



The Philippines: State-Sanctioned Informalization

Boris Verbrugge

18.1 HISTORICAL OVERVIEW: BOOM-BUST CYCLES IN PHILIPPINE GOLD MINING

18.1.1 *Boom to Bust I: The (Pre)colonial Era*

The Philippines—notably the Cordillera mountain ranges on the Northern island of Luzon—has a very long history of gold mining. Gold artifacts have been found that date back to as early as 400–250 B.C. (Caballero 1996). The precolonial mining system revolved around an exploitative system of food-for-labor exchange controlled by traditional elites (the *Baknang*) and was integrated into regional trading networks dominated by Chinese traders (Habana 2001). Despite numerous attempts by the Spanish to conquer the gold mines, this traditional mining system survived the Spanish colonial period largely intact (1521–1989). Yet the Spanish did introduce the Regalian Doctrine, which accorded

B. Verbrugge (✉)
IOB, University of Antwerp, Antwerp, Belgium
e-mail: boris.verbrugge@uantwerpen.be; boris.verbrugge@kuleuven.be
HIVA, KU Leuven, Leuven, Belgium

© The Author(s) 2020
B. Verbrugge and S. Geenen (eds.),
Global Gold Production Touching Ground,
https://doi.org/10.1007/978-3-030-38486-9_18

the (Spanish) crown the right to develop the country's mineral potential, either on its own initiative or through Spanish concessions (Chaloping-March 2017). This idea of state ownership would constitute the basis for post-colonial systems of mineral resource governance.

Things changed when the Americans took over in 1898. American soldiers brought their experiences from California and Klondike gold rush and started prospecting together with the local population (Habana 2001). With the assistance of the American colonial administration, the Philippines saw the emergence of a modern gold mining industry, which was particularly established in Benguet province. In the 1930s, a confluence of factors, prime among which were technological improvements and gold price increases, led to a veritable gold mining boom. While domestic (mainly from the sugar elite), Chinese, and British capital was also involved in this gold boom, the majority of the newly established companies were American-owned. Americans occupied nearly all executive positions, supervisory positions were occupied by educated "lowlanders," whereas the indigenous inhabitants of the Cordilleras (mainly the Igorot) would provide manual labor. Moreover, as the American mining companies seized or bought mineralized lands from traditional elites and gradually became "the main gold buyers, principal employers, and sources of credit and patronage" (Habana 2001: 33), they effectively usurped the role of the Baknang.

Yet throughout the American colonial period, ASGM persisted and would even benefit from the increased presence of industrial mining, due to enriched panning streams in the vicinity of the mining operations, and the spillover of new mining technologies. Vice versa, mining companies benefited from the presence of ASGM by acting as gold buyers. The onset of World War II and the subsequent Japanese occupation led to the sudden demise of this American-backed gold mining industry.

18.1.2 Boom to Bust 2: The Post-colonial Era

Under the impetus of increased global demand for (metallic) minerals (not least from nearby Japan), the mining industry recovered in the decades immediately following the war (Ofreneo 2009). An interventionist state supported the development of a domestic mining industry, and the Philippines saw the emergence of Filipino-owned mining giants, such as Philex, Marcopper, and Atlas. Many of these companies opened copper-gold projects throughout the country. More so than before, the mining

industry relied on a skilled and expensive workforce (Lopez 1992). During the authoritarian regime of Ferdinand Marcos (1965–1985), the mining industry continued to benefit handsomely from government support in the form of cheap loans, infrastructure development, and military support (Camba 2015). The Marcos dictatorship saw mining as a key source of foreign revenues, and as a vital ally in its quest to develop remote frontier regions like the southern island of Mindanao. The 1970s in particular were “the busiest for the mining industry as a whole. Old, dormant gold mines were reopened, new gold mines developed, existing copper mines expanded, and new copper projects undertaken” (Lopez 1992: 264).

Yet by the mid-1980s, different factors triggered a deep crisis in the mining industry. At the global level, the outfall of the oil crisis and a glut in global mineral supply (due to investments made in previous decades) led to a steep drop in prices for base metals (Lopez 1992; Ofreño 2009). Inside the Philippines, the Marcos regime was confronted with a massive debt crisis and growing civil unrest. Particularly on the southern island of Mindanao, this civil unrest took the form of an armed communist and Muslim rebellion (Abinales 2000). Creditors lost faith in the Philippines, leading to unprecedented levels of capital flight. Faced with these uncertain prospects, President Marcos and his entourage were increasingly preoccupied with enriching themselves through “crony business failures associated with an unstable environment which discouraged long-term local investment in favor of short-term gains” (Pinches 1996: 112).

