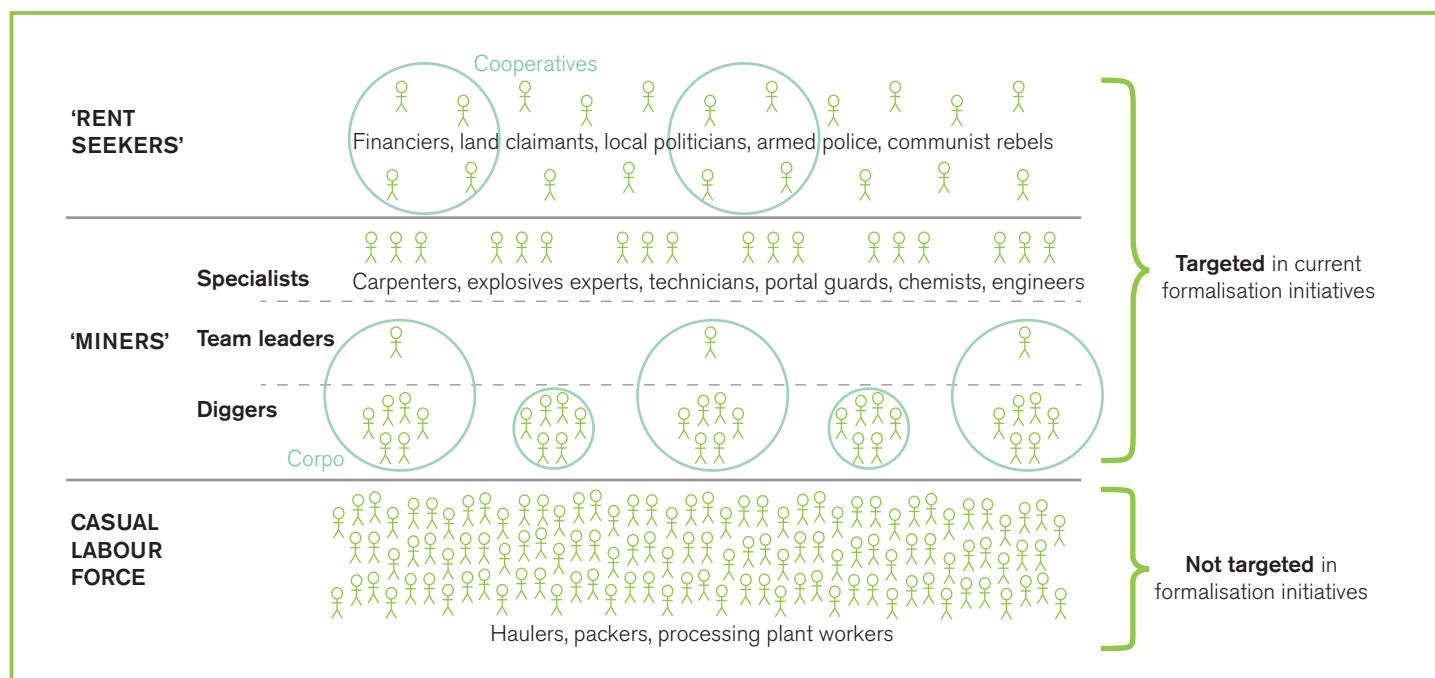
### Skewed risks and benefits

Injecting capital and professional skills into ASM led to an increasingly complex and multi-tiered labour structure, which endures today (see Figure 1). At the lower levels unskilled haulers, packers and processing plant workers work as day labourers for low wages, are often underage, and are exposed to hazardous working conditions. The actual diggers (abanteros) are organised in a *corpo* headed by a team leader, usually an experienced miner. They receive a percentage share, either in cash or in ore. Bigger tunnels also employ semi-skilled workers such as carpenters, explosives experts, technicians, portal guards, and in some cases even chemists and engineers. These workers often receive higher wages or shares, while being exempted from the truly dirty and dangerous work.

