

## Bottlenecks to formalization of small-scale mining in PH

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The mining industry contributed around 0.8 percent to the Philippines' gross domestic product in 2018 (Domingo 2018). That same year, it amassed a production value of PHP 179.6 billion, providing employment opportunities to at least 207,000 people (MGB 2019). These figures conservatively capture the benefits from the livelihood and employment generated by the sector, particularly those in relatively small mining operations. Unfortunately, benefits from the latter are not well documented.

This industry is comprised of two subsectors, namely, the large-scale and small-scale mining operations, defined through Republic Acts 7942, or the Philippine Mining Act, and 7076, or the Small-scale Mining Act, respectively. While ultimately under the oversight of the Department of Environment and Natural Resources (DENR), the subsectors diverge when it comes to operation and regulation. Large-scale mining is wholly supervised by the Mines and Geosciences Bureau (MGB), while small-scale mining supervision is technically devolved to the local government units (LGUs) with MGB as chair of Provincial Mining Regulatory Boards (PMRB).

Nuances in small-scale mining operation and policy implementation make the subsector difficult to oversee in terms of extraction activity, technology application, and worker welfare assurance.

This *Policy Note* looks into the efforts of the government to ground policy and formalize the small-scale mining economy. Insights from LGUs, national government agencies, nongovernment organizations (NGO), and other stakeholders provide clarity on particular aspects that hamper the creation of a formal and legal environment for the subsector. The same inputs allow for the exploration of options that will enable a more efficient capture of mining benefits accruing to both national and local economies.

### **Large-scale vis-à-vis small-scale mining**

Large-scale mining operations are considered formalized by the mining industry. Albeit still with room for improvements, what goes in and out of this subsector is more or less captured by regulatory agencies, and subsector outputs are reflected in the economy. This is apparent in terms of



*Although it was established earlier in the national law, small-scale mining remains widely informal and illegal. As a result, its benefits remain invisible in the economy. This is despite anecdotal evidence on the ground stating that it is mostly responsible for 70 percent of the mining revenues. (Source: ILO Asia-Pacific/Flickr)*

1. the presence and scale of documentation of operations and production systems;
2. defined policies on environmental compliance, consent process from indigenous communities, and social and development plans and rehabilitation programs for affected populace;
3. existence of rationale and mandate to establish monitoring teams; and
4. available avenue for transparency to the public.

The same cannot be said for the small-scale mining subsector, which remains widely informal and illegal. This is notwithstanding the Small-scale Mining Act, which was enacted earlier than the Philippine Mining Act. Moreover, the benefits from small-scale mining are largely invisible in the economy despite anecdotal

evidence on the ground claiming that it is responsible for around 70 percent of the total mining outputs in the country. This concern translates to billions worth of losses for both local and national constituents.

### **Mitigating and countering barriers**

Narratives from the ground described some of the primary challenges in the process of the formalization of the small-scale mining subsector. These pertained to the following:

#### ***Demographic mapping for small-scale mining***

Baseline information on policy formulation and implementation process is a critical ingredient behind the creation of sound regulations and informed decisionmaking. While there may have been a national

inventory for mineral resources in the Philippines, the extraction details for those are not clear apart from information disclosed by large-scale mining. Most, if not all, of large-scale mining inputs and outputs are monitored by various organizations, most notably the Philippine Extractive Industries Transparency Initiative of the Department of Finance (DOF).

The above monitoring and profiling mechanisms do not exist in small-scale mining. For instance, the subsector lacks detailed information on small-scale extraction operations, including capitalization, production, technology application, and sales, and the demographics of small-scale mining operators and laborers or wage-earners. Such compromises the oversight function of the government for both environment and social welfare protection.

#### *Definition and types of small-scale mining*

Another vital thing to consider is the definition of small-scale mining. As per the Small-scale Mining Act, it is defined as an industry where mining activities heavily utilize manual labor without the use of heavy mining equipment. The Organisation for Economic Co-operation and Development (2016) also defines small-scale mining as formal or informal mining operations with simplified mechanism, utilizing low capital and high labor-intensive technology.

However, these definitions were observed to be unfit as they fail to clarify distinctions between artisanal mining and the actual small-scale mining operations on the ground, which already employ heavy machinery and modern technology, such as backhoe, explosives, and chemicals. This significant issue counters attempts to formalize the subsector.