The mining industry was not immune for this volatility. In 1974, President Marcos undertook further efforts to nationalize the mining industry. In particular, he promulgated Presidential Decree 462, which sought to get rid of neocolonial ties with the USA, by putting a 40% constitutional bar on foreign ownership. Yet the Filipinization of the mining industry coincided with a proliferation of “one-of-kind arrangements and special deals” (Clad 1988: 76), whereby the Marcos government granted loan guarantees to selected mining projects, many of which later defaulted on their debt obligations. Production costs were on the rise, not least due to the worsening exchange rate of the Philippine Peso (PHP) vis-à-vis the US dollar.

Following the demise of the Marcos regime in the mid-1980s, and the uncertain democratic transition that followed, successive (democratically elected) governments attempted to rejuvenate the fledgling mining industry. The Philippine Mining Act of 1995 (Republic Act 7942) provided for a reasonably clear-cut system of mineral resource governance, which

centralized control over mineral resources in the hands of the national government. It aroused enthusiasm among investors and led to a rapid increase in the number of mining applications (Verbrugge 2017). Yet it also co-existed uneasily with other legal initiatives, many of which embodied the spirit of “people power.” Examples include the Local Government Act of 1991 (which gave local governments various powers in the domain of resource governance), the Indigenous People’s Rights Act of 1997 (which gave indigenous tribes priority rights to their ancestral domain), and the People’s Small-Scale Mining Act of 1991 (to which I return in more depth below). In short, the Philippine system of mineral resource governance is replete with legal inconsistencies, creating uncertainty over has legitimate access to mineral wealth (Verbrugge 2015a).

Moreover, despite repeated claims about a shift toward a “mining-based development paradigm” (Holden and Jacobson 2006), different governments have been blowing hot and cold over the future of the mining industry, occasionally reverting to virulent anti-mining rhetoric. At least in part, this is due to a series of environmental disasters, which led to a widespread anti-mining sentiment across the country (*ibid.*). Over time, politicians have exploited this anti-mining sentiment. Local politicians have issued moratoria banning (open-pit) mining. In early 2017, Secretary of the Environment Gina Lopez—a staunch environmentalist—announced the closure of 23 industrial mining operations and the cancellation of 75 large-scale mining permits (Dumlao-Abadilla and Nawal 2017). While Ms. Lopez has since been replaced—partly as a product of virulent lobbying efforts on the part of the mining industry—these moves had the full backing of the country’s president, Rodrigo Duterte, who repeatedly vowed to “close the mining industry” in a bid to save the environment (Ranada 2019). Finally, in places like eastern Mindanao and Samar, the mining industry is confronted with a resurgent communist rebellion, which sees mining companies as a primary target for its campaign of “revolutionary taxation” (Holden 2014).

Due to this combination of inconsistent political action, widespread resistance to mining, and political instability, the Philippines consistently ranks as one of “the least attractive jurisdictions for investment” in risk reports such as that of the Fraser Institute (Stedman and Green 2018). As a result, only a small portion of the country’s estimated 9 million hectares of mineral-rich lands are currently being developed. As of late 2018, there were 48 producing metallic mines operating throughout the country, only

twelve of which were producing gold.¹ Together, they extracted 20 tons of gold, down from an all-time high of 40 tons in 2010.

18.1.3 *The ASGM-Boom*

In recent decades, the Philippines have witnessed a massive expansion of ASGM, particularly (but not exclusively) in the Northern Cordilleras and on the Southern island of Mindanao. Legally speaking, all gold produced by ASGM has to be sold to the Central Bank (*Bangko Sentral*), which operates a refinery that is included in the LBMA's list of good delivery, and thus has direct access to international markets. A first major boom occurred in the mid-1980s: Between 1983 and 1986, official ASGM-production from ASGM increased from 136 kgs to 11.4 tons. By the late 2000s, it reached over 20 tons per annum. Moreover, between 1985 and 2010, ASGM-production surpassed production from large-scale mining in nine different years. Yet in 2012, official ASGM-production dropped dramatically, and by 2018, it was officially responsible for less than two percent of national gold production, or approximately 330 kgs of gold.² Rather than indicating a sudden demise of ASGM, observers agree that this decline results from a five percent excise tax on gold sales that was introduced in 2012. Ever since, cross-border smuggling of gold from the Philippines to China has boomed (Francisco 2012). While the Philippine government has attempted to rectify this situation by lowering excise taxes to just 1% in late 2017, this move has yet to produce tangible results. That said, even before 2012, ASGM was always a largely informal activity, with only a very limited number of the country's ASGM-operations taking place inside officially designated small-scale mining areas (*Minahang Bayan*).

