

Political and corporate governance for effective mine closure

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Abstract

This paper looks into how two types of communities currently deal with the impacts, present and foreseen, of the anticipated closure of a mine. One is the huge community of mine workers and their families whose existence has been intimately tied to the mine's continuous operation. The other is a small agricultural settlement which is now abandoned and dissolved as its inhabitants found their economic activity to be no longer viable. The distinction between the two communities underscores the need to qualify the form and extent of relationships that a mining company has with its impact communities in designing and planning for closure. The forces shaping the approach, design and implementation of mine closure strategies are international in dimension. International cooperative efforts exist to address legacy issues, and are definitely an encouraging development towards finding solutions to interlocking social and environmental problems associated with mine closure. However, the locality-specific concerns must not lose primacy. The paper argues that mine closure planning, while requiring a comprehensive approach, should go beyond being a purely engineering-managerial project guided solely by risk assessment toolkits aimed at rehabilitating landforms into their ecologically stable state. While strategies to address problems may be well-thought out, they can prove ineffective and remain meaningless if specific concerns of people and communities, embedded within defined socio-political and economic milieus, are inadequately understood. The paper also demonstrates that the two communities, while different in size and other characteristics, share the complexity of social and economic displacement associated with the loss of livelihood or income sources. Thus, schemes to implement mine closure necessarily entail the systematic and shared efforts of multiple parties. The paper concludes that mine closure concerns should be recognised as governance issues and appropriate actions require the leadership and commitment of the national government and its relevant instrumentalities.

1 Introduction

The untoward impacts of mine closure are intertwined — environmental, social and economic. The environmental issues, together with geotechnical and safety aspects, have been well documented. What have been less examined, and therefore inadequately understood, are the social and economic dimensions. In broad terms, these are the changes that relate to the everyday life of communities who are, in the final analysis, the end receivers of legacy problems, usually on an involuntary basis. Environmental problems themselves impede access to essential resources like land, water, and air and the flora and fauna that these elements support. These elements are vital to communities that depend on agriculture and fishing, often the two major economic activities of many remote and rural communities.

In existing literature on large-scale mining and community relations, there is a stark deficiency in clarifying the fact that there usually is more than one type of community that a mining company finds itself dealing with. Communities may all commonly have stakes in a mining project but may differ in their interests. They may also vary in the form and extent of relationship they have with a mining company. As such, the approach to one type of community is not necessarily appropriate or applicable to another.

This paper looks into how communities respond to the present impacts and foreseen consequences of the closing down of a mine. It is based on analyses of two types of communities and the nature of their relationships with a copper mine that has operated for over 50 years. In particular, the discussion focuses on the initiatives that households, families, and other groups adopt in response to both the actions and inactions of a mining company. On a higher plane, the paper seeks to contribute to understanding the complex context and process of designing and implementing mine closure strategies particularly from the perspective of addressing socio-economic and cultural concerns.

The main data for this paper formed part of a PhD project (Chaloping-March, 2008) that involved a total of 13 month ethnographic research in mid 2003 and 2004–2005 in Benguet, Northern Philippines. Updated information was subsequently collected through reviews of more recent (2007–2008) materials.

2 Carved out and built communities

Many of the large-scale mines in the Philippines are located in previously inaccessible areas. In commencing and re-commencing their operations mainly during the post World War II period, large mining companies found it necessary to carve out communities and maintain them (Casambre et al., 1987; Lopez, 1992). These companies had built huge settlements as they recruited thousands of workers to meet workforce requirements in mine operation. These settlements can be appropriately called mine site communities owing to their location around the mine and their affairs fall within the aegis of mining companies. Once recruited, the workers, most of them males, in turn brought with them their spouses and children to the mine areas where they would settle for good. Meanwhile, many of the unmarried workers eventually met their spouses in the locality and had their own families.

Within Benguet, a mineral-rich province in the Cordillera Region (Figure 1), the Lepanto Consolidated Mining Company whose operations began in 1936, built its community of workers within the town of Mankayan. Likewise, several worker settlements within the town of Itogon developed out of the operations of Benguet Corporation which was formally organised in 1903. Furthermore, Philex Mining Corporation which commenced operation in 1958 established its workers' settlement within the town of Tuba.

All three mining companies, like the rest of those in other areas of the Philippines, began operations many decades before environmental management and mine closure planning became part of mining vocabulary. As such, the thought of ensuring a sustainable post-mine scenario of the huge hubs of mine workers and their families 50 to 100 years down the line may have never crossed the mind of anyone within the firms or the mining industry as a whole.

As a scheme to secure its operations and maintain its workforce, each mining company in Benguet provided facilities for housing, medical care, education, recreation, and commerce. Over several years, a number of self-contained settlement nuclei, with populations usually five or six fold those of their host towns, had sprung up in Benguet.

3 The community of workers and their families

This section details the key characteristics of Philex, one of the major mining settlements in the Benguet Province. The focus is on the community's symbiotic relationship with the mining company that created it. The discussion draws attention to the implications of eventual mine closure for creative programmes to address untoward social and economic repercussions.

Philex is a community of workers and their families. It was built by and named after Philex Mining Corporation, presently the top copper producer of the Philippines. The company has been operating its copper mine in a locality called Padcal since 1958 until the present but anticipates closure in 2014. When carried out, its mine closure will be the first to be implemented in the country by a long operating mine with a huge community.

3.1 Establishment and growth

Padcal was an uninhabited hunting ground for wild boars and deer until the early 1950s. Large sections of the area used to be grazing land for cattle. Near the district were hamlets of farming households, mainly of early migrants who belong to the Kalanguya ethnolinguistic group. Their main livelihood was vegetable cultivation along hill slopes and growing citrus fruits within their house yards. Around Padcal were small valleys inhabited by the native Ibaloy ethnolinguistic group. These were several families who depended on raising cattle, cultivating rice in paddies, and infrequent panning for alluvial gold along waterways.

