



Mining amid armed conflict: nonferrous metals mining in the Philippines

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In recent years the government of the Philippines has attempted to accelerate the growth of the nation's economy by encouraging the extraction of its mineral resources by multinational corporations. The Philippines is also a nation beset by armed violence carried out by anti-state groups. This article discusses how the presence, and activities, of these groups generate problems for a mining-based development paradigm. The article examines: the literature on the topic of natural resource abundance and conflict, how there have been attacks upon mines by armed groups, how mining companies have served as a target of extortion, how grievances related to mining can act as a source of conflict, how mining could disrupt the peace process with the Moro Islamic Liberation Front and how mines are accompanied by a militarization of the area in their vicinity. Ultimately, violence is a manifestation of poverty and social exclusion inherent in Philippine society. Mining may not diminish, and indeed may increase, this poverty and social exclusion. Unless poverty and social exclusion is alleviated the violence will continue and alternative efforts to develop the Philippine economy will be precluded.

L'activité minière au milieu d'un conflit armé: l'extraction de métaux non-ferreux aux Philippines

Dans les dernières années, le gouvernement des Philippines a pris des mesures afin d'accélérer la croissance de son économie nationale en incitant des sociétés multinationales à exploiter ses ressources minières. Les Philippines sont un pays rongé par la violence commise par des groupes armés anti-gouvernementaux. Cet article explique comment la présence et les activités de ces groupes posent des problèmes pour le paradigme du développement axé sur l'exploitation minière. L'article étudie la littérature sur l'abondance des ressources naturelles et des conflits, comment des attaques contre les mines sont commises par les groupes armés, comment des actes d'extorsion sont menés sur des compagnies minières, comment les griefs relatifs à l'activité minière peuvent dégénérer en conflit, comment l'activité minière peut nuire au processus de paix avec le Front de libération islamique Moro, et comment les lieux situés près des mines se militarisent. En dernière analyse, la violence est une manifestation de la pauvreté et l'exclusion sociale qui sont inhérents à la société philippine. L'activité minière ne réduirait pas cette pauvreté et exclusion sociale, mais tendrait au contraire à les exacerber. À

moins que la pauvreté et l'exclusion sociale ne soient soulagées, la violence continuera et il sera impossible de mettre en œuvre des mesures alternatives au développement de l'économie des Philippines.

Introduction

This article examines the phenomena of large-scale corporate mining¹ that occurs amid armed conflict by examining nonferrous metals mining in the Philippines, a country where armed insurgent groups are engaged in violence against the Philippine state. Mining activity imposes substantial impacts upon social environments, as well as biophysical environments. The juxtaposition of mining with armed conflict significantly complicates mining's social impacts.

In recent years, the multinational corporations (MNCs) that comprise the nonferrous metals mining industry have shown a locational preference for the developing world (Hayter *et al.* 2003). This investment has occurred as a result of 'push factors' out of the developed world, such as concerns regarding mining's environmental impact or decreasing access to high quality ore deposits (Muradian *et al.* 2003) and from 'pull factors' into the developing world, such as liberalized mining codes that were specifically geared towards attracting foreign direct investment (FDI) by mining companies (Bridge 2004). Concomitant with this relocation, many mining companies have entered into politically unstable areas of the world where armed groups engage in acts of anti-state violence (Mining, Minerals, and Sustainable Development 2002).

This article draws upon fieldwork interviews conducted in 2004, 2005 and 2006. An instrumental case study methodology is employed that allows for a detailed knowledge of a single case; it is a strategy for conducting research involving a particular phenomenon (Robson 1993). Instrumental case studies are used to understand something other than just the case itself; they are a method of focusing on a particular phenomenon in order to acquire knowledge about a more gen-

eral phenomenon (Stake 1995). In this particular study, mining in the Philippines (the *particular phenomenon*) is studied as a vehicle to evaluate the problems inherent in having mining companies locate in areas of armed conflict in the developing world (the *general phenomenon*). This methodology is specifically designed to comply with the view of Peluso and Watts (2001, 5) that violence is 'a site specific phenomenon rooted in local histories and social relations'. The specific characteristics of mining amid conflict in the Philippines are examined to exemplify a more general manifestation of mining amid conflict in the developing world.

Extractive Activities in Conflict Areas: The General Phenomenon under Study

According to the 'resource curse thesis' countries rich in mineral resources tend to experience poor economic performance (Auty 1994; Sachs and Warner 2001). Several observations are relevant in this regard. First, there is the concept of the 'Dutch Disease'², wherein an influx of foreign exchange attracted into a country as a result of mineral exports causes an exchange rate appreciation that renders other locally produced products uncompetitive in foreign markets (Auty 1994; De Soysa 2000; Sachs and Warner 2001; Le Billon 2005). Second, there is the tendency of mineral prices to experience volatility over time. Mineral prices may rise, and they may fall suddenly; this volatility becomes a substantial disruption to budgetary planning in those countries dependent upon their export (Renner 2002; Le Billon 2005). Third, mineral extraction may create an 'enclave economy' with isolated pockets of

1 The focus of this article is on large-scale mining by corporations. Small scale, or 'artisanal' mining carried out by individuals or families using labor-intensive methods and rudimentary technology is beyond the ambit of this article.

2 The term is referred to as the 'Dutch Disease' as a result of the experience suffered by the Netherlands during the 1970s. As the Dutch began exporting North Sea oil, the Dutch Guilder appreciated in response to the inflow of foreign exchange and this appreciation rendered other Dutch export products uncompetitive in foreign markets.



wealth having few linkages to the rest of the national economy (Ross 1999; Renner 2002).

In addition, a new dimension to the resource curse thesis has emerged recently that posits that countries rich in mineral resources have an enhanced vulnerability to armed conflict (De Soysa 2000; Le Billon 2001, 2005; Auty 2004; Nevins 2004; Ross 2004a). Although some writers, such as Homer-Dixon (1999), postulate a view that a *scarcity* of resources creates conflict, a contrasting view has developed which says that an *abundance* of resources is much more likely to generate conflict (Collier 2000; De Soysa 2000; Hartmann 2001; Peluso and Watts 2001; Le Billon 2004). The reasons underlying this latter view relate to: greed, or the *looting mechanism*; the *grievance mechanism*; the *lengthening of conflicts*; the *militarization of areas* and the relationships between *corruption and conflict*.

With respect to the looting mechanism, the locations of mining projects are dictated by 'idiosyncratic natural endowments' (Collier 2000, 93). It can take several years, and hundreds of millions of dollars, for a mining company to find, develop, and begin to mine a major mineral deposit (Soussan 1988). Once a mining project is developed it cannot be relocated and a mining company has a substantial incentive to pay funds to armed groups in exchange for being allowed to operate (Le Billon 2001; Buhaug and Gates 2002; Ross 1999, 2004b).

The vulnerability of mining companies to extortion raises some serious concerns about the viability of mining, as a method of achieving economic development, in an area subject to armed conflict. Buhaug and Gates (2002), Le Billon (2001) and Ross (1999, 2004b) argue that the vulnerability of a mining company to extortion, and its propensity to make payments to armed groups (given its high fixed costs and immobility), are factors that encourage an increase in the duration of the violence. Armed groups can extract money from mining project proponents to buy more, and better, weapons. With lucrative payments from mining companies, insurgents have a reduced incentive to stop their activities and the violence continues and, possibly, worsens. According to Ross (1999), the potential for extractive industries to worsen conflict is so serious it is referred to as a 'violent form of the resource curse'. Ross (1999) suggests that the

violence occasioned by the extortion of the mining companies makes it more difficult for firms engaged in other types of economic activity and the economic structure of the country becomes distorted and over reliant upon mining.

The issue of payments by extractive companies in conflict zones has been addressed by a 2001 initiative sponsored by the American, British, Dutch and Norwegian governments (as well as a group of mining and oil companies) called the 'Voluntary Principles on Security and Human Rights' (Global Witness 2005). This initiative is somewhat limited in its effectiveness because it only creates *voluntary* guidelines, which are not binding on the companies (Global Witness 2005). It is doubtful as to whether this voluntary initiative will have any effect in reducing the scope extractive industries pose for an aggravation of a conflict by locating in a conflict zone. In the words of Global Witness (2005, 33), 'it seems that a company can endorse the Voluntary Principles, and draw the reputational benefits, without providing any information to the public about any payments that it makes to armed parties to a conflict'.

With respect to the grievance mechanism, mining is an activity with a substantial potential for environmental harm (Muradian *et al.* 2003). Mining's environmental effects disrupt resources upon which people depend for their subsistence, and even displaces them, thus generating grievances among people that act to further generate conflict (Collier 2000; De Soysa 2000; Auty 2004; Le Billon 2005). The presence of mineral resources also lengthens conflicts (Le Billon 2004, 2005; Ross 2004a). The lengthening occurs in either, or both, of two ways: first, the government may negotiate a peace accord with separatist rebels, and then renege upon it in order to gain access to resources; second, the separatists may *expect* the government to *renege* upon the agreement, in order to gain access to resources, and become hesitant to sign a peace accord.