Inside the Philippines, an image persists of a dual gold mining economy that is "composed of large-scale metallic mining which is undertaken by large local and foreign corporations that employ sophisticated technology; and small-scale gold mining practiced largely by marginalized local communities who employ labor-intensive traditional technology" (Gomez 2010: 8). In reality, ASGM is extremely diverse, with operations ranging from very small-scale activities that target alluvial gold deposits (e.g., through river panning or hydraulic *banlas* mining), to medium-scale underground mining operations that may employ hundreds of workers, and make extensive use of modern mining technology. In the remainder

of this chapter, I will show how the emergence and expansion of this latter type of ASGM was not just a bottom-up response to poverty, but was also a logical consequence of the crisis that affected the mining industry as a whole.

18.2 THE INFORMALIZATION OF GOLD MINING³

18.2.1 *From Industrial Mining to ASGM*

The scaling-down or even outright closure of industrial mining operations in the 1980s–1990s produced a pool of (semi-)skilled mining labor. Many of these miners subsequently turned to ASGM. Events inside the mining concessions of APEX mining (in Maco, eastern Mindanao) and Benguet Corporation (Virac, Cordillera) serve to illustrate the sequence of events that unfolded. In both cases, ASGM-operations mushroomed near the industrial mining operations in the 1980s. Respondents indicated that the companies started buying gold ores from ASGM, processing them inside the company compound. By the early 1990s, ASGM-operators increasingly operated inside the concession and even inside the companies' tunnels. Remaining staff (including guards and engineers) turned a blind eye on these activities in exchange for a share of the proceeds. In some cases, they even provided technical advice or started financing ASGM-activities. Particularly in eastern Mindanao, this ASGM vanguard swarmed out across the region, initiating a series of gold rushes. Undoubtedly the most (in)famous of these gold rushes was Diwalwal, which is located in the uplands of the municipality of Monkayo. As early as the mid-1980s, this remote gold rush town attracted tens of thousands of people, who were mostly driven by poverty, but were also attracted by the hopes of striking it rich.

The Diwalwal gold rush marked the start of a process of capitalization from below. In addition to successful miners investing part of their revenues to expand their operations, Diwalwal attracted the attention of regional elites (prime among which were Chinese-Filipino traders) which started investing in ASGM (Verbrugge 2014). These investments enabled the use of modern machinery like water pumps, automatic drills, generators, and dump trucks (locally referred to as *saddams*). Undoubtedly the most important innovation was the use of cyanidation. Once gold ores are extracted, they typically go through a first phase of (on-site) processing, whereby ores are crushed either manually or in a ball mill, before

mercury is added to capture the gold particles. Yet as early as the 1980s, several engineers and chemists who were previously employed by the mining companies decided to set up an independent carbon-in-pulp (CIP) processing plant in the town of Nabunturan and started buying ores and tailings from nearby gold rush sites. Pretty soon, CIP-plants started to spring up across the region. A similar process unfolded in Benguet, where carbon-in-leach processing gradually found its way from large-scale mining to ASGM.

While artisanal mining persists throughout the country, increased investment and the use of modern mining technology led to the diffusion of what is locally referred to as “medium-scale mining.” By the late 2000s, the ASGM-boom entered a new phase, marked by an increased involvement of foreign (mostly Chinese and Korean) investors (see also Wong et al. 2013), and a further diffusion of advanced ASGM-activities that do not limit themselves to near-surface gold deposits, but work their way through complex underground vein systems.

18.2.2 *Regulatory Interventions and Persistent Informality*

From the start, the Philippine state has attempted to grapple with the expansion of ASGM. As early as 1984, the Marcos government put in place a highly permissive permit system in the form of Presidential Decree 1899—allegedly to divert the ASGM-gold into the coffers of the central bank (Clad 1988). In 1991, Congress enacted Republic Act No. 7076, or the People’s Small-Scale Mining Act, which still remains the most important law covering ASGM as of today. RA 7076 mandated provincial/city mining regulatory boards to segregate ASGM-areas (*Minabang Bayan*) and to issue contracts within these areas. However, and in line with the situation in other countries (see also Chapter 4, this volume), several problems are undermining the formalization process.