#### *Oversight and implementation*

The Small-scale Mining Act mandates the designation of small-scale mining areas or *Minahang Bayan* for

regulated extraction activities. While the declaration of Minahang Bayan was supposedly the mandate of the PMRB, LGUs cannot recognize Minahang Bayan without clearance from the DENR Secretary. As such, there are Minahang Bayans that are locally-declared, but are technically still illegal in designation. The devolution of regulatory functions has to be cleared between LGUs and the national government, noting also that the PMRBs are usually chaired by the regional MGB director.

#### *Clarification of the regulatory structures*

While PMRB is supposed to be a manifestation of the devolved regulatory authority to LGUs, it has become as an extension of the national agency through the regional office of MGB. The chairpersonship of the board was previously with the provincial governor or shared with the MGB's regional director. The composition of the board itself has limited stakeholder representation, with original members coming from large and small-scale mining firms and environmental NGO. Other sectoral and community representations need to be included with full voting rights in the board's decisionmaking and regulatory functions.

#### *Policy implementation and enforcement*

The nonrecognition of the primacy of the Small-scale Mining Act over previous laws compromises formalization and legalization attempts in the subsector. The application of the provisions of Presidential Decree 1899, passed in 1984 by then President Ferdinand Marcos, was allowed to coexist with those of Small-scale Mining Act, leading to conflicting Minahang Bayan processes even decades after the passing of the 1991 landmark legislation.

#### *Value chain in mining operations*

Pascual et al. (2019) noted that the formal value chain in the mining industry follows the following nodes, namely, associate, locate, value, establish,

mine, transport, process, market, and divest. For the informal value chain, only four nodes exist, namely, mine, transport, process, and market. This shortcut leads to the noncapture of benefits, environmental policy incursions, labor-related abuses, and the trade dominance of the black market.

Processing plants serve the third node in the value chain, after the extraction of the minerals and their transport from small-scale mining areas to the mills. The law specifies that processing plants should only be located within identified mineral processing zones, but these too should be in line with the boundaries and delineations set by the LGUs' comprehensive land use plan and zoning ordinances. In particular, the implementing rules and regulations (IRR) of Small-scale Mining Act state that the mineral processing zones shall be duly designated by LGU through the board and shall be located only within the Minahang Bayan.

With the proliferation of makeshift and informal ball mills, these processing plants should be within the framework of formalization and given accreditation. In the same breath, as accorded by DENR Administrative Order 2015-03 Section 15b, they should also become withholding agents for royalties, production share, or other taxes due to the government, requiring them to be registered with the Bureau of Internal Revenue (BIR).

### *Tenurial arrangements*

The Small-scale Mining Act recognizes prior rights in operating areas, complicating tenurial arrangements in mining activities. One such issue is with mining claims or patents handed out during the American period through the Philippine Bill of 1902. This was prior to the passage of the Philippine Mining Act with no limitation set on years of contract and no provisions for turning over of the land to the government after the exhaustion of the minerals.

Other tenurial arrangements that overlap with mining operations are protected areas and classified forestlands, particularly prevalent in Guimaras. While it is understood that forestlands comprise almost 70 percent of its provincial area, these were classified instead as alienable and disposable lands, facilitating the entry of mining operations and sand and gravel quarrying.

The same is observed in Libertad, Antique, where mining operations on quartz and silica sand once existed. For a locality that has protected areas in both upland and coastal zones, its stance must remain strong against extractive industries. However, some constituents involved in small-scale mining believe that they should be allowed to explore livelihoods in the mining industry with the assurance that they will comply with formal procedures.

The lack of clarity in mining rights is also affected by the limitation of LGUs and DENR in enforcing existing laws and regulations. Security and logistical issues come into play when dealing with mining operations in remote areas. Enforcement agents, in the absence of support from the police or military, are often rendered ineffective in regulating and monitoring extractive operations in the hinterlands. It is because of this that mining still exists even in areas not delineated as mineral reservations, including forest and protected areas.

### *Reign of black markets*

The last node of the supply chain refers to the availability and accessibility of markets, where the black market currently dominates. The imposition of *Bangko Sentral ng Pilipinas* (BSP) and BIR's 5-percent tax on gold production of small-scale mining in 2010 led to unintended consequences. The gold purchases of BSP drastically decreased from 28.56 metric tons in 2010 to 0.95 metric tons in 2012 (MGB 2019).