In the context of the militarization of areas in the vicinity of mining projects (Renner 2002; Le Billon 2004), military forces are often deployed by the government of the country where the mineral project is located; ostensibly, this is done to protect the mining company's personnel and investment. However, local populations perceive

these military forces as a method of intimidation (Le Billon 2004). 'Some of the worst cases and allegations of human rights abuses have occurred when companies have relied on national security forces either to gain control over land or to defend established premises' (Mining, Minerals, and Sustainable Development 2002, 189). The militarization of areas near to mining projects stifles community opposition to the projects. The presence of military forces employed by a mining company, or enforcing the interests of a mining company, is not helpful in ensuring that communities can freely voice their concerns regarding mining (Miranda *et al.* 2005). These security forces have substantial potential to contribute to conflict through the grievance mechanism in that misbehaviour, or heavy-handed behaviour, on their behalf can provoke a violent community response and further escalate conflict (Mining, Minerals, and Sustainable Development 2002). Often security forces are private forces employed by the mining company or state security forces paid by the mining company; that can generate allegations, particularly in the case of a repressive regime, that the mining project is helping to arm government troops that engage in human rights violations (Renner 2002). The Voluntary Principles on Security and Human Rights discusses the behaviour of mining companies with regard to the use of security forces but, again, these are *voluntary* guidelines and compliance with them rests on the goodwill of those companies that have signed them (Le Billon 2005).

Finally, the mineral sector is highly correlated with corruption (Mining, Minerals, and Sustainable Development 2002). The concentration of resource revenues at one place within a country makes these revenues easily appropriable (Sachs and Warner 2001). Government officials may become preoccupied with extracting these revenues rather than engaging in activities that encourage economic growth (Sachs and Warner 2001). Corruption prolongs conflict by undermining the efficiency of armed forces. Members of the armed forces who are deployed to protect a mining project can sell weapons to members of the insurgent group they are tasked to protect the mine from (Le Billon 2003). With these weapons, the insurgent group will feel emboldened and their activities will continue thus escalating the violence (Le Billon 2003).

To reduce the conspicuous failures of resource based development, including the problems that corruption poses to mining, a collation of companies, governments, investors and civil society organizations have formed the Extractive Industries Transparency Initiative³ (EITI), which is a voluntary initiative designed to encourage greater transparency with respect to the flow of revenue from extractive activities and to address the problems faced by countries experiencing resource development (Le Billon 2005). However, as with the Voluntary Principles on Security and Human Rights, the major limitation on the EITI is its *voluntary* nature. While some of the world's major mining companies, such as BHP-Billiton, are participants in the EITI many other mining companies are not participants. Similarly, while the UK is a participant in the EITI, Australia, Canada and the US are not participants.

Mining in areas of conflict is a serious challenge that carries with it the potential to prolong conflict. Mining is vulnerable to extortion and the funds extorted from mining can be used to purchase new and better weapons. Mining's potential environmental effects can drive people into armed groups. Mining can exacerbate a separatist conflict by giving a national government an incentive to renege upon an agreement with a separatist group, or by generating an expectation among a separatist group that the national government may renege upon an agreement with it. Military forces deployed to protect mining facilities may engage in human rights abuses and drive people into armed groups that engage in anti-state violence. Lastly, the corruption that often accompanies mining revenues will have a perverse interaction with armed conflict and make it more virulent. A key factor underlying all these factors is poverty and social exclusion that drives people into the armed groups in the first place. Without the reduction of poverty, the conditions that caused armed conflict will not dissipate and the conflict will only interact with mining and make conditions worse.

This article now turns to mining in the Philippines (and a demonstration of how the general conditions of the phenomenon being studied manifest themselves in a specific situation).

3 For a list of the participants in the EITI see <http://www.eitransparency.org/section/supporters>.



Mining in the Philippines

The Republic of the Philippines is an archipelago of approximately 7,000 islands located in South-east Asia, part of that group of countries referred to as the 'developing world' (World Bank 2005). Poverty is a widespread social problem in the Philippines (Figure 1) and 37 percent of all families live in poverty (World Bank 2005). 'Among the major East Asian economies, the Philippines has had the slowest rate of poverty reduction during the last three decades and, at the turn of the present century, had the highest incidence of absolute poverty' (Balisacan 2003, 311). Concomitant with these high levels of poverty, the archipelago suffers from a high level of inequality in the distribution of income. The standard method of measuring inequality is the Gini coefficient. A high Gini coefficient indicates a high level of inequality while a low Gini coefficient indicates a low level of inequality. The Gini coefficient for the Philippines in 2006 was 46.1; this was higher than the average Gini coefficient of 40.76 for the other Association of South East Asian Nations for which data were available (World Bank 2006).⁴ The Philippines, like many countries in the developing world, is also heavily indebted to foreign creditors; in 2003, for example, 22 percent of all export revenue was spent on debt service payments (World Bank 2005).

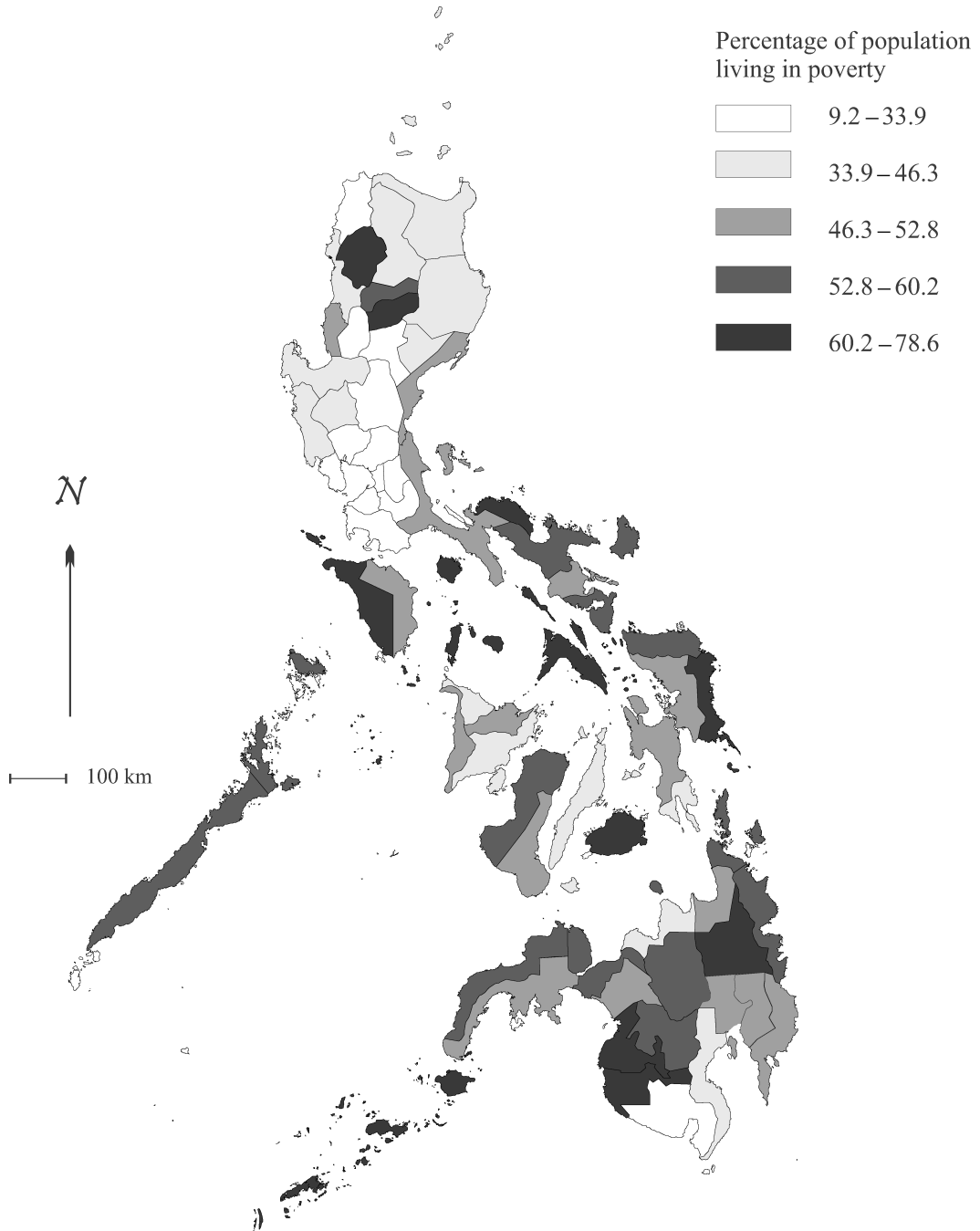
The Philippines is well endowed with mineral resources particularly nonferrous metals (metals other than iron) or, as they are often called, 'hardrock minerals' (the minerals are often found in consolidated rock of igneous origin) such as copper, gold, lead, nickel, silver and zinc (Mitchell and Leach 1991). The Philippines has a long history of mining. According to Rovillos *et al.* (2003), by the Third Century AD Chinese traders were referring to the island of Luzon as *Huang Jin Dao* (the island of gold). Industrialized mining began during the American colonial period (from 1898 to 1946), when a series of US statutes granted American investors access to the Philippine economy, and, by 1941, the Philippines was the world's fifth largest gold producer (Oliveros 2002). In 1980, 45 operating mines were responsible for over 20 percent of all export revenue

(Rovillos *et al.* 2003). By the late 1980s and early 1990s, however, the ability of the Philippine mining industry to act as a mechanism of facilitating economic growth began to become viewed as underutilized (Rovillos *et al.* 2003). The Asian Development Bank (ADB) was critical of the investment climate in the Philippines and it called for a liberalization of the nation's mining laws (Rovillos *et al.* 2003). The ADB, specifically, took issue with the provision of Section 2, of Article XII of the Philippine Constitution of 1987 which limited the extent of FDI in mining projects to no more than 40 percent of the total investment in the project (Rovillos *et al.* 2003).