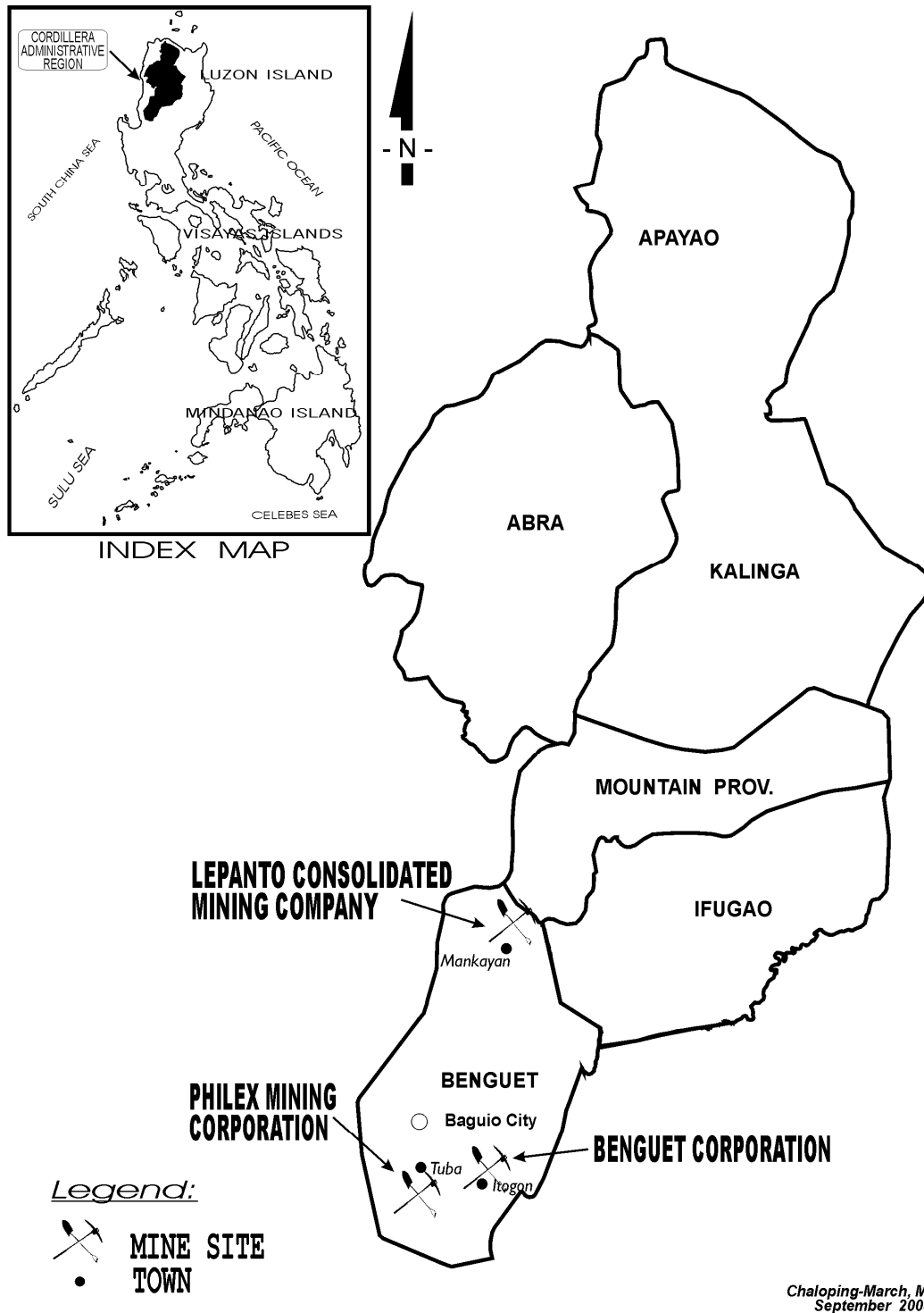


Figure 1 Operating mines in Benguet Province, Cordillera Region, Northern Philippines

Philex Mining Corporation began exploration in Padcal in 1955. The company's exploration activities resulted in the discovery of the copper orebody that would bring the birth of the company and its impressively continuous operation during the next 50 years. With mine production eventually taking off in 1958, hundreds of migrants arrived in Padcal as the company recruited workers. Subsequently, the company built several buildings for housing towards the 1960s. In the 1970s, more structures had been constructed such as the school, hospital, basketball courts, stores, a bowling alley, and offices. Thus, a compact 'city', called Philex, emerged amid the mountains of Padcal.

Philex exhibits a mixture of people coming from virtually all areas of the Philippines. Given the diversity of their places of origin and the tremendously tight neighbourhoods, problems arise out of disagreement, jealousy, gossip, and quarrels. Nonetheless, as explained by many residents, people had learned tolerance, the capacity to socialise better with each other, and develop a sense of belonging to one place. Many of the residents have come to refer to themselves as 'Philexians'.

Philex is first, an occupational community. Every household head, predominantly the husband, is an employee of the company. A family resides in Philex because either the husband or wife (or both) works for the company. It was an obvious policy that non-employees are not entitled to reside in Philex although, in certain circumstances, this rule has been bent to some extent.

Secondly, Philex is a community of kith and kin. Regarded as offering opportunities for greener pasture, it is a place where people arrived commonly through their association or relation with someone who was already employed with the company. Usually, the predecessor accommodates a kin in his/her home within Philex during the interim period when the latter is in the process of applying for a job. Sooner, the guest kin gets hired by the company, and then eventually brings his family to live with him/her in Philex. To many relatives who live in the highlands of the Cordillera or the nearby lowland provinces, going to reside for good in a mining area like Philex is a welcome opportunity to leave the rusticity of the farm and move into what is often perceived as a more sophisticated or advanced living.

In 1966, Philex Mining Corporation had 1,450 employees. As company workers lived with their spouses and children, the number of residents in Philex that year was 5,800. The community's population more than tripled in 1990–1991 to over 20,000 represented by about 5,000 employees and their dependent spouses, children, and some relatives. This number gradually shrunk as the slump of metal prices in the international market starting in the late 1980s towards the early 1990s entailed manpower cutbacks. With a workforce of about 2,000 in 2008 (PMC, 2009), the current population of Philex is approximately 12,000.