But overall, revenue sharing is skewed in favour of financiers, who often retain between 40 and 60 per cent of the revenues. They also control the processing facilities, through which they accumulate more income. A broad range of 'rent-seekers', including land claimants, local politicians, but also armed soldiers, police and communist rebels put further downward pressures on labour's share.

This situation does not necessarily mean the ASM labour force is destitute. Instead, various informal social security mechanisms provide some security. Financiers may provide food and shelter, cash advances or even weekly stipends. But these are later deducted from the worker's share. And financiers favour miners whose skills and experience put them in a good negotiating position. Such arrangements can be understood as a form of debt bondage, a way for financiers to immobilise a reliable supply of semi-skilled labour, which is otherwise continually looking for opportunities elsewhere. These protections are not accessible to unskilled haulers and packers, who are casual 'day labour'.

Figure 1. The complex and multi-tiered labour structure in the Philippines' artisanal and small-scale mining sector



### Informality persists despite reform

In 1991, Philippine congress passed Republic Act 7076, or the 'people's small-scale mining act', which let provincial and city mining regulatory boards create small-scale mining areas (Minahang Bayan), and award operating permits to cooperatives.<sup>8</sup> However, complex registration procedures, rampant nepotism and rent-seeking still make formalising ASM difficult. Importantly, much ASM happens inside large-scale mining concessions, making formalisation impossible without the explicit consent from the concession holder.

And even where a Minahang Bayan has been created, and a permit issued, membership of the cooperative is often limited to financiers, tunnel owners and/or local landowners. They use the cooperative as a mechanism to realise economies of scale, and to claim ownership of the mineral rights, and thus royalties from miners.

### Challenges and opportunities in Kematu: a case study

The ASM-area in Kematu in the municipality of T'Boli, South Cotabato province, began in the 1970s. Led by local and external financiers, small-scale gold mining has expanded steadily. In August 2014 Kematu had 73 tunnels with about 6,000 workers. Approximately 2,000 actively mine the tunnels (some 300 are experienced and professional miners). The rest haul, pack, process and do other mining-related activities.

In the 1990s–2000s, local and provincial government tried to increase control over ASM in

Kematu by creating a Minahang Bayan and issuing a permit to TMBMPC, a local cooperative organised by financiers and landowners. But government efforts were uncoordinated and failed to stabilise the situation. In 2010, with tunnelling accidents and conflicts between different ASM operators proliferating, the province ordered all ASM to stop.

In 2011 the Provincial Environmental Management Office (PEMO) initiated a programme called Minahang Bayanihan that requires ASM operators to apply for individual mining contracts, while still operating within the cooperative. The province combined this individualised mineral tenure with efforts to regulate employment relations. Financiers are now expected to secure IDs for diggers and motorcycle drivers for a fee collected by the barangay (the lowest local government unit in the Philippines). In the future, there will also be labour contracts between the financier and the diggers. Finally, the PEMO proposes to make financiers responsible for basic health and social insurance for the labour force. Although the Minahang Bayanihan is still new, our study<sup>5</sup> identified several opportunities, challenges and possible responses.

### Stakeholder benefits

1. **Workers** have increased access to welfare benefits such as the municipal hospital, and official social security schemes. They are trained on key issues such as health and safety, waste management and the social benefits available through registration.

2. **Employers/financiers** expect a more reliable and disciplined workforce due to the contractual employer-employee relationship.
3. **Local governments** increase their revenues (through fees paid by cooperatives and individual operators) and regulatory control over mining settlements.