The Philippine government began to act upon the ADB's advice in 1989 when officials from the Mines and Geosciences Bureau (MGB) of the Department of Environment and Natural Resources (DENR) participated in a seminar organized by the ADB entitled 'Prospects for the Mining Industry to the Year 2000', which emphasized increasing foreign access to a nation's mineral resources as a method of enhancing FDI and, consequently, economic growth (Rovillos *et al.* 2003).

In March 1995, President Ramos signed into law Republic Act 7942, the Mining Act of 1995 (United States Geological Survey 1995). This statute contained several generous incentives to encourage mining such as: a four-year income-tax holiday; tax and duty-free capital equipment imports; value-added tax exemptions; income tax deductions where operations are posting losses; and accelerated depreciation (United States Geological Survey 1995). The statute also guaranteed the right of repatriation of the entire profits of the investment as well as freedom from expropriation (US Geological Survey 1995). However, the most significant aspect of the Mining Act of 1995 was its creation of two new types of production agreements that would govern the mineral deposit ownership requirements under which a foreign mining corporation would operate in the Philippines. These are the Mineral Production Sharing Agreement (MPSA) and the Financial Technical Assistance Agreement (FTAA). The Mineral Production Sharing Agreement is a production agreement which can last for up to 25 years, is approved by the Department of Environment and Natural Resources, and requires that no more than 40 percent of the mineral project be owned by a foreign corporation (United States

⁴ Cambodia (40.4), Indonesia (34.3), Laos (34.6), Malaysia (49.2), Singapore (42.5), Thailand (42.0), and Vietnam (37.0).



Source: United Nations Development Program (2003)

Figure 1
Official poverty incidence



Geological Survey 1995). The Financial Technical Assistance Agreement is a production agreement that can last for up to 25 years, is approved by the President of the Philippines, and (in contrast to the Mineral Production Sharing Agreement) allows 100 percent foreign ownership of the mining property (US Geological Survey 1995).

The Financial Technical Assistance Agreement became popular with the firms of the nonferrous metals mining industry and by 2002 there were 43 FTAs in place covering 2.2 million hectares, or approximately eight percent of the land area of the Philippines⁵ (Tujan and Guzman 2002). From 1994 to 1996 the number of foreign mining companies represented in the country increased by 400 percent (US Geological Survey 1996). The US Geological Survey went so far as to call the Mining Act of 1995 'one of the most modern in Southeast Asia' (US Geological Survey 1997, x1). According to Snell (2004, 38), 'Extractive industries from around the world staked out about 40 percent of the nation's land area in the Act's first two years'. By the mid to late 1990s the government of the Philippines seemed bent upon a development strategy led by mineral resource extraction. In Figure 2 and Table 1, the locations of the major operating and proposed metallic mines are presented.

Armed Conflict in the Philippines

The Philippines is unfortunately a nation well endowed with armed anti-state groups that engage in acts of ideology-based armed conflict. 'Ideology-based armed conflict' is a term for violence, other than common criminality, that espouses an alternative state-vision (Human Development Network 2005). Several insurgencies in various parts of the country confront the Philippine government (Tauli-Corpuz and Alcantara 2004).

A more diffuse of the armed anti-state groups is a Maoist group known as the New Peoples Army (NPA). The NPA, the armed wing of the Communist Party of the Philippines (CPP), has been engaged in guerrilla warfare against the state since 1969 and is one of the longest running communist insurgencies in the world (Rodell

2004). From 1969 to 2002, an estimated 43,000 lives were lost in confrontations between the Armed Forces of the Philippines (AFP) and the NPA (Rodell 2004). In 2004 (Figure 3), there were 157 encounters between the AFP and the NPA in 50 provinces resulting in 369 deaths (IBON 2004, 2005). In 2005, the NPA were estimated to have approximately 8,000 active cadres, and have been described by the authorities as the major security threat facing the country (Linantud 2005).

The more concentrated of the armed anti-state groups operating in the Philippines are two Muslim groups operating in the southern Philippines. The first group is the Moro Islamic Liberation Front (MILF). The MILF split off from the Moro National Liberation Front (MNLF) in the early 1980s and has been fighting to obtain an independent homeland for the Muslim (or 'Bangsamoro'⁶) inhabitants of the southwestern portion of the southernmost island of Mindanao (Vitug and Gloria 2000; Diaz 2003). When the MNLF signed a peace accord with the government in 1996, the MILF continued its armed conflict against the Philippine government and grew in strength from '6,000 in the early 1990s to 15,000 by the end of the decade' (Abinales 2004, 11). From 1986 to 2004, 1,653 people were killed in confrontations between the AFP and the MILF (Human Development Network 2005). The second of these groups is a group called *Abu Sayyaf* (bearer of the sword); *Abu Sayyaf* operates mainly on Basilan Island in the Sulu archipelago and is predominantly involved in kidnapping and in 'protection rackets' (Abinales 2004).⁷

Conflict in the Philippines is extensive (Figure 4). Indeed, over the 1986 to 2004 period, 91 percent of all provinces in the Philippines were affected at some point by ideology-based armed conflicts (Human Development Network 2005). In the words of Kirk (2005, 127), 'the nation seethes with unrest'.

6 The term 'Bangsamoro' is a moniker for the Muslim inhabitants of Mindanao and the Sulu islands.

7 These Muslim groups operate principally in the Provinces of Lanao del Sur, Maguindano, Sultan Kudarat, parts of North Cotabato and the Sulu islands. By virtue of a 1999 agreement between the MILF and the NPA, the NPA does not conduct operations in the Autonomous Region of Muslim Mindanao (Rood 2005).