3.2 Benefits from and dependence on the mine

Overall, residents of Philex regard themselves fortunate in many respects. They consider their community as secure and safe for families, particularly those with young schoolchildren. The curfew at nine in the evening is strictly observed and residents do not consider it a violation of their civil rights. Rather, it is a policy they deeply appreciate and regard as a strong deterrent to crimes, thus making the community dissimilar from an ordinary city or town where crime rates are hardly zero.

Philexians also revel in their privileges as residents in their community: company-provided housing plus water and electricity, and proximity to work. Farther workplaces are provided free transport. Older children who have left Philex to pursue their tertiary studies in the cities are mystified at how much they had to pay for house rent, bills for electricity and water services, and fares for public transport. While these students live in dormitories or boarding houses, they usually 'go home' to Philex on weekends. Bringing their loads of laundry to Philex where free water and electricity is a common practice.

Among countless families in Philex, their being in a situation of relative privileges was something they were zealous to share with relatives. Hence, bunkhouses have become congested partly due to the presence of extended family members. Many workers and their spouses have had nieces, nephews, younger cousins, in-laws, and other relatives staying with them, and younger kinsfolk also study in the company-run school, until recently.

The company's provision of schools and the heavily subsidised tuition have enabled many couples to see their children finish the six year elementary and the four year secondary levels of education within Philex. Following these levels, the students then move to the tertiary stage of study in the cities. For the majority of workers, their uninterrupted employment with the company has afforded them a secure means to send their children to school, with many of them eventually finding work after acquiring tertiary qualifications.

The majority of company employees talked about the stability of their job and their continuous stay in Philex over the period they had been working. In general, they ardently appreciate their being employed with the company. Such appreciation springs from the sheer difference they observe as they compare themselves with people they left in their villages or towns of origin. The feeling of wellbeing should be understood in light of the difficulty of getting into a secure job that brings with it housing facilities for families and the privilege of

having their school-age children enrolled in the company-managed elementary and secondary schools. Getting employed with Philex Mining Corporation is akin to getting married with a perfect lifetime partner. Newer and younger employees, especially the children of company workers themselves, also take pride in working for the company and residing in Philex. In 2005, there were 482 employees, representing 18% of the company's total workforce, whose parents had worked or were still working for the company. This figure was distributed across different positions within the company. Among the 70 managers, there were 16 (22.85%) who were children of employees.

3.3 Family investments

Available data (2004) indicates that employees of Philex Mining Corporation generally receive salaries 62% higher than the prescribed government rate of PhP190 a day in the Cordillera Administrative Region and 10% more than that of the National Capital Region at P280 per day. As claimed, and even boasted by many residents themselves, they have had wage increases and periodic bonuses over the many years they had been employed with the company. As explained by low-ranking workers, however, their salaries are usually just enough to support their large families and the relatives in the provinces who depend on them. The bonuses, including those received in 2007 when the company reaped extraordinary profits from good metal prices, are often set aside for major expenses. This is especially the case of workers who have children studying in colleges and universities.

Philex as a community offered residents opportunities to practice thrift and savings. The majority of workers have become members of the Philex Community Credit Cooperative (PCCC), a workers-initiated cooperative that was organised in the early 1970s. Through payroll deductions, workers invested portions of their wages into the PCCC. However, most of the workers chose to seek membership in the cooperative not for the sake of earning profits but primarily to be entitled to borrow larger sums of money. The major reason of members in taking out loans is to be able pay their children's university tuition. As tertiary-level students finish their degree courses, many other parents have continued to take out loans in preparation for the licensure examination of their children. In effect, the investments of most parents were in the form of tertiary education for their children. The majority of older workers are now proud to talk about their children who have landed in various professions, with others working overseas.

More than receiving dividends of their investments in the cooperative, workers had to pay off their loans and the attendant interests. By the time a worker's loans have been paid off and/or his children have finally finished studying, he may have spent at least 25 years with the company. It is at such stage when an employee tends to be more receptive to the idea of retirement or retrenchment, and therefore he and his family may be less averse to the reality of having to leave the community. However, not everyone in Philex is in this situation.

3.4 Pampered by provisions

Most residents in Philex, particularly those with younger children, are most unenthusiastic to the possibility of having to leave the community. Their main apprehensions lie in their lack of alternative income source, and the fact that they have nil savings. Many residents asserted that it would be the managers and supervisors who should have been able to save money because they have much higher salaries, extra privileges, and therefore expectedly lesser expenditures.

As admitted by a number of residents, obviously a realisation on their part as they face the looming uncertainty of the future, they had been, to a great extent, accustomed to depend on the provisions one receives while living in Philex, and lose sight of the reality that the mine will close one day. If there was ever a time when Philexians had seriously thought of saving for the future, it is at present as they now face the prospect of finding other income sources.

Several managers explained that the company was partly at fault by not handling well the expectations of people in Philex, particularly the mindset that the mine will carry on indefinitely, and the outlook that Philex as a community will always stay the same. A remark by a former employee exemplified a sentiment that lays bare the critical need for periodically clarifying and managing expectations.

“I have lived here for 30 years now. The news that the company is going to close one day is one that we’ve heard before. Many people were retrenched in 1993 but a lot of them are still here with us. The company said some time ago that it was going to close in 1997. But it has not. Well, if the mine stops, come what may.”

The 1980s is considered the heyday of the company and residents remember it as the period of remarkable bonuses. The recollection of a manager’s wife of the past years highlights the distress associated with foregone opportunities and the changed situation:

“Everything is provided by the company — this apartment, my husband’s car, our couch in the living room, fuel, electricity and water. I and my husband used to have lots of money especially in the 1980s when bonuses were plenty. Can you blame me if I had not withheld buying what we wanted? We had the money so we spent it as we pleased. Even when our two daughters were growing up, we were still in very good financial standing. Now, the times are just so different. I wish I had saved and saved.”

The above discussion underscores the critical need for creative programmes aimed at developing strategic capacities among community members. However, relevant mechanisms for building skills do not have to be in relation to the impending closure of a mine. Rather, they could be various skills programmes to match general and specific situations that occur during the mine’s operational life.