*The current definition of small-scale mining is inaccurate with the operations on the ground. While the law speaks of an industry where mining activities heavily utilize manual labor without the use of heavy mining equipment, small-scale miners today already employ heavy machinery, such as backhoe, explosives, and chemicals. (Source: ILO Asia-Pacific/Flickr)*

Latest figures in 2018 pointed to 0.33 metric tons, highlighting the magnitude of loss the country is incurring.

## Recommendations

### **Advance documentation of small-scale mining**

A rigorous and comprehensive documentation should be undertaken for the small-scale mining subsector. A proper census among mining constituents must be done to ensure worker protection and benefit capture. This should include demographic information of the stakeholders, particularly the detailed profiles of mining operators and laborers. These characteristics should cover household and work details, including income and expenditure, employment and labor arrangements, types of mining arrangements, specifics of mineral production, such as volume and value of minerals, risk assessment, and market pathways.

### **Clarify definition and delineation of tasks**

The government needs to expand the definition of small-scale mining, providing distinctions between it and artisanal and large-scale mining:

1. Artisanal mining may cover subsistence operations with no use of equipment, mainly dependent on manual labor, and usually tax-free.
2. Small-scale mining would fit current operational arrangement in the subsector, allowing for the use of heavy equipment and explosives while becoming taxable and entrepreneurial in nature
3. Large-scale mining may follow the definition enclosed within the Philippine Mining Act.

It should also clarify and mainstream the documentary requirements needed for DENR clearance, referring to free, prior, and informed consent (FPIC) and environmental compliance certificate (ECC). A reexamination of regulatory structures must be conducted to clarify mandates among national and

local institutional players. Devolved regulatory functions to LGUs need to be explicitly defined. The DENR's oversight function and internal line agency mandates covering MGB, Environmental Management Bureau (EMB), and the Forest management Bureau must also be strengthened and harmonized to enhance policy grounding and enforcement and avoid jurisdictional overlaps.

### *Revisit membership of the provincial boards*

Recommendations on the ground focus on the inclusion of city, municipal, and barangay representatives to PMRB. Should indigenous peoples be present within the area, they should also be extended a platform for participation.

A national multistakeholder oversight structure with inputs from the Department of Interior and Local Government, BSP, National Economic Development Authority, Bureau of Customs, DOF, Office of Civil Defense, Philippine National Police (PNP), Armed Forces of the Philippines (AFP), NGOs, civil society organizations, and sectoral organizations should be put in place to allow for the holistic development and regulation of small-scale mining in the country. This would lend to the mainstreaming of sector-specific strategies in the priority programming of said agencies, as well as the regional development council and LGU counterparts at the provincial, city, and municipal levels.

### *Improve policy implementation*

Due respect to policy hierarchy should be followed, the highest among which is the Constitution, followed by republic acts, executive orders, and other functional policies. Likewise, harmonization of complementary policies should be followed with the least amount of overlaps and contradictions, particularly laws on the rights and culture of indigenous peoples, regulations of contrabands, management of protected areas,

implementation of the forestry code, and entitlements of the Local Government Code.

### *Improve accountability*

Sans artisanal mining, many small-scale mining operations are not that small. Some operators employ hundreds of laborers operating by shift 24 hours a day, seven days a week yielding hundreds of millions worth of mineral produce. Important accountabilities expected from large-scale mining companies should also be considered for small-scale operators, such as the existence of community development and safety programs, rehabilitation plan for denuded and degraded areas, and transparent benefit-sharing agreements in relation to wages, taxes, royalties, and lease.

While community development and safety programs are mandated by the revised IRR of the Small-scale Mining Act, provisions on environmental protection, such as rehabilitation plan for denuded and degraded areas, are still absent. As such, small-scale mining operators can skirt accountability related to environment protection and community welfare. Mining operators must also ensure the submission of production and financial reports to PMRB, as well as compliance to signed mining contracts to facilitate benefit capture.

Compliance with the above recommendations can only be made possible by putting in place apt and enforceable monitoring and evaluation mechanisms.