5 This is in contrast to the 270,716 hectares that were covered by MPSAs (Tujan and Guzman 2002).

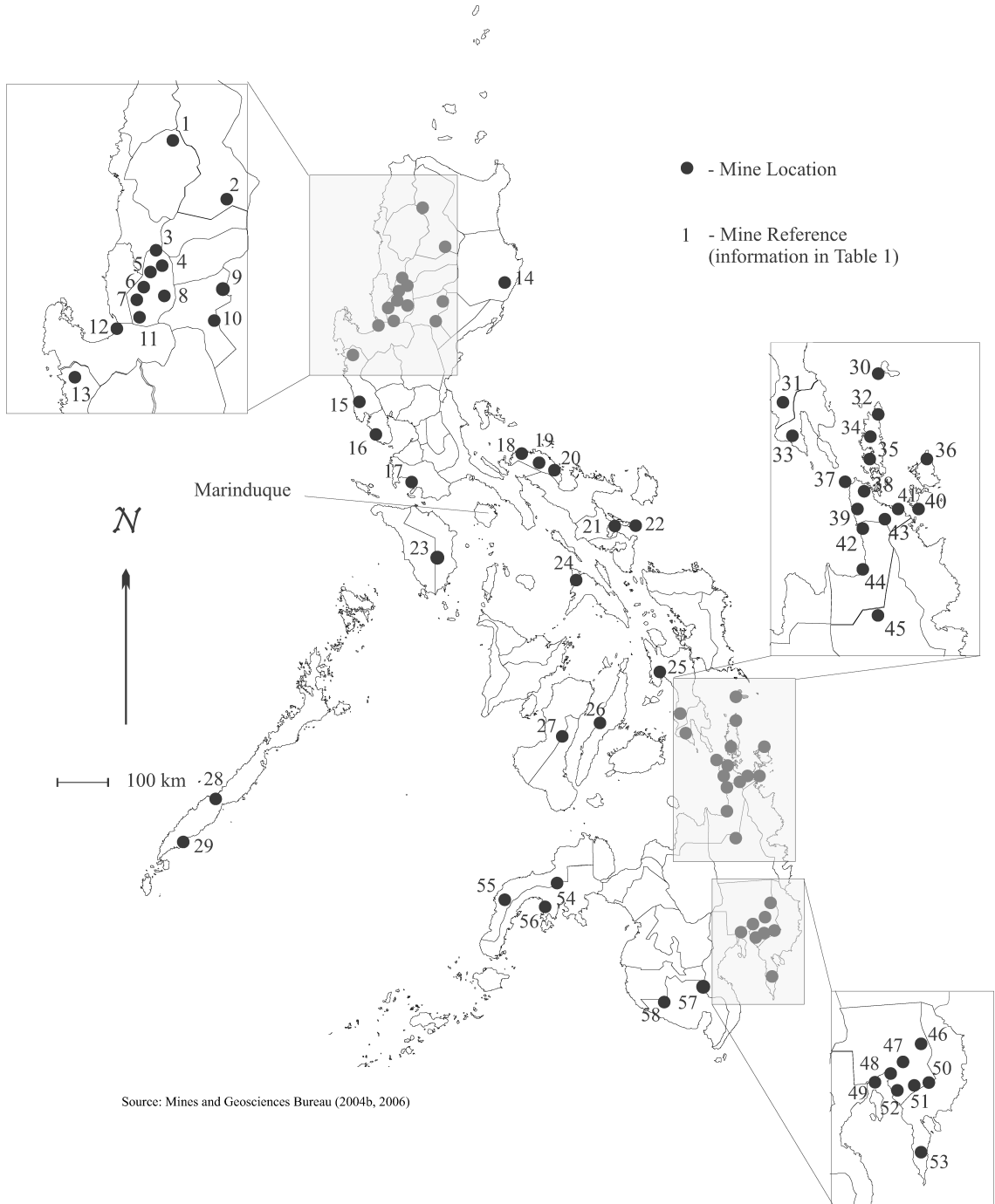


Figure 2
Major mine project locations



Table 1
Mine information for Philippines

Map number	Mineral type	Project name	Project proponent	Foreign owner	Provincial location
1	Copper	Conner copper-gold project	Cordillera Exploration Corporation	Yes	Abra
2	Copper	Tabuk copper project	Wolfland Resources	Yes	Kalinga
3	Gold	Victoria gold project	Lepanto Consolidated Mining	No	Benguet
4	Gold	Teresa gold project	Lepanto Consolidated Mining Corporation	No	Benguet
5	Gold	Gambang gold project	Oxiana Philippines.	Yes	Benguet
6	Gold	Camp 3 gold project	Northern Luzon Mining Corporation/Anglo American	Yes	Benguet
7	Gold	Acupan SSM operations	Benguet Corporation	No	Benguet
8	Gold	Far south east gold project	Lepanto Consolidated Mining Corporation	No	Benguet
9	Copper and Gold	Didipio copper gold project	Climax-Arimco Corporation	Yes	Nueva Viscaya
10	Gold	Nuevo Viscaya gold project	Orophilippine Ventures	No	Nueva Viscaya
11	Copper	Padcal copper project	Philex Mining Corporation	Yes	Benguet
12	Gold	Itogon-Suyoc gold project	Itogon Suyoc Mines	No	Pangasinan
13	Chromite Platinum	Acoje Chromite - platinum project	Crau Minerals	No	Zambales
14	Nickel	Dinapigue Nickel project	Platinum Group	Yes	Isabela
15	Chromium	Masinloc Chromite project	Benguet Corporation	No	Zambales
16	Gold	Bataan gold project	Balanga Bataan Mineral Exploration Corporation	No	Bataan
17	Gold	Lobo gold project	Mindoro Resources	Yes	Batangas
18	Gold	Del Gallego gold project	Phelps Dodge Exploration Corporation	Yes	Camarines Norte
19	Gold	Paracale gold project	Johnson Mining Corporation	Yes	Camarines Norte
20	Gold	Labo gold project	Indophil Resources	Yes	Camarines Norte
21	Copper, Gold, Silver	Hixbar project	Lafayette Mining Corporation	Yes	Albay
22	Copper, Gold, Silver, Zinc	Rapu Rapu Polymetallic project	Lafayette Philippines	Yes	Albay
23	Nickel	Mindoro nickel project	Aglubang Mining Corporation	Yes	Mindoro Oriental
24	Gold	Masbate gold project	Filminera Resources Corporation	Yes	Masbate
25	Gold	Leyte gold project	PNOC- EDC	No	Leyte
26	Copper	Toledo copper project	Alakdor Corporation	Yes	Cebu
27	Gold	Negros gold project	PNOC- EDC	No	Negros Oriental
28	Nickel	Palawan nickel project	Rio Tuba Mining Corporation	Yes	Palawan
29	Nickel	HPAL nickel processing project	Coral Bay Nickel Mining Corporation	Yes	Palawan
30	Chromium	Homonhon chromite project	Heritage Resources Mining Corporation	No	Eastern Samar
31	Gold	Leyte gold project	Indophil Resources	Yes	Leyte
32	Nickel	Sigbanog nickel project	Hinatuan Mining Corporation	No	Surigao Del Norte
33	Gold	Southern Leyte gold project	Orophilippine Ventures	No	Southern Leyte
34	Nickel	Hintuan nickel project	Hintuan Mining Corporation	No	Surigao Del Norte
35	Nickel	Nonoc iron fines project	Pacific Nickel Phils.	Yes	Surigao Del Norte
36	Chromium	Omasdang chromite project	CRAU Mineral Resources Corporation	No	Surigao Del Norte
37	Nickel	Nonoc nickel processing project	Nonoc Processing	No	Surigao Del Norte
38	Nickel	Adlay-Cadianao-Tandwana (act) project	Case Mining Corporation/BHP-Billiton	Yes	Surigao Del Norte
39	Copper	Boyongan copper project	Silangan Mindanao Mining Corporation/Anglo American	Yes	Surigao Del Norte
40	Copper Gold	Surigao copper gold project	Coolabah Mining Corporation	Yes	Surigao Del Norte
41	Nickel	Cagdianao nickel project	Cagdianao Nickel Mining Corporation	No	Surigao Del Norte
42	Gold	Agatha gold project	Mindoro Resources	Yes	Agusan Del Norte

Continued

Table 1
Continued

Map number	Mineral type	Project name	Project proponent	Foreign owner	Provincial location
43	Nickel	Taganito nickel project	Taganito Mining Corporation	No	Surigao Del Norte
44	Gold	Mabuhay gold project	All-Acacia Resources	Yes	Agusan Del Norte
45	Gold	Banahaw gold project	Philsaga Mining Corporation	No	Agusan Del Sur
46	Copper, Gold	King King copper gold project	Benguet Corporation	No	Compostela Valley
47	Gold	Diwalwal direct state development project	Natural Resources Development Corporation	No	Compostela Valley
48	Copper	Tagpura copper project	Philco Mining	No	Compostela Valley
49	Gold	Batoto gold project	Philco Mining	No	Compostela Valley
50	Gold	Manat gold project	Indophil Resources	Yes	Compostela Valley
51	Copper	Amacan copper project	North Davao Mining	No	Compostela Valley
52	Copper, Gold	Batong Buhay copper gold project	Natural Resources Development Corporation	No	Compostela Valley
53	Nickel	Pujada nickel project	Asiaticus Mining/BHP Billiton	Yes	Davao Oriental
54	Gold	Bayugan gold project	Zamboanga Minerals Corporation	No	Zamboanga Del Norte
55	Gold	Canatuan gold project	TVI Pacific	Yes	Zamboanga Del Norte
56	Gold	Alicia gold project	PNOC- EDC	No	Zamboanga Sibugay
57	Copper and Gold	Tampakan project	Sagittarius Mining/Indophil Resources	Yes	South Cotabato
58	Gold	T'boli gold project	Tribal Mining Corp /Philco Mining	No	South Cotabato

SOURCE: Mines and Geosciences Bureau 2004b; Mines and Geosciences Bureau 2006

Attacks upon Mines

Inevitably, anti-state violence has affected mining companies, and their employees. In the 2004/2005 Fraser Institute survey of mining companies, 50 percent of the respondents ($n = 259$) indicated that they considered the security situation in the Philippines to be a strong deterrent to investment in the Philippines; in the 2005/2006 Fraser Institute survey of mining companies, this figure had risen to 57 percent of the survey respondents ($n = 322$) (Fraser Institute 2005, 2006). As one unnamed mining company president stated, 'In the Philippines, the terrorist and security threat is real' (Fraser Institute 2005, 46).

This concern is well founded in that there are instances of armed groups attacking mining companies. In December of 1999, the NPA killed a man engaged in negotiating community consent for the Australian mining company Newcrest Mining Corporation in the Province of Abra on the island of Luzon (Conrado Balweg Punished 2000). In February 2002, the NPA burned a vehicle owned by a copper processing company on the island of Leyte (NPA Metes Punishment on Social Menaces in Leyte 2002). In March of 2002, unidentified gunmen opened fire on a truck car-

rying employees of TVI (Toronto Ventures Incorporated) Pacific, a Canadian mining company, from its Canatuan Gold Project (Figure 2 and Table 1) to the nearby town of Siocon in the Province of Zamboanga del Norte on the island of Mindanao; two security guards employed by TVI Pacific were killed in this attack (Canatuan Incident 2002). In December 2002 another attack by unidentified gunmen⁸ on a truck carrying employees of TVI Pacific from its Canatuan Gold Project occurred and three security guards were killed along with two male employees of the mine and eight women and children (Thirteen Die in Attack Near Canatuan 2003).

What facilitates attacks upon mines by armed groups is the fact that both mineral deposits, and the ideal terrain for guerrilla warfare, originate in mountainous areas. Mineral deposits are usually found in mountainous regions because of the complicated geological forces that occasion their genesis (National Research Council 1999). The literature on guerrilla warfare shows that

⁸ This attack is often attributed to the MILF (Snell 2004). However, when asked about this attack, Von Al Haq, the Chair of the MILF Coordinating Committee on the Cessation of Hostilities, emphatically and categorically denied any MILF involvement in this incident (Al Haq 2005, interview).