3.5 Departure, deferment, decongestion and defiance

In 1992, Philex Mining Corporation incurred significant financial losses, as was the case of all mining companies in the country during the late 1980s to 1990s. This compelled the company to adopt cost reduction measures which required trimming down the number of employees by offering early voluntary retirement and retrenchment programmes. Thus, manpower reductions took place in 1993, 1996, 1999, 2001 and 2003 in response to losses, progressive debts, and the continuing mechanisation programme of the company. By 2006, the company workforce was 2,226 in contrast to 5,150 in 1990.

It was an understood rule that those who left the workforce, together with their families, no longer had the legitimacy to be residing in Philex. While retrenched and retired employees were content to receive their severance payments, the sentiment among the majority of the affected families was one of reluctance if not aversion. During the years following the workforce reduction schemes, the company found itself having to deal with social, administrative, and legal challenges.

A larger number of retrenched and retired employees gradually departed but scores of others continued to stay in Philex. The company granted the requests of some families whose children were still studying in the schools within Philex, to continue residing in the community until the school year finishes. Other families tried to find ways to legitimise their stay in Philex by engaging in retail businesses within the community. Families extending their stay in Philex continued occupying their company-provided quarters and relying on water and electricity services. Up to some stage, the company applied tolerance towards the practice.

The perceived leniency applied by the company towards many families who were retrenched in 1993 but had not left Philex was taken as a justification by other employees, who were laid off during the subsequent years, to also remain residing in the community. For others, like a group of supervisors and more than 40 rank-and-file employees, they challenged the legality of the company’s decision to dismiss them from service (Supreme Court of the Philippines, 2005), asserting that they will not leave Philex until a final decision on their case was issued. Incidentally, their court case that was filed in 1993 received decisions only in 2000 and resolution in 2001 due to appeals to earlier rulings, and lasted until August 2005 when the Supreme Court finally issued a decision directing the company to reinstate the dismissed workers, or pay back wages in lieu of reinstatement.

In early 2005, the company notified those whom it considered non-legitimate residents of Philex, both the employees who retired and were retrenched, together with their families, to vacate their living quarters or private shacks lest their water and power services get cut off and the contents of their dwelling units be removed. The company carried out an activity which it called ‘decongestion programme’. It involved coordination with police from the municipalities that have jurisdiction over Philex. The effort aimed to expel former employees from their company accommodation and private shacks inside Philex. Many of the

affected families, particularly those who had no place to go felt that they were being driven out of Philex like unwanted people after they had served the company for many years. The decongestion activity created controversies that placed the company in the local media. This developed as one potential evictee who was retrenched in 2003 refused to vacate her apartment and led others to seek legal action against the company.

The refusal of many residents to leave Philex reflects their inability to cope with the change of circumstances such as the end of their being part of the community which they had known most of their lives. In more profound terms, the situation highlights the complex repercussion of inadequate schemes or strategies, on the part of the company, to help prepare residents in coping with the post-mine and post-Philex reality ahead of them.

4 Communities around the mine

This segment of the paper zeroes in on Alang, one of the many communities adjacent the Padcal Mine. A discussion on the other communities is beyond the confines of this paper. The concerns of other communities are similar to Alang's but also different in certain terms. Alang is taken as a case to underscore the type of relationship that the community has with the company, and examine the context that shapes specific and broad social issues attendant to mine closure.

4.1 Several sparse settlements

Around Philex are scores of small hamlets called sitios. A sitio is a distinct politico-geographic unit usually consisting of a cluster of several households, and makes up a sub-unit of a village (barangay). Their composition, economic activities, and the nature of their interaction with the company are different to that of the mine site community. They generally acknowledge that Philex Mining Corporation has brought them the social and economic advantages of being linked to the city of Baguio, the prime urban centre in the Cordillera region. Nonetheless, the majority of inhabitants in these surrounding sitios consider the provisions they receive from the company as trifles compared to the privileges enjoyed by company employees and their families.

Numbering more than 20 sitios, the small communities around the Padcal Mine consists of the following: a) several households who trace their roots to distinct Ibaloy clans, many of whom were already settlers in the area long before the company arrived, b) about three to four generations of mainly Kalanguya and Kankanaey families whose ancestors migrated in waves to the outlying areas of the mine before and during the First World War until the early 1950s, and c) scores of migrant families who moved to the district in the 1980s to 1990s to engage in small-scale gold mining. Elsewhere (Chaloping-March, 2006), the author discussed the relationship of these communities with Philex Mining Corporation, and local government in regard to their cooperative activities towards social sustainability.

4.2 Compensation claims and broader issues

Alang is the sitio that is most adjacent to the Padcal Mine. Many of the former residents, in this previously thriving community, had engaged in a long drawn-out complaint against the Philex Mining Corporation concerning compensation. From being a small hamlet of less than ten households in the early 1950s, Alang grew to a settlement of about 30 households. The primary livelihood of the inhabitants was upland agriculture mainly for subsistence but with a growing number of farmers producing crops for market. However, farming activities gradually stopped due to the drying up of springs which served as sources of water for households and irrigation for farms. The water depletion was attributed by residents to the company's mining activities not only through the open pit excavation during its initial years of operation, i.e. 1958–1960, but through its continuous block-cave mining over several decades. Alang residents also claimed that the withering of springs was worsened by the company's drilling activities in the late 1980s.

To address the concerns pertinent to water depletion which were already raised in the early 1990s, the company had been in consultation in 2000 with the Engineering and Development Corporation of the Philippines, a firm engaged in water projects, in regard to determining alternative sources of water and construction of pump wells for affected residents. However, the process of identifying a possible water source and the requisite planning and supposed implementation of the project was stalled when a few individuals claiming for compensation wanted to negotiate a better deal with the company. Since 2002, water

supply projects for households and communities around the Padcal Mine have been among the company's infrastructure projects, in compliance with the Mining Act's provisions for social development management programme (SDMP).

From the late 1980s to 1990s, the residents of Alang gradually left their houses and farms, as farming was no longer viable and there was no alternative livelihood. Some residents moved to bordering sitios while others were able to put up their shacks in Philex. Other families were granted company accommodation. Many others went to Nueva Vizcaya, a province adjacent to Benguet, to join relatives and find better opportunities for farming. Some went to Loo, Buguias, an agricultural town in the northern part of Benguet. The departure of people resulted in the abandonment and eventual dissolution of Alang, once a flourishing agricultural community.