Firstly, insofar as the regulatory boards are active, they tend to be dominated by provincial-level politicians, and the formalization process tends to be characterized by high degrees of nepotism and clientelism (Verbrugge 2015b). Secondly, prospective ASGM-permittees have to comply with a seemingly endless list of fiscal and administrative requirements. Thirdly, the (renewed) expansion of large-scale mining which, in many cases, takes place on paper only, as mining companies hold on to their claim as a speculative asset, limits the amount of mineral-bearing

land that is available for ASGM-operators. Finally, RA 7076 only recognizes truly artisanal mining (i.e., relying on manual labor with no use of machinery) and does not allow the type of medium-scale mining activities that can now be found across the country.

18.2.3 ASGM-Crystallizations and Revenue Sharing

This evolution toward more advanced ASGM went hand in hand with the emergence of new types of revenue sharing. In this section, I will give a brief description of three ideal-type ASGM-crystallizations and associated revenue sharing arrangements—note that many other configurations are possible—that I encountered during my field research in Mindanao. This discussion is limited to underground tunneling, which is by far the most common type of ASGM that can be found on the island.

A first crystallization (Fig. 18.1) entails truly small-scale tunneling operations undertaken by small mining teams (*corpos*) composed of friends or family members. Ores are processed locally, relying either on manual methods or a mechanized bowl mill (which is not seldom owned by the landowner who then sells the tailings to a CIP-plant) to crush the ores, before mercury is added to extract the gold. Once the gold is sold, each of the miners takes an equal share of the revenues.

A second crystallization (Fig. 18.2) involves slightly bigger tunnels with a financier. These operations variably have timber reinforcements and use technologies, such as generators or water pumps. Moreover, they may or may not rely on a casual workforce for hauling and/or processing ores. These casual workers are usually paid a fixed or piece-rate (e.g., per bag) wage. The revenue sharing arrangement in this configuration is widely

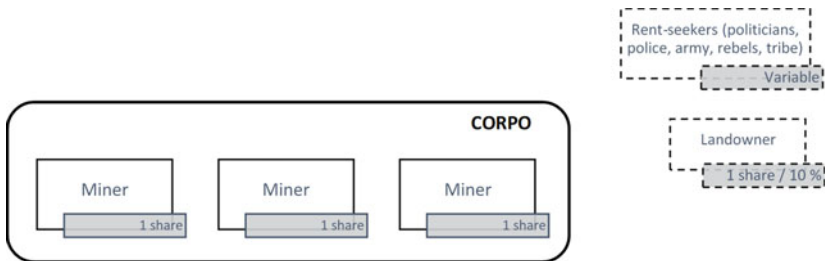


Fig. 18.1 Equal revenue sharing

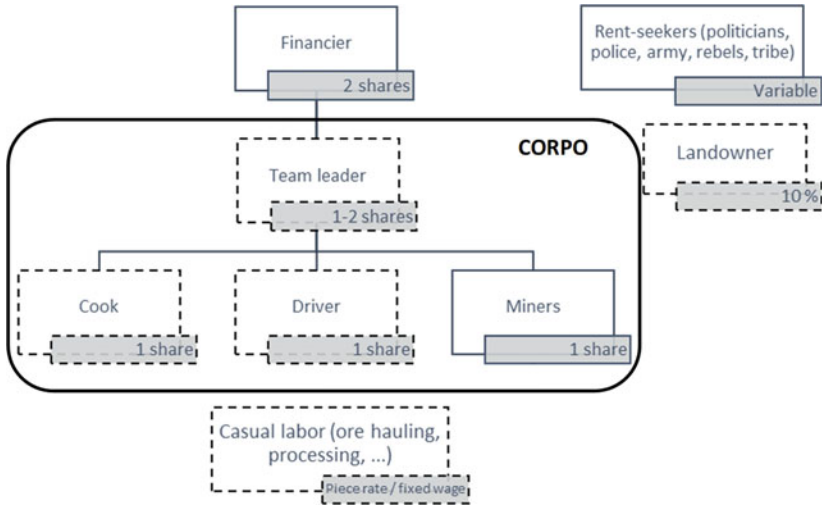


Fig. 18.2 Back-financing

described as back-financing: The financier takes two shares, while the workers retain one share each. In many cases, there is also a team leader that oversees the day-to-day operations and acts as the “ears and eyes” of the financier. He typically takes one or two shares. Initially, sharing took the form of ore (*graba*) sharing, but with the increased availability of CIP-processing, *cash sharing* has become more widespread: Ores are processed and sold first, before the financier deducts the costs he/she incurred (for equipment, food, processing, ...), and the net revenues are distributed between the financier (two shares) and the workers (one share). Many respondents noted that cash sharing is very difficult to monitor, as miners have no way of knowing whether the amount they receive represents their fair share.