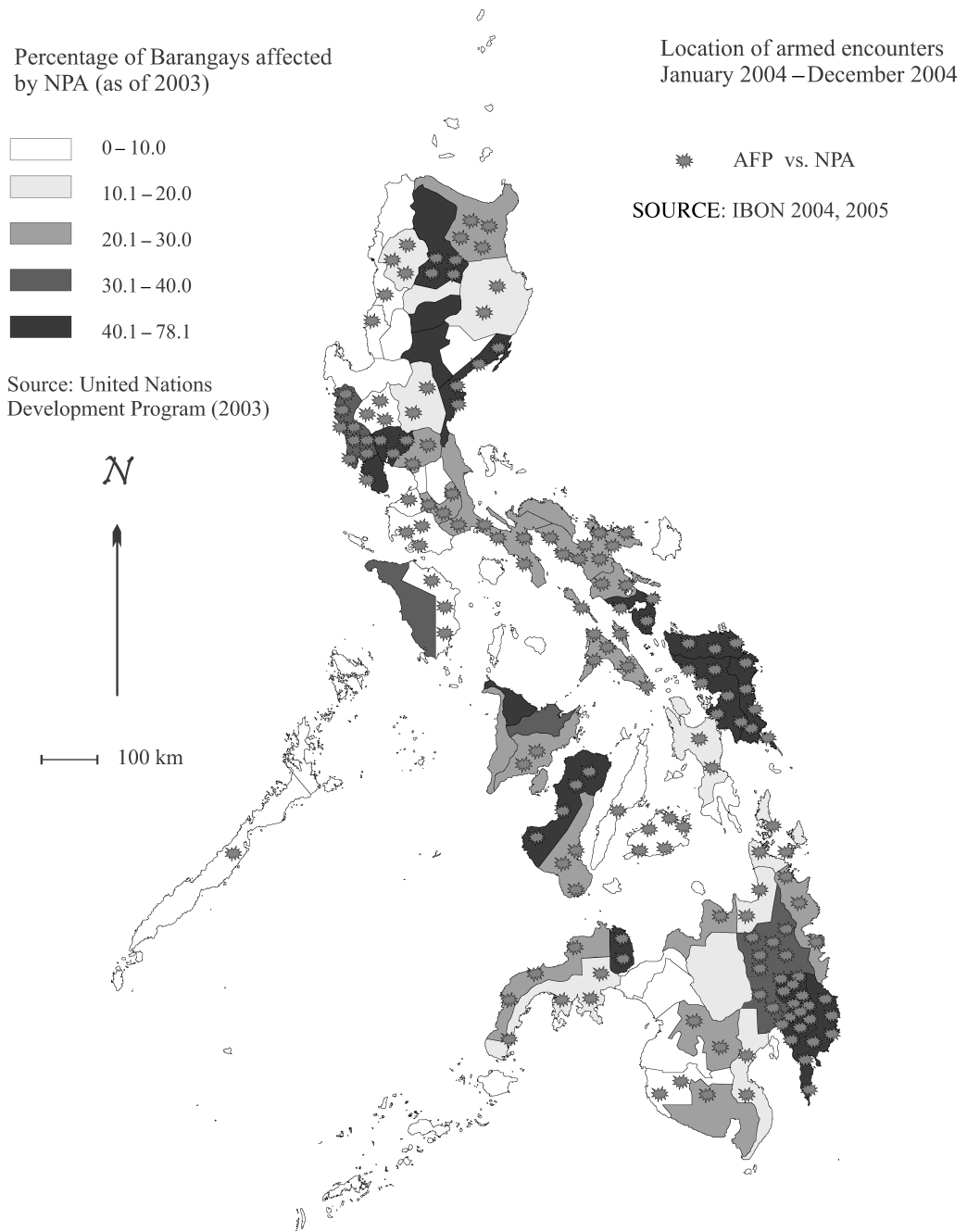


Figure 3
NPA activity in the Philippines

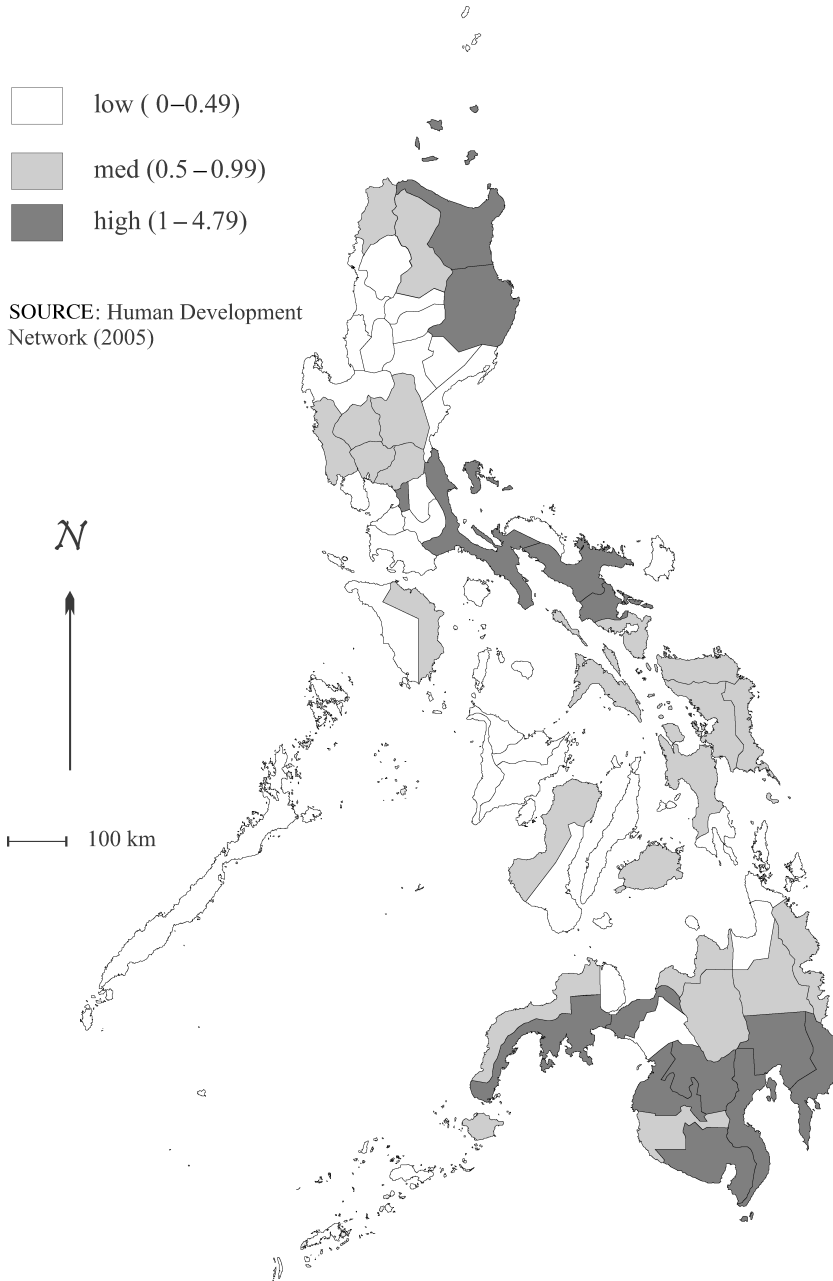


Figure 4
Average number of ideology-based armed encounters (1986 to 2004)



mountainous terrain is significantly related to higher rates of civil war (Fearon and Laitin 2003). Fighting is mostly a matter of moving, hiding and shooting and the ability to do all three is conditioned by the lie of the land and climate (O'Sullivan 1991). Rough terrain, and an abundance of hiding places, will allow a poorly armed force to easily hold off a numerically superior, and better-armed opponent. The mountainous terrain of the Philippines islands, and their humid tropical vegetation cover, make them an excellent venue for an insurgency (Le Billon 2004). The use of mountainous areas as an operating area for insurgents becomes particularly important in a Philippine context when one considers that it has long been established NPA doctrine to operate in these areas (Guerrero 1979).

Mountains as a source of mineralization, and as a haven for insurgents, become apparent in the eastern provinces of the southernmost island of Mindanao (Figures 2 and 3). The heavily forested landscape of Eastern Mindanao is dominated by the northwest-trending Eastern Mindanao Ridge, which extends from the Pujada Peninsula (in the south) up to Dinagat Island (in the north) and often attains elevations over 2,400 meters (Mitchell and Leach 1991). According to Romie Valerio, the Supervising Geologist of the Davao Office of the MGB, the best mineral potential in the Philippines lies in this part of Mindanao (Valerio 2005, interview). This area (as Figure 3 demonstrates) also contains a substantial amount of NPA activity. Of the 157 encounters between the AFP and the NPA that occurred in the Philippines in 2004, 35 were in the seven eastern Mindanao provinces of Surigao del Norte, Agusan del Norte, Surigao del Sur, Agusan del Sur, Davao del Norte, Compostela Valley and Davao Oriental (IBON 2004, 2005). This mineral rich area hosted 22 percent of all AFP-NPA confrontations during 2004 while only constituting 11 percent of the Philippine land area. As Figure 2 shows, there are also several mining projects in this area (Mines and Geosciences Bureau 2004b, 2006).