During the 1990s until 2005, the company paid compensation to families in Alang whose crops, farms, and house lots were determined by the company to have been affected by mining activities. The company's policy to pay what it considers to be legitimate claims only, particularly those that fall within the defined buffer zone of the 98 ha subsidence area that has been part of the company's mining concession.

Alang is no longer a community as no people live there at present. However, Alang's former residents, particularly those who were born and grew up there, continue to talk about it as a place with so much significance in their life. While families received compensation for the damage to their farms, other lands, and related structures and improvements on the land, the payments did not necessarily bring to a close peoples' recollection and narratives about their loss. Some of those who chose to move to Philex have engaged in a few, but often intermittent, livelihood activities such as collecting and selling scrap metals, and contracting company projects. Small-scale mining has been an activity for very few as they have to acquire access to a usok (adit) which is not easy, and they do not possess the required skill and predilection to engage in the trade.

4.3 Distinct interests by different communities

In January 2007, the lease contract of Philex Mining Corporation to continue mining the orebody, which incidentally was located underneath Alang, expired. Thus, the company needed to renew its contract. It was in this instance when a group of former Alang residents rose anew, and with relatively more resolve, to demand for compensation for land and water. The Secretary of the Department of Environment and Natural Resources (DENR) approved the renewal of Philex Mining Corporation's lease contract by issuing a special permit, with the caveat that the company should acquire the free prior and informed consent (FPIC) of the communities affected and the endorsement of the local government. Local government officials endorsed the renewal of the lease contract. However, in August 2007 former residents of Alang and some inhabitants of neighbouring sitios picketed against company operations and questioned the DENR's approval of the company's aim to continue its mining activities.

Towards the end of 2007, the picketers' demands about water compensation was elevated to outright opposition to mining activities in the area. This situation prompted some leaders in Philex, namely the officers of the two worker unions – that of the supervisors' and the rank-and-file-employees, to gather petition signatures as an expression of their unwavering support for the continuity of mining in the area.

In another vicinity near Padcal, the company has been undertaking exploration since 2005. In particular, the exploration sites border several communities such as Nay-en, Sais and Singko whose main livelihood is small-scale gold mining. Like the former residents of Alang, the inhabitants in these communities regard the extended operation of the mine, which may entail encroaching into their work sites, as potentially jeopardising their economic activities.

In the end, the company's application for a mine production sharing agreement within the area executed, on 14 January 2008, a Memorandum of Agreement (MOA) with the concerned communities and the National Commission on Indigenous Peoples. The MOA, described by the company as 'a first of its kind in the Philippines' (PMC, 2008a), stipulated a royalty payment by the company of 1.25% of gross output to affected communities (PMC, 2009) as required under the Philippine Mining Act of 1995.

5 Mine closure and governance

In this section, the discussion centres on the need to look at the intertwining concerns around mine closure as broad governance issues. The concept of governance is defined and the international and national domains of mine closure are taken up as part of the governance landscape. While recognising the importance of international-level efforts, the centrality of understanding local situations is asserted.

5.1 Understanding governance

Governance is understood as having to do with ensuring order and desired behaviour through administering certain sets of rules. The political scientist James Rosenau stressed that governance is not synonymous with government although the two terms are related and have to do with goal-centred activities and administering rules. Government, Rosenau explained, implies activities that are supported by formal authority and police powers ‘to insure the implementation of duly constituted policies.’ In addition, governance entails ‘activities backed by shared goals that may or may not derive from legal and formally prescribed responsibilities and do not necessarily rely on police powers to overcome defiance and attain compliance’ (Rosenau, 1992). Thus, while governance may be drawn from the government through the application of coercion, it may also involve non-government entities, at all domains — local, national and international.

The idea of governance that is required in effecting successful mine closure is, tautologically, ‘good governance’. This would have to be ‘an open, committed, accountable, and collaborative engagement of all social forces in the pursuit of the common good.’ It is a process whose objective is fundamentally the strengthening of peoples’ sense of community. Thus, governance cannot be a disconnected or patchy pursuit separately carried out by multiple sectors or groups (Asian Development Bank, 2005). There is an increasing recognition that government alone does not determine the course of development within a society but is defined and brought forth through the interaction of many actors (Bressers and Kuks, 2003).

The manner by which a business entity is governed is understood as corporate governance. In general terms, it defines the ownership and management structure of a corporation, the duties and liabilities of the governing body, the rights of stakeholders, and mechanisms for enhancing performance. The Organisation for Economic Cooperation and Development (OECD) explains corporate governance as ‘the structure through which shareholders, directors and managers set the board objective of the company, the means of attaining those objectives and monitoring performance’. The fundamental objective of corporate governance is to ensure that investors namely the suppliers of finance, creditors, or shareholders get revenue on their money (OECD, 2004). Maximising shareholders’ revenue demands a practical consideration of attendant economic and socio-cultural factors that affect a company’s viability to operate. This definitely includes taking into account the company’s relations with its host and impact communities.

This is more so with the end in view of attaining sustainability. Achieving environmental and social sustainability, as reiterated by Benn and Dunphy (2007) increasingly requires partnerships with various parties such as non-government organisations (NGOs) and community groups for reasons and goals such as promoting organisational learning, upholding credibility, ensuring accountability, and minimising resistance to change.

5.2 Towards effective mine closure: an international perspective

Mine closure, as stressed by the World Bank (WB) and its private sector arm, the International Finance Corporation (IFC), is a scheme to help ensure that ‘the benefits accruing from mining, are maximised in a sustainable way and that the negative impacts of the mine are mitigated to the extent that the communities both during and after the life of the mine, are better advantaged by the presence of a mining investment’ (WB-IFC, 2005). Such is the ideal outcome of mine closure, which unfortunately is often divergent from what happens on the ground. A mine closure is considered effective when a mine has produced long-term and fair benefits which can promote other productive activities and increase capabilities among local individuals, households and communities.