A third type of crystallization (Fig. 18.3) revolves around the medium-scale mining operations that first emerged in Diwalwal, but can now be found across the Philippines. In this type of operation, the financier(s)—in some cases mining operations have several financiers that organize themselves into a corporation—typically take 30–70% of the net revenues. In addition to the mining labor inside the tunnels, these operations often rely on a casual workforce for more repetitive jobs like hauling or processing, and in some cases even for digging the main tunnel portal (in this case

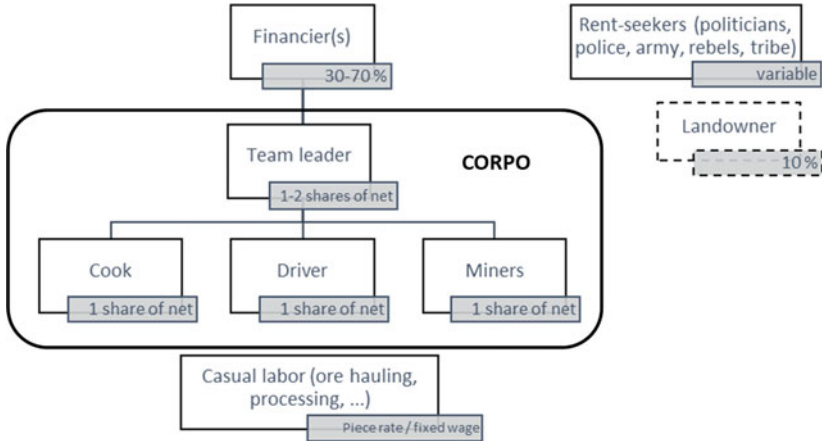


Fig. 18.3 Medium-scale mining

workers are sometimes paid *per meter*). Things are complicated further in cases where financiers operate an independent side-tunnel (*destino*) inside a larger tunnel complex. In these cases, different revenue sharing arrangements may co-exist, with the management of the main tunnel portal taking part of the revenues of the *destino*, with the remainder being shared between the financier and his corporation.

It is important to note that in all three crystallizations—but particularly in the second and third one—there are various rent-seekers that lay claim to part of the revenues. In cases where there is a landowner, he or she usually receives a share of the ores/revenues and may be entitled to other privileges, such as access to good positions in the workforce (for themselves or their kin). Similarly, local politicians may solicit contributions from the financier or may ask them to let one of their trustees work in a high-yielding tunnel (the *buddy-buddy* system). These examples clearly illustrate how (access to) labor markets are regulated by social institutions, prime among which are the patron-client relations that have long dominated the Philippines countryside (Scott 1972). In many cases, there is also a tribal association that claims royalties because ASGM takes place inside its ancestral domain. Finally, armed actors may demand contributions or, in the case of the communist New People's Army, “revolutionary taxes.”

Moreover, these complex revenue sharing schemes disguise more subtle ways in which financiers manage to increase their share to the detriment of the workforce. For instance, bigger financiers have increased their control over the value chain, by investing in vital forward (processing plants) and backward (hardware stores, gasoline stations) linkages. Direct control over CIP-processing also makes it easier for financiers to cheat during the revenue sharing, as it has severed the link between the ores dug up by miners, and the gold that is eventually extracted.

18.2.4 *Whither the Role of the State?*

Summarizing the above, the ASGM-boom that first started in the 1980s did not emerge out of nowhere, as a bottom-up response to poverty (and opportunity). Instead, the Philippines witnessed a transition away from industrial mining, which was and still is faced with a myriad of challenges, toward informal ASGM.⁴ These ASGM-activities are much more mobile than industrial mining, targeting (relatively) easy-to-access deposits. Yet in the end, they rely on the availability of a cheap and flexible workforce. I now turn to analyzing how the Philippine state has failed to prevent and has in some ways even facilitated, this process of informalization. A first observation—which was already made above—is that despite persistent informality, in the entire period between 1984 and 2012 (the year when taxes on gold sales were introduced), the Philippine government has benefited handsomely from ASGM, in the form of gold sales to the Bangko Sentral.