Mining Companies as Targets of Extortion

There is evidence of mining companies paying money to insurgent groups as a way of forestalling violent attacks upon their facilities. The

NPA has a long history of extorting money from businesses, such as logging companies and mining companies, which it refers to 'revolutionary taxation' (Le Billon 2005). A mining company that fails to pay revolutionary taxes to the NPA may find its facilities attacked, equipment destroyed, and personnel killed. The NPA justifies revolutionary taxation as 'a legitimate act and a right of the state of the people's democratic government' (Revolutionary Taxation: a Legitimate Act of Governance 2003, 3).

There are also instances of the MILF extorting money from businesses in southwestern Mindanao. In the early 1990s, a Korean construction company was engaged in constructing the *Malitubog-Maridagao* (or 'Mal-Mar') irrigation project for the Philippine government in the Municipality of Carmen in the Province of North Cotabato (Vitug and Gloria 2000; Diaz 2003). The MILF insisted that they be 'hired' to provide 'security' for the project (Vitug and Gloria 2000). As Vitug and Gloria (2000, 119) stated: 'Even in *ji-had*, money matters'.

In the case of Canada's Echo Bay Mines, the original project proponent of the King-King Copper-Gold Project in the Province of Compostela Valley on Mindanao (Snell 2004), it has been alleged that Echo Bay Mines paid over US\$1.7 million in three years to various armed groups including *Abu Sayyaf*, the MILF, and the NPA (Snell 2004).⁹

Buhaug and Gates (2002), Le Billon (2001) and Ross (1999, 2004b) suggest that the vulnerability of mining companies to extortion is a factor conducive to an increase in the duration of the violence. Snell (2004) discussed how the behaviour of Echo Bay Mines increased the security risks experienced by the rest of Filipino society as a result of its contributions to these groups. With the increased financial resources provided by Echo Bay Mines (and others), these groups purchased new, and better, weapons thus enhancing their capacity to wage war and increase the level of violence in society. Meanwhile, other economic actors, unable to pay the extortion demanded by

9 Allan Laird, the project manager at the King-King project, testified about these financial contributions to a subcommittee of the Canadian Parliament on 18 May 2005 (Subcommittee on Human Rights and International Development of the Standing Committee on Foreign Affairs and International Trade 2005).

the armed groups, are precluded from engaging in economic activity and are 'crowded out' of the economy. This tendency locks the Philippine economy into an economy dependent on mining and acts as 'violent version of the resource curse' (Ross 1999, 321).

Mining Related Grievances as a Source of Conflict

The grievance mechanism that affects the local population because of land expropriation, environmental hazards, insufficient job opportunities and the social disruptions caused by labour migration (Ross 2004a) is a serious concern among many stakeholders in the Philippines.

Hardrock mining is an activity with a substantial potential for environmental degradation and this is illustrated by the Marcopper tailings spill incident of 1996. The Marcopper mine was located in the north central highlands of the island of Marinduque (Figure 2) (Plumlee *et al.* 2000). It was owned by the Marcopper Mining Corporation, which was, in turn, owned (40 percent) by the Canadian mining company Placer Dome and (60 percent) by the Philippine government (Plumlee *et al.* 2000). Copper began to be extracted from the Tapian pit in 1969 and copper was taken from this pit until 1991, when production switched to the San Antonio pit several kilometres to the north (Plumlee *et al.* 2000). In 1991, the mined-out Tapian pit had its dewatering drain plugged with concrete and it began to be used as a receptacle for the fine-grained wastes ('tailings') from the newer San Antonio pit (Mines and Geosciences Bureau 2004a). By December 1995, a total of 32,476,841 metric tonnes of tailings were impounded in the Tapian pit (Mines and Geosciences Bureau 2004a). On 24 March 1996, the plug at the bottom of the Tapian pit failed and there was a release of acidic tailings into the Boac River (Mines and Geosciences Bureau 2004a). The actual amount of tailings that was released is a matter of controversy; low-end estimates put the amount at 1.6 million cubic metres (Mines and Geosciences Bureau 2004a) while high-end estimates put the amount at up to 3 million cubic metres (Plumlee *et al.* 2000). While the actual amount of tailings that was released may be a matter of contention, its effects were dramatic.

A month later, a UN team declared the river 'biologically dead' (Mining, Minerals, and Sustainable Development 2002, 208). When the investigative team sent by the US Geological Survey and the US Armed Forces Institute of Pathology visited Marinduque in May of 2000 (four years after the tailings release) they reported that there were 'still extensive tailings deposits visible in many places along the Boac River streambed' (Plumlee *et al.* 2000, 22). Their conclusion was that 'the mining-environmental impacts on some parts of Marinduque have been substantial and pose significant long-term challenges for remediation, both from a technological and monetary standpoint' (Plumlee *et al.* 2000, 41).

Perhaps the most enduring aspect of the tailings spill at the Marcopper mine was its psychological effect. While the Philippine government prefers to refer to the tailings spill as 'an incident' (Cabalda 2004, interview) others have referred to it as 'the infamous tailings spill incident' (Rovillos *et al.* 2003, 202) or as a 'disaster' (Tujan and Guzman 2002, 204). Indeed, Chris Hinde, the Editorial Director of the London based *Mining Journal* (a mining industry publication) went so far as to call the Marcopper tailings spill an 'environmental disaster' (Hinde 2004, 1). The tailings release generated a substantial amount of concern among the Philippine people about the environmental effects of nonferrous metals mining. According to Catherine Coumans,¹⁰ from the Canadian non-governmental organization (NGO) Mining Watch Canada, 'There is a legitimate fear of mining in the Philippines. This fear is a well-reasoned skepticism about the value of having a mine; this is not an irrational fear' (Coumans 2005, interview). Michael Cabalda, the Chief of the MGB's Mining Environment and Safety Division, acknowledged that whenever mining is discussed 'it is always Marcopper that is talked about' (Cabalda 2004, interview).

In the Philippines, three-quarters of the poor engage in subsistence agriculture or subsistence aquaculture as a way of providing livelihoods for themselves (Llanto and Ballesteros 2003). Should

10 Dr. Coumans' Doctoral Dissertation in Anthropology was about the island of Marinduque, where she spent a substantial amount of time conducting fieldwork. Dr. Coumans has been heavily involved in advocacy upon the behalf of the residents of Marinduque in their efforts to seek compensation for the tailings spill release.



there be a mining related environmental disruption, such as a tailings spill, these people could be immediately thrust from subsistence into destitution (Broad 1994).

Although the discussion of environmental issues in the developing world is often about what Bryant and Bailey (1997, 24) referred to as 'the struggle between actors for control over the environment', this becomes magnified in a Filipino context due to the unique vulnerability of the archipelago to environmental disruptions. 'With much mountainous terrain, often-friable soils, and heavy tropical rainfall, the Republic of the Philippines is unusually susceptible to environmental degradation in the matter of soil erosion and associated disruption of watersheds' (Myers 1988, 303). The fragility of Philippine ecosystems only serves to amplify the vulnerability of the poor to a mining related environmental disruption.

This 'fear of mining' is an ideal vehicle for the NPA to increase its influence among the poor and disaffected of the archipelago. The opportunities for extortion, that mines present, and the grievances they generate, are complimentary processes; the former provides funds to purchase weapons, the latter provides cadres of disaffected people to wield those weapons. The NPA cannot only extort money from mining projects it can also use the concerns of the people that they will be displaced from their lands, and from their livelihoods, as a method of increasing recruitment. This is an excellent example of what Collier (2000, 100) would call a 'grievance-motivated rebellion' combining with 'some material payoff with the grievance'. It is the view of Father Riolito Ramos, from St. Joseph's Parish in the Diocese of Pagadian,¹¹ that this is exactly what is happening. According to Father Riolito, 'the NPA has been providing assistance to those displaced by mining as a way of encouraging recruitment' (Ramos 2005, interview).

For resource exploitation to augment conflict through the grievance mechanism, wrote Ross (2004a, 41), one 'should observe the rebels criticizing resource firms or the resource sector in

their propaganda'. The pages of *Ang Bayan* are rife with descriptions of foreign mining companies as 'land grabbers', 'foreign plunderers', 'imperialist corporations', 'foreign monopoly capitalists' and 'imperialist plunderers'. To Catherine Coumans, foreign mining corporations have provided a perfect ideological target for the NPA. 'To the NPA today, foreign mining projects serve an ideological role similar to that played by the US military bases in the 1980s. To the NPA, foreign mining projects are a tangible manifestation of the capitalist order they are fighting against' (Coumans 2005, interview).