The forces shaping the design and implementation of mine closure strategies are international in dimension. Part of the governance landscape for the minerals industry to ensure mine closure programmes will deliver sustainable outcomes is the growing recognition to coordinate actions within industry ranks. Within the

global minerals industry, the main concern of companies is the implication of legacy issues for the industry and thus the legitimacy of mining to carry on. The founding of the ICMM, a group made up of 16 of the largest mining and metal companies and 28 national mining and global commodities associations, was in recognition of the considerable challenges the sector faced, i.e. maintaining the industry's reputation; sustaining profits; accessing new assets; and preserving investor and employee confidence (ICMM, 2007). Collaborative initiatives among companies have been launched to formulate approaches to address the problems. One of these is the Post-Mining Alliance which aims to promote good practice in post-mining regeneration by becoming a centre of excellence and repository of knowledge on post-mining regeneration projects. The ICMM has continued to publish mainly for its members' guidance and policies relevant to ensuring successful mine closure.

Furthermore, there are also efforts of international agencies to address mine closure concerns. In particular, the United Nations Environment Programme (UNEP), United Nations Development Programme (UNDP), the Organisation for Security and Cooperation in Europe (OSCE), and the North Atlantic Treaty Organisation (NATO) produced the document *Mining for Closure: Policies and Guidelines for Sustainable Mining Practice and Closure of Mines*, intended as a checklist and guidebook on best practices (Peck et al., 2005). Other efforts are aimed at tackling environmental and socio-economic issues emanating from legacy sites. For instance, the World Bank, Nordic Development Fund (NDF), and the Zambian government are partners in the Zambian Copperbelt Environment Project to clean up hazardous wastes associated with mining. Similarly, the World Bank Group also supports the regeneration of legacy sites in Poland and Russia in coordination with the governments of these countries to address both the physical aspect of closure and the social impacts on the workers and community.

The elevation of the attention to legacy issues to the international level is a compelling element for mining companies to ensure and facilitate cost-effective closure and devise solutions to address related problems. This is especially true for transnational corporations many of whom are the leaders in the industry, and thus have relatively greater reputational stakes than other companies within the minerals sector.

5.3 Locality-specific situations — a prime consideration

In the Philippines, the entry of several of the world's transnational mining companies within the last two decades, although denounced by nationalist and ideological NGOs, has been claimed by the Department of Environment and Natural Resources (DENR) and the Chamber of Mines of the Philippines (COMP) as bringing 'best practice' not only in mining technology but also in environmental management and community engagement. International cooperative efforts can certainly lead to further validating tried-and-tested practices by applying them in varying situations. They also signal an encouraging development towards managing the multiple social and environmental issues associated with mine closure. While this is true, the locality-specific concerns must not lose centrality. In planning, modelling and monitoring strategies, companies include technical and bio-physical qualities of a mining operation such as climate, topography, and ground characteristics. These are indeed imperative. However, the incorporation of political, economic and socio-cultural elements is often missed. As a result, the specific concerns of people and communities are inadequately understood because they are dealt with outside the socio-political and economic milieu that define them.

Mine closure planning is a social intervention and an engagement of commitment. It requires an enduring cognisance that formulating and implementing mechanisms should not be approached as purely an engineering-managerial project, guided solely by risk assessment toolkits that set out to rehabilitate landforms and the elements into their ecologically stable state. While 'water', 'land' and the 'environment' may be treated as separate from humans, many communities do not see it as such. Rather, embedded in and intertwined with these is a whole set of other dimensions: economic, sense of being and history, cultural and religious.

6 Local concerns and larger societal issues

This part of the paper bridges the concerns around the Padcal Mine to key governance issues in the Philippines. It is argued that the case of the Philex Mining Corporation in implementing mine closure of its Padcal Mine is considered as a test case for the ability of both the Philippine government and the country's

minerals industry to demonstrate that responsible and sustainable mine closure does not stop at rhetorics. This is critical in a country where there has never been a mine that had carried out a purposeful and systematic closure and rehabilitation programme and where outstanding legacy issues remain unresolved.

6.1 The Padcal Mine closure as a case to behold

The social issues associated with the eventual closure of the Padcal Mine are enormous: loss of income raised for huge numbers of families, indeterminate future for would-be-homeless households, the unspeakable anguish from the actual and perceived dissolution of communities where people were born and the consequent move of retrenched and retired workers and their families to already densely populated cities and towns.

While this paper focuses on community relations and social concerns associated with mine closure, it does not overlook the potentially grave environmental problems of the mine in the area considering its mountainous terrain and its proximity to the Agno River and its tributaries. The Padcal Mine does not have a mishaps-free record in terms of tailings management. In January 1992, its Tailings Pond 2 collapsed, discharging 80 Mt of tailings into the environment (Ramos et al., 2000). Community safety and environmental integrity remain goals yet to be ensured when one takes into account Padcal's post-mine landscape and vegetation, mine-and-mill land use and related installations, and its remaining tailings dam (Tailings Pond 3). The decommissioning of mines has long been acknowledged as an important procedure involving engineering and technical activities and as such, an immense body of knowledge is available that informs theory and policy on remedies to address environmental problems associated with post-mine operation (Cooke and Johnson, 2002). Little could be added to current knowledge and debate regarding the depth and scale of damage that can be done to two scarce resources, i.e. land and water, as elements that are important to monitor during the post-mine period. While monitoring of the company's currently remaining tailings pond is carried out by a multi-partite monitoring team (MMT), a mechanism that should continue during the post-mine period, an important factor is the proficiency and sustained integrity of MMT members.

The profound and interlacing environmental, social, economic, and psychological impacts of mine closure — directly on thousands of people in the mine site community, and indirectly on many small communities around the mine — cannot be fully measured. Considering that these are in themselves economic and social displacement with far-reaching repercussions, the challenges related to designing and implementing appropriate schemes are directed not solely to the company, but more so to the national government and its instrumentalities whose leadership and commitment in pursuing sustainability are critical. The schemes to implement effective mine closure necessarily entail the systematic and shared efforts of multiple parties. In the case of the Padcal Mine, these cannot be reduced to being the exclusive responsibility of the Philex Mining Corporation, albeit the company must indeed be the leading player, as it is. In other words, the nature of social concerns around mine closure, for the Philippines, is an issue of broad governance.