### *Exact appropriate penalties and rewards*

Appropriate penalties and fines should be adjusted, and their implementation ensured. Mining operators and financiers should be accountable regardless of the type of mining arrangements. Commensurate rewards must also be given for those exhibiting diligent compliance.

The line bureaus of DENR and LGUs must look at providing institutional enforcement capacity through

proper arrangements with PNP and AFP, either through simple activity coordination and/or the creation of designated environmental enforcement units. All enforcement arrangements must, however, conform to the tenets of universal human rights and observe cultural sensitivity to residents and indigenous cultural communities within mining areas.

### *Capitalize on Existing regulatory checks*

The imposition of regulatory bottlenecks should be looked into as entry points for intervention toward subsector legalization. Stringent regulations already exist outside the mining policy landscape, which could be capitalized on. It must be framed that mining does not operate in a bubble, as its proponents must comply with the provisions of other laws.

To be legal, small-scale miners must operate within minahang bayans and they must comply with the other provisions of the Small-scale Mining Act. Processing plants must have the required documentary clearances and be within mineral processing zones, and mine workers must be protected under the labor code. Meanwhile, mineral outputs, particularly gold, must only be sold to BSP and its accredited buying stations.

Since gold ores need to be processed to a marketable form, processing plants present avenues for regulatory impositions. This is where appropriate output documentation can be instituted. The clout of LGUs, MGB, and EMB over the existence of processing plants makes the implementation of such regulatory arrangements possible. Small-scale mining operations and outputs need not be invisible.

Although against policy, the current small-scale mining already uses explosives for operations and chemicals for processing. These materials are heavily regulated. An honest implementation of policy through permits

and licenses will make it close to impossible for rogue mining proprietors to operate. Blasting noise is also difficult to hide from PNP and AFP.

Employment should comply with set labor code standards. This includes security mechanisms for wage-earners and common laborers through provisions of benefits under the Social Security System, Philippine Health Insurance Corporation, and other remunerations.

In terms of other documentary requirements, FPIC, ECC, and local government permits are mandatory documents, without which no mining proponent can operate. FPIC, in particular, is a powerful tool for indigenous communities to check extractive operations within their ancestral domains.

### *Formalize markets*

Every ounce of gold sold in the black market eats away from the subsector's contribution to the economy. While the only legal sale of gold from small-scale mining is through BSP, the establishment of the bank's buying centers greatly depends on scale economies. To augment this, there needs to be an accreditation scheme by the bank for gold buying centers. This can also invigorate value-adding through other industries, such as jewelry-making which has an immense potential contribution to the economy. The passing of legislation that rationalizes taxation in BSP's gold-buying activity is a step toward the right direction, and promises the recapture of sales lost through the black market.

### *Amend the Small-scale Mining Act*

The different aspects of formalization should be addressed through a cohesive and comprehensive strategic framework, which should be anchored on clear policy. This would entail the passing of a new legislation that fills in the weaknesses of the current law. Small-scale mining must be aptly defined, and

all subsector stakeholders must be accountable to the public, the government, and the environment.


## Conclusion

The subsector of small-scale mining is largely informal in the Philippines despite testaments on the ground that it accounts for roughly 70 percent of all precious mineral produce in the country.

Small-scale mining contribution to the economy cannot be measured because most of its outputs are leaked through the black market. Despite efforts to formalize the sector, there have been numerous barriers to its formalization, which translate to opportunities foregone, not only for the economy, but also for the well-being of affected communities.

The small-scale mining subsector is now almost invisible in terms of captured benefits, and the workforce behind it. Albeit relatively unseen, it still contributes to the national and local economies through the circulation of resource and the employment of thousands of Filipinos. It is time that the bureaucracy put a stop to these losses and ensure that industry outputs do not disappear through the black market.

Decades of tolerance and neglect in grounding policy has led to a quagmire of issues that make the formalization of the small-scale mining subsector difficult. However, regulatory checks within the

bureaucracy abound for quick but still substantial fixes. To firmly anchor lasting changes, the Small-scale Mining Act must be amended, defining the legal scope of small scale mining operations in the country and ensuring compliance of all mining operators and financiers to the tenets of ecological integrity. All this should be done while safeguarding the welfare and interests of hardworking Filipino mining laborers and wage earners. 

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