What makes the grievance mechanism a compelling argument in favour of how mining can lead to conflict in the Philippines is the precedent availed by the Chico River Dam project. In the 1970s, the Marcos government pursued a series of hydroelectric dams on the Chico River, in the Cordillera of northern Luzon. The inhabitants of the Cordillera, threatened with displacement, opposed the proposal. The NPA entered the area and, using the dissatisfaction emanating from the project, established itself among the inhabitants, becoming popular among them (Hilhorst 2003). This was a crucial impetus to the expansion of the NPA in the 1970s (Le Billon 2005). Should the government pursue mining as it pursued the Chico River Dam project, there could be an expansion of NPA activity across the archipelago and an increase in conflict.

Mining and the MILF Peace Negotiations

Resource abundance lengthens conflicts in either, or both, of two ways: first, the government may negotiate a peace accord with separatist rebels, and then renege upon it in order to gain access to resources; second, the separatists may expect the government to renege upon the agreement and become reluctant to sign a peace accord (Ross 2004a). There is a concern among many that mining could aggravate the peace process between the MILF and the government.

The MILF are currently engaged in negotiations with the government to resolve the conflict that both sides have been engaged in since the early 1980s. Whereas the MNLF, the precursor organization from which the MILF split, was satisfied to

11 The Diocese of Pagadian is located in the Province of Zamboanga del Sur on the island of Mindanao. In 2003, 16 per cent of all *barangays* (villages) in the Province of Zamboanga del Sur were affected by the NPA (United Nations Development Program 2003).

have a degree of autonomy granted to the four Muslim dominated provinces of Mindanao-Sulu, the MILF is desirous of achieving an independent Islamic state in these four provinces (Diaz 2003).

There are some in the Philippines who suggest that the government is insincere in its dealings with the MILF because it desirous of having access to resources on lands occupied by them (Diaz 2003). In the specific case of nonferrous metals mining, it does not currently appear that the portion of Mindanao wherein the MILF operate has a high degree of mineralization (Valerio 2005, interview). One must, however, take into account the fact that much of Mindanao's geology is relatively unexplored (Valerio 2005, interview). It could be that the government is reluctant to negotiate a peace accord with the MILF, which would cede territory to an independent Muslim state, because there is uncertainty over the extent of the resources that would be surrendered by such an accord. This uncertainty is certainly inimical to a resolution of the conflict between the parties.

In any event, regardless of the implications mining poses for the peace process, the MILF, much like the NPA, has gone on record declaring its opposition to mining by foreign corporations. According to Von Al Haq, the Chair of the MILF Coordinating Committee on the Cessation of Hostilities, 'the MILF believes that mining managed by multinational corporations is not good' (Al Haq 2005, interview). In Al Haq's view, 'Multinational corporations can help the Bangsamoro people by not operating in the area'. The Bangsamoro 'want to shape their destiny; they do not want foreign corporations to do it for them' (Al Haq 2005, interview).

Mining and Militarization

Given the danger that armed groups pose to mining companies that operate in the Philippines, the army has engaged in a process of militarizing areas in the vicinity of mining projects as a way of providing security to mining project proponents. At the Tampakan Copper-Gold project (Figure 2 and Table 1), on the island of Mindanao, the 602 Infantry Brigade, an element of the Sixth Infantry Division, is conducting 'probing patrols' to 'drive away enemies' (Alon 2005, interview). In

the words of Major Onting Alon, the Civic Affairs Officer of the Armed Forces of the Philippines (AFP) Sixth Infantry Division, 'the AFP is there to secure' (idem.).

What makes the militarization of mining areas a problematic development is a concern that the AFP will be unable to discern between legitimate anti-mining dissent and insurgency. Mining is a controversial activity and there is substantial opposition to the government's emphasis upon mining from the forces of Filipino civil society (Holden 2005). There are many anti-mining activists who are of the view that the AFP will be unable (or, perhaps, unwilling) to distinguish between 'legitimate dissent' and 'terrorism'. Using fears of terrorism as a pretext to crackdown on social movements is a common in the Philippines (Hilhorst 2003).

The actual experiences of people in the Philippines appear to verify these sentiments. According to Father Lauro Mozo, from St. Peter and St. Paul Parish in the Diocese of Surigao,¹² 'it is common for those who engage in anti-mining campaigns to be accused of being NPA supporters' (Mozo 2004, interview). When asked about the perspective of the AFP, with respect to anti-mining activists, Major Alon stated that those who protest are 'protesting because they have been influenced by the NPA' (Alon 2005, interview). In Major Alon's opinion, 'the people who are properly informed know about the benefits of the mine' (idem.).

The general concern articulated in the literature that the deployment of military forces to protect mining projects could generate human rights abuses (Mining, Minerals, and Sustainable Development 2002; Le Billon 2004, 2005) has a substantial verisimilitude in the Philippines as the AFP has faced allegations that it behaves in a heavy-handed manner (Rodell 2004; Linantud 2005). According to Bishop De Dios Pueblos, the Bishop of the Diocese of Butuan,¹³ 'the AFP does

12 The Diocese of Surigao is located in the Province of Surigao del Norte on the island of Mindanao. In 2003, 11 percent of all *barangays* in the Province of Surigao del Norte were affected by the NPA (United Nations Development Program 2003).

13 The Diocese of Butuan comprises the Provinces of Agusan del Norte and Agusan del Sur on the island of Mindanao. In 2003, ten percent of all *barangays* in the Province of Agusan del Norte were affected by the NPA and 37 percent of all

not pacify, it intimidates' (De Dios Pueblos 2005, interview).

The concerns articulated above about misbehaving mine security personnel who provoke violent community responses, and further escalate conflict, appear valid in the Philippines as there are well-documented instances wherein a heavy AFP presence in advance of development projects has led to such a high degree of dissatisfaction among those in the vicinity of the project that NPA activity has actually increased as the NPA have found a willing source of recruits among those adversely effected by the militarization accompanying the project (Hilhorst 2003; Rodell 2004).

What augments the concerns over the AFP providing security for mines is the frequent provision of security by paramilitary groups that lack the discipline and training of regular army troops and are, consequently, even more unable (or unwilling) to distinguish between 'legitimate dissent' and 'terrorism'. The Philippines has long history of paramilitary groups (supposedly) acting under the supervision, and control, of the AFP (Kerkvliet 1977; Chapman 1987; Kessler 1989). These paramilitary groups began to acquire a notorious reputation during the 1940s and 1950s with the Civilian Guards who were 'people of bad reputations out to make good with the law, avoid punishment, and make a living' (Kerkvliet 1977, 196). The Civilian Home Defense Forces (CHDF) followed the Civilian Guards in the 1960s and 1970s. The CHDF units were notorious for their brutality (Chapman 1987; Jones 1989; Kessler 1989). During Corazon Aquino's presidency, the Civilian Armed Forces Geographical Units (CAFGUs) replaced the CHDF units (Jones 1989). CAFGUs are paramilitary groups equipped, and trained, by the AFP to provide security against NPA activities at the *barangay* level. Although CAFGUs are supposed to be better trained and more accountable to the military, and therefore less likely to commit abuses, the CAFGUs have a reputation as, or more, unenviable as the CHDF units that preceded them (Nadeau 2002).

Much has been written about the use of CAFGUs as a vehicle for suppressing the dissent of

people opposed to forestry projects during the 1990s (Girouard 1996); it is alleged that the same process is continuing with respect to mining projects in the nascent years of the twenty-first century (Rovillos *et al.* 2003; Stavenhagen 2003). There are also concerns about Special CAFGU Armed Auxiliaries (SCAAs),¹⁴ which are CAFGUs equipped, and trained, by the AFP but *paid* by a third party, such as a mining company (Girouard 1996). These organizations have the potential to become the personal 'goons' of a mining company and can be used to intimidate anti-mining activists.

At its Canatuan Gold Project (Figure 2 and Table 1), in the Zamboanga peninsula of Mindanao, the Canadian mining company TVI Pacific has employed a SCAA to provide security (TVI Canatuan 2005). This company points to the deaths of its employees in the two attacks in 2002 as a justification for the presence of this armed force (TVI Canatuan 2005). The company also points out that 'armed security is a fact of life in the Philippines' and that 'any organization operating in this part of the world requires a significant armed security presence' (TVI Canatuan 2005). While the need for a SCAA at this mine may not be the subject of controversy, the allegations about the behaviour of its members has generated controversy. There have been allegations that there have been 'acts of violence, by the company's security guards and other armed units, such as rape, the establishment of checkpoints and the maintenance of blockades, barring of food and essential commodities, blocking health services and religious practices' (Stavenhagen 2003, 15).

Earlier, the Voluntary Principles on Security and Human Rights were discussed as a vehicle for guiding the behaviour of mining companies with regard to their use of security forces. These principles have limited scope for addressing the problems inherent in mining companies using security forces in the Philippines for three important reasons. First, with the notable and important exceptions of Anglo-American (Camp 3 Gold Project, and Boyongan Copper Project) and BHP-Billiton (Adlay-Cadianao-Tandwana Project, and

barangays in the Province of Agusan del Sur were affected by the NPA (United Nations Development Program 2003).

14 'Special CAFGU Armed Auxiliaries' (SCAAs) is a quintessential example of what Vitug and Gloria (2000, 274) call 'the Filipino penchant for tortured acronyms'.