A second observation has to do with the focus and scope of existing formalization efforts. Even in cases where ASGM complies with existing legal frameworks (notably the People’s Small-Scale Mining Act of 1991), these frameworks one-sidedly focus on the issuance of mineral tenure rights to ASGM-operators, who are expected to organize themselves into cooperatives. At least in the case of Mindanao, these cooperatives rarely include ordinary workers and are instead composed of financiers and various rent-seekers, like (trustees of) local politicians. In this way, formalization fails to consider the plight of ordinary workers and implicitly respects the logic of informalization described in this chapter (Verbrugge and Besmanos 2016). In retrospect, Presidential Decree 1899 (the first law regulating ASGM) explicitly recognized this, as it did not only mention that a combination of “inflation, volatile commodity prices, multiple increases of oil and fuel prices, stringent environmental control measures

and high cost of capital” had been disastrous for industrial mining, but also that the “abundance of cheap labor in the Philippines, relative flexibility and simplicity of operations, minimum capital requirements (...) are among the arguments that lend support to the development of small-scale mining.” In short, the logic of cheap labor became enshrined in law.

Thirdly, while the national government continues to treat ASGM as illegal, the situation is less straightforward at the local level. Many gold mining areas across the country have witnessed the rise of miner-politicians that have a direct personal interest in the persistence of ASGM. Particularly since the late 2000s, some of these miner-politicians even started to use their powers under the Local Government Act to regulate purportedly informal ASGM (Verbrugge 2015c). For instance, the provincial government of Compostela Valley erected checkpoints on the access roads to mining sites in order to tax ore transport; started handing out business permits to processing plants; and actively assisted ASGM-operators to set up cooperatives and apply for formal government recognition—knowing very well that the mining areas in question are covered by large-scale mining permits.

18.3 THE ACUPAN CONTRACT MINING SCHEME: A MINING CRYSTALLIZATION PREYING ON INFORMAL LABOR⁵

As noted before, the Mining Act of 1995 led to a renewed expansion of industrial mining. While many of these concessions remain inactive, in several mining areas relations between mining companies and ASGM have taken a turn for the worse. In Bayog, in Zamboanga del Sur province, what started out as a legal conflict between TVI-RD (the Philippine affiliate of a Canadian mining company) and local ASGM-operators gradually escalated into a highly militarized situation and a spate of violent encounters in the early 2010s. In the aforementioned case of Diwalwal, the entry of a Chinese-backed mining company (SEMCO) in the 1990s led to tensions and even armed confrontations with ASGM (Regelado 2000). To deal with these and future conflicts, policy-makers often refer to the need for a “negotiated solution.” The Acupan Contract Mining Project (ACMP) provides a good example of what such a negotiated solution might look like on the ground.

The Acupan gold mine in the municipality of Itogon (Benguet province) was operated by Benguet Corporation since the early twentieth century. In 1992 growing indebtedness, a prolonged decrease in gold prices, and a devastating earthquake, forced the company to suspend its operations. As elsewhere, the suspension of industrial mining went hand in hand with a boom in ASGM. Many of these ASGM-operations had financiers, which included local gold buyers, politicians, businessmen, overseas foreign workers, but also engineers that were (previously) connected with the company.

In the early 2000s, Benguet Corporation and selected ASGM-operators (represented by their financiers) negotiated the Acupan Contract Mining Project (ACMP). Under this scheme, Benguet Corporation retained—or regained—full control over the mining premises and became responsible for the overall planning of the mining operations; the maintenance of the main tunnel; and for processing and selling the gold (to the Central Bank). The actual mining operations were contracted out to ASGM-operators who organized themselves into associations represented by a president, who assumes the role of legal contractor. At first glance, this scheme is beneficial for both parties involved: While Benguet Corporation was able to generate revenues in a climate wherein a resumption of mining was unprofitable, for ASGM-operators this agreement implied at least some form of legal recognition, and technical and operational support of the company.⁶ In reality, the ACMP is skewed in favor of Benguet Corporation and ASGM-financiers, to the detriment of the workforce.