6.2 The legislative framework for mine closure in the Philippines

In the Philippines, Republic Act 7942 (1995), otherwise known as the Philippine Mining Act of 1995, is the current law that governs the minerals industry in the Philippines. In regard to mine closure specifically, this law requires mining companies to allocate a trust fund 'for physical and social rehabilitation of areas and communities affected by mining companies and for research on the social, technical and preventive aspects of rehabilitation' (RA 7942, Chapter 18, Section 181). In a directive issued in July 2007 (DENR Administrative Order 2007-26, 2007), the DENR requires all mining companies with approved environmental protection and enhancement plans to submit before 31 December 2007 a final mine rehabilitation and/or decommissioning plan. The plan is to be reviewed by the mine rehabilitation fund committee and the contingent liability and rehabilitation fund committee.

Under the Mining Act of 1995, and in consonance with the Local Government Code of 1991, a mining company is required to consult with local government concerning community projects in which priority needs are considered and community consultation undertaken. In addition, Chapter 10 of the law and its revised implementing rules and regulations (DENR Administrative Order No. 96-40, 1996), requires a mining company to allocate at least 1% of its yearly gross direct mining and milling costs for community development, and the development of mining technology and geosciences. The 1% allocation is to be divided

at 90% specifically for community development and 10% for development of mining technology and geosciences. Meanwhile, the 90% for community development is to be managed through the SDMP. The SDMP is a comprehensive five year plan of a mining company to implement community programmes and projects based on consultations with the host and neighbouring communities. The Philippine government regards the SDMP as the vehicle to maximise opportunity for social and economic development and facilitate the equitable distribution of benefits. Ideally, the SDMP should be utilised 'to provide opportunities for a self-sustained livelihood thus decreasing dependency on the benefits derived from mining companies' (MGB, 2005).

While the law is comprehensible and its provisions are encouraging, the bottomline is its enforcement. A study conducted by the Foundation for Environmental Security and Sustainability (FESS) in 2007 pointed out the cynicism and distrust of many local government units, communities, and citizens about the national government's commitment to responsible mining. The misgiving is buttressed by the fact that the DENR has poor credibility with the public. The negative outlook is even fuelled by the media who are at certain times swift to sensationalise information. The COMP does not help either. As it relentlessly tries to portray the industry in the most positive light and tirelessly draws attention to the investments that the industry is supposed to bring to the country, it downplays mining disasters and is reluctant to admit its shortcomings. On the part of the NGOs, many of them are similarly one sided in their inflamed condemnation of mining (FESS, 2007). As each player seeks to put forward its respective claim, the vulnerable communities, lamentably, bear the adverse outcomes of both the actions and inactions of government and other major players.

6.3 The imperative for shared actions

Philex Mining Corporation prepared its mine transition plan (MTP) and submitted it to the DENR in 2006. The local government, particularly the province and municipality levels are at the back bench in the company's MTP activities. To date thus far, these two local government units 'just wait for what the company will do', viewing their role as being limited to either endorsing or disapproving. Fortunately, the lowest levels of government, namely the two barangay (village) councils that have jurisdiction over Philex, do participate in identifying SDMP projects and related activities such as monitoring the mine's environmental protection and enhancement programme. The involvement of barangay officials lies mainly in the fact that their constituent electorates are the beneficiaries of community development projects sponsored or delivered by the company.

The company hopes to extend operations beyond its anticipated date of closure. As such, it has tapped the services of organisations such as the Foundation for People's Development and the Institute for Solidarity Asia in formulating a corporate vision of 'transforming Padcal into a self-reliant community where the residents are able to sustain their basic needs' (PMC, 2008b). The trajectory of post-mine programmes, as formulated among company and community representatives in 2007 and 2008, is for Philex residents 'to have multiple sources of income' with the company continuing to play the role of a 'catalyst, partner and adviser to the community'.

As it is, the company is virtually solo in seeking to carry out its mine transition scheme and closure activities. The company is being watched by spectators, mainly the mining critics but also the national government and its relevant instrumentalities. The company has been well cited particularly by the DENR as a leader in environmental management. Notably, it is currently the only mining company in the country that is ISO 14001-certified. In terms of community development projects, the company has also been lauded by both government and industry bodies in its compliance to the Mining Act's requirement for SDMP projects for the communities around the mine. Among MGB officers and staff in the Cordillera Administrative Region, there is a strong perception that the Philex Mining Corporation will implement a successful mine closure and a post-mine programme. Such perception is based mainly on the company's relatively fine reputation as though it is almost incapable of misdemeanour.

The company has yet to draw on the meaningful participation and input of the provincial and municipal governments, other relevant government agencies (such as the Department of Trade and Industry, the National Economic Development Authority, the Department of Agriculture, Department of Labour and

Employment), and credible institutions/organisations involved in livelihood programmes to expand the relevant visioning and planning exercises towards effective design and implementation of activities.

7 Conclusion

This paper aims to contribute to understanding the complex context and process of formulating and implementing mine closure programmes and activities particularly from the perspective of addressing socio-economic and cultural concerns. Through the analyses of two types of communities, the paper looks into differing responses of two communities to current and foreseen impacts of the anticipated closure of the Philex Mining Company's Padcal Mine. The distinction between the two communities emphasises the need to consider the form and extent of relationships of a mining company with its impact communities in planning for closure.

The experiences of the Philex Mining Corporation in addressing mine closure concerns are unique in some ways, but are also analogous to those of any other mining company in terms of the basic challenges that confront all mine operations — the need to be financially viable, in tune and evolve with the political and economic realities, and respond to the imperative for sustainability. In essential terms, business viability necessitates the company to be legitimate, not simply in legal terms, but socially, i.e. acceptable not only before its community stakeholders but to the public and society at large.