## Challenges and potential policy responses

1. **Improving state structures to monitor compliance.** The PEMO plans to establish a 'multi-purpose building' inside the mining area to monitor ASM. It will collaborate with national government agencies, the barangay and the cooperative, forming a 'bridge' between the government and individual ASM operators. These positive changes must be coupled with efforts to improve transparency, particularly at the cooperative and the barangay level.
2. **Financiers' capacity and willingness to shoulder additional costs are not addressed in the current plan.** When production is low, financiers may be unable or unwilling to cut profits in order to meet their obligations. Policies need to be responsive to these realities.
3. **Responding to a mobile workforce.** The Minahang Bayanihan assumes a sedentary workforce, but ASM is an inherently mobile sector. It is crucial to think how to expand the geographical coverage of these formalisation attempts. Making worker IDs valid in different areas could ensure collaboration across local authorities.
4. **Regulatory uncertainty and mineral tenure conflict.** At present, provincial governments cannot regulate 'illegal' ASM within large-scale mining concessions. To make ASM formalisation initiatives successful, it is vital to engage different government levels and agencies, to minimise regulatory inconsistencies, intra-government competition and overlapping mineral tenure claims.
5. **Including all the workforce.** Around two thirds of the workforce, including those

engaged in risky hauling and processing activities, fall outside the Minahang Bayanihan. While the ID-system was partly initiated to fight child labour, children still haul and process ore without formal protection. Protecting this most vulnerable and often exploited labour force needs policy responses that take an integrated and structuralist approach to addressing ASM's complex social challenges, including issues of child labour.

6. **Updating benefit sharing structures in light of regulatory changes.** The Minahang Bayanihan does not address the issue of skewed benefit sharing, despite planned contractual arrangements between financiers and workers. In fact, some financiers have seen the programme as an opportunity to immobilise the workforce by imposing contractual obligations. Furthermore, some might try to shift their new costs to the labour force. A multi stakeholder and inclusive discussion should explore the impacts of the new regulation and whether or how to change the benefit sharing system.
7. **Incorporating existing social security mechanisms.** It is unclear how introducing new, formalised mechanisms for labour protection will affect pre-existing informal arrangements. Despite their flaws, these mechanisms do provide some workers with subsistence or even income security. Formal protection mechanisms should thoroughly understand existing informal mechanisms so as to complement or reinforce their benefits.<sup>9</sup> New formal rules and regulations should particularly preserve and maximise the pre-existing arrangements that benefit those doing the 'dirty work'.

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This paper is based on an analytical/theoretical framework developed by Boris Verbrugge.



## Knowledge Products

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This research was funded by UK aid from the UK Government, however the views expressed do not necessarily reflect the views of the UK Government.



## Notes

<sup>1</sup> For a good overview of existing approaches towards the informal sector see Chen, M (2008) Informality and social protection: theories and realities. *IDS Bulletin* 39(2), 18–27. / <sup>2</sup> Legalistic approaches are primarily associated with the work of Peruvian economist Hernando de Soto. See de Soto, H (2000) *The mystery of capital: why capitalism triumphs in the West and fails everywhere else*. Basic Books, New York. / <sup>3</sup> Structuralist approaches are primarily associated with the work of Alejandro Portes. See Portes, A et al. (1989) *The informal economy: studies in advanced and less developed societies*. The Johns Hopkins University Press. / <sup>4</sup> This section is based on nearly eight months of field research in the southern Philippines, conducted by Boris Verbrugge with assistance from AFRIM (and others). / <sup>5</sup> This case study is based on field research conducted in August–September 2014 by Beverly Besmanos of AFRIM, in close coordination with Boris Verbrugge. / <sup>6</sup> See further Chen, M, 2008 (see note 1). / <sup>7</sup> For a more comprehensive historical overview see Verbrugge, B (2014) Capital interests: a historical analysis of the transformation of small-scale gold mining in Compostela Valley province, Southern Philippines. *The Extractive Industries and Society* 1(1), 86–95. / <sup>8</sup> For an overview of the relevant laws and regulations consult the website of the Mines and Geosciences Bureau: [www.mgb.gov.ph](http://www.mgb.gov.ph). / <sup>9</sup> Frances Cleaver's work on institutional bricolage is particularly relevant here. See Cleaver, F (2002) Reinventing institutions: bricolage and the social embeddedness of natural resource management. *The European Journal of Development Research*, 14(2), 11–30.