Firstly, the ACMP introduced a complex and multi-layered revenue sharing arrangement. The crux of this arrangement is a 40–60 sharing involving Benguet Corporation and the contractors. After a contractor reaches his or her quota, the company processes the ores and sells the gold to the central bank, before deducting its 40% share. All expenses (e.g., processing charges, costs for mining equipment, taxes) incurred by the company are then deducted from the remaining 60%, which is then divided between the contractor (10–15%) and the workforce, which is organized into teams and are headed by a team leader. After deducting his/her own ten or fifteen percent share, the contractor deducts any expenses (e.g., boots, flashlights, timbering) from the remaining 45–50% share, which is then divided among the workers. In some cases, teams of workers have their own financiers, who will also be entitled to a share of the revenues. These complex and multi-layered revenue sharing arrangements put strong downward pressures on the workers' share,

and for many of them mining is nothing more than “a hand to mouth”⁷ (Fig. 18.4).

In addition to these unequal revenue sharing arrangements, the ACMP also put in place a fairly coercive labor regime with the aim of disciplining the workforce. The agreement between the company and the contractors describes the latter’s role as “job contractors,” that are not only expected to “maintain the required manpower in order to produce the prescribed quota,” but also “to discipline and impose on his miner/s or worker/s the appropriate penalty for any offense committed.” The company, meanwhile, maintains a “mine patrol” composed of armed guards, whose main function consists in preventing “high grading” (i.e., stealing high-grade ores from the company). Finally, the agreement explicitly states that “there shall be no employer/employee relationship between the COMPANY and the CONTRACTOR or the CONTRACTOR’s workers.” While contractors are principally responsible for ensuring that their operations are in compliance with existing labor regulation, most workers remain without a contract, and the coverage of formal social security schemes is extremely limited.⁸ Meanwhile, village officials maintain a blacklist of miners that are no longer able to secure a clearance, because they committed “high grading offences,” or because they failed

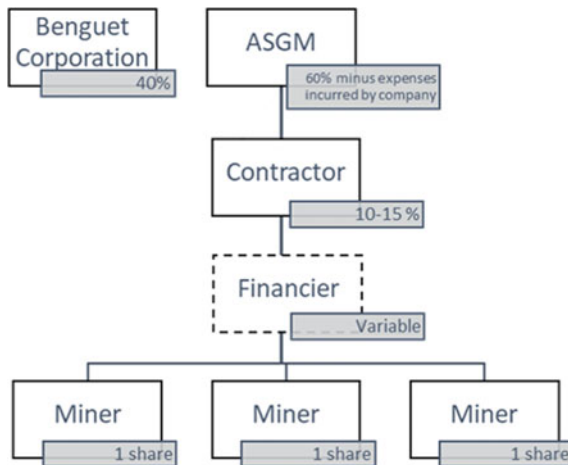


Fig. 18.4 Sharing in the Acupan Contract Mining Project

to repay debts they incurred with their financier.⁹ These and other observations about the involvement of local authorities are even more striking when considering that several local officials are contractors themselves.

18.4 CONCLUSION

In many ways, the case of the Philippines is illustrative for—and has indeed served as an inspiration for—the informalization argument that is developed in Chapter 4 of this book. Rather than being simply a bottom-up response to poverty the massive expansion of ASGM, and its reliance on cheap informal labor, can be seen as a structural response to a crisis in the mining industry. In addition, the Philippine case draws central attention to the role of the state: The transition from large-scale industrial mining to flexible informal mining was accompanied and facilitated by a decentralization of state structures. Ever since, the interests of local state actors (notably miner-politicians) have become intimately entangled with those of the informal mining economy.

While this chapter has paid attention to the ways in which ASGM-expansion intersects with broader institutional dynamics, it fails to provide insight into how the booming informal gold mining economy is integrated into the global gold production system. While this is certainly an issue that merits further empirical attention, there are indications that the lion's share of ASGM-gold from the Philippines is finding its way into the Chinese market. It is highly likely that this clandestine gold trade is facilitated not only by the geographical proximity of China, but also by intra-regional trading networks that have been in existence for centuries, and even enabled the erstwhile emergence of gold mining.

NOTES

1. More information can be found on the Web site of the Philippine Mines and Geosciences Bureau (MGB) (<http://www.mgb.gov.ph>).
2. Again, this information can be found on the Web site of the Philippine Mines and Geosciences Bureau (MGB) (<http://www.mgb.gov.ph>).
3. This section is based largely on field research that I conducted in different regions of Mindanao (in the provinces of Compostela Valley, Davao Oriental, South Cotabato, and Agusan del Norte) and in Benguet province, across different periods between 2011 and 2016.
4. This informalization argument—which also inspired this edited volume—was developed in more depth in Verbrugge (2015c).