The paper asserts that addressing the intertwining environmental, economic and social concerns around mine closure requires the committed participation of the national government, as the issues revolve around governance. The Padcal Mine stands as an acid test for the ability of both the Philippine government and the country's minerals industry to demonstrate that responsible and sustainable mine closure can be real. The systematic and shared efforts of multiple parties are imperative to realising workable strategies to implement effective mine closure.

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References

- Asian Development Bank (2005) Country Governance Assessment Philippines, viewed 8 June 2007, <http://www.asiandevbank.org/Documents/Reports/CGA/pgafeb-2005.pdf>.
- Benn, S. and Dunphy, D. (eds) (2007) New forms of governance: changing relationships between corporate, government and community, In *Corporate Governance and Sustainability: Challenges for Theory and Practice*, London and New York, Routledge, pp. 9–35.
- Bressers, H.T.A. and Kuks, S.M.M. (2003) What does governance mean? From conception to elaboration, H.T.A. Bressers and W.A. Rosenbaum (eds), In *Achieving Sustainable development: The challenge of Governance Across Social Scales*, Westport Connecticut, Praeger Publishers, pp. 43–64.
- Casambre, A.L., Tapang, B.P.J. and Paulino, B.M. (1987) Population Mobility and Development in the Mining Sector, In *Population Mobility Study in the Baguio Area*, Baguio: Area Research and Training Center, S. Rood (ed), University of the Philippines College Baguio, pp. 242–393.
- Chaloping-March, M. (2008) Managing the Social Impacts of Mine Closure: Mining and Communities in Benguet, Northern Philippines, School of Philosophy, Anthropology and Social Inquiry, University of Melbourne, Australia, PhD thesis (unpublished).
- Chaloping-March, M. (2006) Collaboration towards social sustainability: the case of a mining corporation, its surrounding communities, and local government in Benguet, Philippines, *International Journal of Environment and Sustainable Development*, Vol. 5(2), pp. 109–125.
- Cooke, J.A. and Johnson, M.S. (2002) Ecological restoration of land with particular reference to mining of metals and industrial minerals, *Environmental Review*, Vol. 10, pp. 41–71.

- Department of Environment and Natural Resources (DENR) Administrative Order No. 2007–26 (2007) Amendment to Section 2 (Transitory Provision) of DENR Administrative Order No. 2005–07, Amendments to Chapter XVIII of DENR Administrative Order No. 96–40, as Amended, Providing for the Establishment of a Final Mine Rehabilitation and Decommissioning Fund. Quezon City: Department of Environment and Natural Resources.
- Department of Environment and Natural Resources (DENR) Administrative Order No. 96–40 (1996) The Revised Implementing Rules and Regulations of Republic Act No. 7942, Otherwise Known as the “Philippine Mining Act of 1995”, Quezon City: Department of Environment and Natural Resources.
- Foundation for Environmental Security and Sustainability (FESS) (2007) A Double-Edged Sword? Implications of Mining for Environmental Security in the Philippines, viewed 12 July 2007, http://www.fess-global.org/files/philippines_esaf_report.pdf.
- International Council on Mining and Metals (ICMM) (2007) Annual Review 2007 Essential materials, produced responsibly, viewed 14 April, 2008, <http://www.icmm.com/publications/1862ICMMAR07.pdf>.
- Lopez, S.P. (1992) *Isles of Gold: A History of Mining in the Philippines*, Singapore: Oxford University Press, pp. 224–226.
- Mines and Geosciences Bureau (MGB) (2005) Primer on the Social Development Management Programme (SDMP), viewed 27 April 2005, http://www.mgb.gov.ph/sdmp_frame.htm#primer.
- Organisation for Economic Co-operation and Development (OECD) (2004) OECD Principles of Corporate Governance, viewed 1 May 2008, <http://www.oecd.org/dataoecd/32/18/31557724.pdf>.
- Peck, P., Balkau, F., Bogdanovic, J., Sevaldsen, P., Skaalvik, J.F., Simonett, O., Thorsen, T.A., Kadyrzhanova, I., Svedberg, P. and Daussa, R. (2005) *Mining for Closure: Policies and Guidelines for Sustainable Mining Practice and Closure of Mines: United Nations Environment Programme (UNEP), United Nations Development Programme (UNDP), North Atlantic Treaty Organization (NATO), and Organization for Security and Co-operation in Europe (OSCE)*, viewed 30 March 2008, http://enrin.grida.no/environment-and-security/mining_src.pdf.
- Philex Mining Corporation (PMC) (2009) Philex Mining Corporation 2008 Annual Report (SEC Form 17-A for period ended December 31, 2008), p. 3, viewed 9 May 2009, http://www.pse.com.ph/html/ListedCompanies/pdf/2009/PX_17A_Dec2008.pdf.
- Philex Mining Corporation (PMC) (2008a) IP and ICC endorse continued operation of Philex, Philex Cu-Au Bulletin, Volume 36, No. 1, January–March, p. 4.
- Philex Mining Corporation (PMC) (2008b) Preparing for Philex in 2014 and beyond, Philex Cu-Au Bulletin, Vol. 36, No. 3, July–September, p. 5.
- Ramos, H.C., Cabalda, M.V. and Banaag, M.A. (2000) Tailings dam accidents and the use of chemicals in mining – issues, policy response and lessons learned from the Philippines, Paper presented at the International Workshop on Environmental Regulation for Accident Prevention in Mining – Tailings and Chemicals Management, Perth, Australia.
- Republic Act No. 7942 (1995) An Act Instituting A New System of Mineral Resources Exploration, Development, Utilization and Conservation.
- Rosenau, J.N. (1992) Governance, order, and change in world politics, J.N. Rosenau and E-O. Czempiel (eds), *Governance Without Government: Order and Change in World Politics*, New York: Cambridge University Press, pp. 1–29.
- Supreme Court of the Philippines (2005) *Ariola vs. Philex Mining Corporation* (G.R. 147756. August 9, 2005), viewed 24 June 2007, <http://www.supremecourt.gov.ph/jurisprudence/2005/aug2005/147756.htm>.
- World Bank and International Finance Corporation (WB-IFC) (2005) *Key Topics in Mining: Mining and Community*, viewed 17 January 2005, <http://www2.ifc.org/ogmc/wbminingcommunity.htm>.