5. A more elaborate discussion of this case can be found in Verbrugge and Besmanos (2016).
6. Interview with the Barangay Captain of Virac, 7 February 2014.
7. Interview with mine worker and labor activist, 8 February 2014.
8. Interview with community organizer of a trade union, 6 February 2013.
9. Interview with Barangay Captain of Virac, 7 February 2014.

REFERENCES

- Abinales, P. N. (2000). *Making Mindanao: Cotabato and Davao in the formation of the Philippine nation-state*. Quezon City: Ateneo University Press.
- Caballero, E. (1996). *Gold from the Gods: Traditional small-scale miners in the Philippines*. Quezon City: Giraffe Books.
- Camba, A. (2015). From colonialism to neoliberalism: Critical reflections on Philippine mining in the “long twentieth century”. *The Extractive Industries and Society*, 2(2), 287–301.
- Clad, J. (1988). Exploring for policies. *Far Eastern Economic Review*, 142, 76–77.
- Dumlao-Abadilla, D., & Nawal, A. (2017). *DENR shuts down 23 mining areas*. Retrieved 20 May 2019 from <https://newsinfo.inquirer.net/867793/denr-shuts-down-23-mining-areas>.
- Gomez, M. (2010). Transparency issues in the Philippine mining industry—Towards tax justice. *Quezon City: Action for Economic Reforms*.
- Habana, O. (2001). Gold Mining in Benguet: 1900–1941. *Philippine Studies*, 49(1), 3–41.
- Holden, W. N. (2014). The New People’s Army and neoliberal mining in the Philippines: A struggle against primitive accumulation. *Capitalism Nature Socialism*, 25(3), 61–83.
- Holden, W. N., & Jacobson, R. D. (2006). Mining amid decentralization. Local governments and mining in the Philippines. *Natural Resources Forum*, 30(3), 188–198.
- Lopez, S. P. (1992). *Isles of Gold: A history of mining in the Philippines*. Oxford: Oxford University Press.
- Ofreneo, R. E. (2009). Failure to launch: Industrialisation in metal-rich Philippines. *Journal of the Asia Pacific Economy*, 14(2), 194–209.
- Pinches, M. D. (1996). The Philippines’ new rich: Capitalist transformation amidst economic gloom. In R. Robison & D. Goodman (Eds.), *The new rich in Asia* (pp. 103–133). London: Routledge.
- Ranada, P. (2019). *Duterte to ‘confront’ Congress on need to ‘close mining industry’*. Retrieved 20 May 2019 from <https://www.rappler.com/nation/212209-duterte-confront-congress-close-mining-industry>.

- Scott, J. C. (1972). Patron-client politics and political change in Southeast Asia. *American Political Science Review*, 66(1), 91–113.
- Stedman, A., & Green, K. P. (2018). *Fraser Institute annual survey of mining companies 2018*. Retrieved 20 September 2018 from <https://www.fraserinstitute.org/sites/default/files/annual-survey-of-mining-companies-2018.pdf>.
- 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.
- Verbrugge, B. (2015a). Decentralization, institutional ambiguity, and mineral resource conflict in Mindanao, Philippines. *World Development*, 67(2), 449–460.
- Verbrugge, B. (2015b). The economic logic of persistent informality: Artisanal and small-scale mining in the Southern Philippines. *Development and Change*, 46(5), 1023–1046.
- Verbrugge, B. (2015c). Undermining the state? Informal mining and trajectories of state formation in Eastern Mindanao, Philippines. *Critical Asian Studies*, 47(2), 177–199.
- Verbrugge, B. (2017). Towards a negotiated solution to conflicts between large-scale and small-scale miners? The Acupan Contract Mining Project in the Philippines. *The Extractive Industries and Society*, 4(2), 352–360.
- Verbrugge, B., & Besmanos, B. (2016). Formalizing artisanal and small-scale mining: Whither the workforce? *Resources Policy*, 47, 134–141.
- Wong, P. N., Aquino, K., Lara-De Leon, K., & So, S. Y. F. (2013). As wind, thunder and lightning: Local resistance to China's resource-led diplomacy in the Christian Philippines. *South East Asia Research*, 21(2), 281–302.