Pujada Nickel Project), none of the companies listed in Table 1 (most notably TVI Pacific, given the controversy surrounding its Canatuan project) have adopted these principles.¹⁵ Second, the governments of Canada (home country of TVI Pacific) and the Philippines have not adopted these voluntary principles. Third, these principles are voluntary and thus (even if adopted by a mining company, a mining company's home government, or the government of the Philippines) carry no legal significance whatsoever and could be violated with no sanction other than the resulting bad public relations that such a violation would entail.

The use of paramilitary groups as security for mines could also have the ironic effect of actually increasing NPA attacks on mines. The NPA has traditionally acquired its armaments by engaging in what are called *agaw armas* (gun grab) raids wherein NPA members attack AFP units and take the latter's weapons¹⁶ (Chapman 1987; Jones 1989; Kessler 1989). If mining companies rely upon CAFGUs, and SCAAs, for their security these relatively, poorly trained troops could well become a tempting target for *agaw armas* raids as a method of enhancing the NPA arsenal. Indeed, this is exactly what happened in February 2006 when the NPA raided a CAFGU providing security for Lepanto Consolidated Mining's Teresa Gold Project (see Figure 2 and Table 1) in Benguet Province on the northern island of Luzon and seized 23 firearms (Jennifer Carino Command Press Statement 2006). With these paramilitary groups attracting, instead of deterring, NPA attacks there will be more conflict; if the *agaw armas* raids are successful, the NPA will be even better armed and even more capable of carrying out acts of violence and the level of violence in Filipino society will increase. With a higher level of violence in society, other economic actors, who are unable to pay the extortion demanded by the

armed groups, are precluded from engaging in economic activity and are crowded out of the economy. This loss further locks the Philippine economy into an economy dependent on mining and becomes another source of a 'violent version of the resource curse' (Ross 1999, 321).

Mining, Conflict and Corruption

Corruption prolongs conflict by undermining the efficiency of armed forces. Members of the armed forces who are deployed to protect a mining project can end up selling weapons to members of the insurgent group (Le Billon 2003). This is a concern in the Philippines as the archipelago has a reputation for suffering from corruption. The most widely accepted indication of the extent of corruption internationally is the Corruption Perception Index devised by the Berlin based NGO, Transparency International (Mining, Minerals, and Sustainable Development 2002). In the Corruption Perception Index, countries are rated from a score of ten (representing a highly clean score) down to a score of zero (representing a highly corrupt score). In its 2006 Corruption Perception Index, Transparency International rated the Philippines as having a score¹⁷ of 2.5 while Canada, by way of comparison, received a score of 8.5. The AFP, in particular, suffers from a reputation for suffering from corruption and there have been allegations of senior AFP officers selling weapons to insurgent groups (Rodel 2004).¹⁸ With these weapons, these groups will feel emboldened and their activities will continue thus escalating the violence (Le Billon 2003). The EITI was set up to minimize the effects of corruption emanating from extractive industries. The Philippines, however, is not a party to the EITI and, with the notable and important exceptions of Anglo-American (Camp 3 Gold Project, and Boyongan Copper Project) and BHP-Billiton (Adlay-Cadianao-Tandwana Project, and Pujada Nickel Project), none of the mining companies listed in Table 1 are participants either. Also, just as with

15 For a list of the countries and companies participating in the Voluntary Principles on Security and Human Rights, consult <http://www.voluntaryprinciples.org/participants/index.php>

16 Major Onting Alon described an NPA *agaw armas* raid he experienced while on patrol with the AFP as a lieutenant on 1 May 1990 in Davao Oriental. At least 200 NPA fighters ambushed his force of 60 AFP soldiers. Major Alon's best friend, a fellow lieutenant, was killed, and the AFP lost their M60 machine guns to the NPA. Major Alon described it as 'the worst day of his life' (Alon 2005, interview).

17 The scores are available on the Transparency International website at <http://www.transparency.org>

18 Allegations of arms sales by senior AFP officers to insurgent groups was the principle grievance giving rise to the 'Oakwood mutiny' of 2003 wherein a group of approximately 350 heavily armed AFP troops occupied a shopping mall in metro Manila.

the Voluntary Principles on Security and Human Rights, the EITI is a purely voluntary agreement and even if the government had signed the accord it would not be binding upon any mining companies operating in the archipelago.

Discussion: Conflict as a Manifestation of Poverty and Social Exclusion

What ultimately must be considered in a discussion of mining amid armed conflict is the cause of the conflict; the underlying socio-economic causes of the conflict must be taken into account before a mining-based development paradigm is pursued. If these underlying causes are not addressed, the conflict will continue and will perversely interact with mining thus worsening the peace and order situation.

According to Rosenberg (1990, 161), 'the most deeply rooted and long-term phenomenon at the bottom of many insurgencies [is] massive poverty'. This claim is clearly the case in the Philippines where both the communist and Muslim insurgencies are a manifestation of poverty. The NPA use the rhetoric of ideology (communism) to galvanize their members, and the MILF use the rhetoric of theology (Islam) to galvanize their members, but in both cases, it is ultimately the poverty and social exclusion that cause the movements to come into existence. As Rodell (2004, 198) wrote about the NPA, 'That the movement still thrives is, however, more a testament to the country's poverty level than it is of the party's ideological vitality'.

Consider the eastern Mindanao provinces of Agusan del Norte, Agusan del Sur, Compostela Valley, Davao Oriental, Surigao del Sur and Surigao del Norte. This is a region of the Philippines where a high percentage of the population lives in poverty (Figure 1) and where the NPA are active (Figure 3). According to Gus Gatmaytan, an anthropology professor at Ateneo de Davao University, there is a steady stream of impoverished young people entering into the NPA in this part of Mindanao 'seeking action, adventure, and excitement'; for these people, 'the NPA is a genuine life option' (Gatmaytan 2005, interview). This area is also well endowed with mineral resources, and there are numerous mining projects (Figure 2).

If these projects go ahead, their presence as a tangible manifestation of capitalism will make them targets of the NPA's ideological rhetoric and their high-fixed costs and immobility will make them become the targets of NPA extortion activity.

The process of poverty, ideology and extortion interacting to produce violence is not without precedent in Filipino history. Consider the *Hukbong Mapagpalaya ng Bayan* (Peoples Liberation Army, HMB, or 'Huks') of central Luzon. The Huks emerged out of the poverty and social exclusion of the haciendas of central Luzon (Kerkvliet 1977). In the 1930s, the agrarian unrest in central Luzon led to the formation of the *Kalipunang Pambansa ng mga Magsasaka sa Pilipinas* (National Society of Peasants in the Philippines, or KPMP). During the World War II Japanese occupation, many members of the KPMP formed the *Hukbo ng Bayan laban sa Hapon* (Peoples Anti-Japanese Army or 'Hukbalahap'). The Hukbalahap became affiliated with members of the *Partido Komunista ng Pilipinas* (Philippine Communist Party or PKP) and became an effective military force (Kerkvliet 1977). By the end of the 1940s, the Hukbalahap morphed into the Huks and engaged in open rebellion against the injustices of the haciendas (Kerkvliet 1977). The bulk of the Huk movement eventually died out by the mid-1950s but some of them lingered on into the 1960s engaging in the extortion of gambling and prostitution near Clark Air Force Base in Pampanga (Kerkvliet 1977). According to Rodell (2004), this is what is happening to the NPA, which has been listed as an international 'terrorist organization' and is forced, more than ever, to rely on 'revolutionary taxes' as a source of funding.

In the case of both the Huks of the 1950s and the NPA of today, poverty in society stimulated their development. The organizations then became galvanized by communist ideology and subsequently engaged in extortion as a way of providing themselves funding.

To illustrate the potential for violence emanating from the spatial proximity of modern mining projects to NPA activity an index of vulnerability to NPA armed activity was created. The vulnerability index was generated by using the geographic information system overlay operator a Boolean 'And' to arithmetically sum the attributes

of a province that dispose it to NPA activity.¹⁹ The attributes consisted of: the percentage of the population living in poverty, terrain, forest cover and the percentage of the *barangays* within the province affected by the NPA (United Nations Development Program, 2003; Forestry Management Bureau 2006). It is reasonable to believe that a province wherein a high percentage of the population lives in poverty would act as source of disaffected people who would be potential NPA recruits, the rough terrain and forest cover would provide the NPA with suitable terrain for guerrilla warfare, and a high percentage of *barangays* influenced by the NPA would demonstrate effective NPA organizing in these provinces. Thus, a province where the combination of these variables is large would have a high propensity to experience NPA armed activity.

The results of this analysis (Figure 5) demonstrate an overlap between areas of vulnerability to NPA activity and mining project locations. Both the Cordillera of Luzon and the southeastern corner of Mindanao have an extreme vulnerability to NPA activity and both of these areas host numerous mining projects. Northeastern Mindanao hosts numerous mining projects and also has a moderate vulnerability to NPA activity. The islands of Mindoro and Samar have an extreme vulnerability to NPA activity but appear to lack many mining projects. It must be made clear, however, that this is a result of mining moratoriums enacted by the provincial governments in Oriental Mindoro, Samar and Eastern Samar that preclude any mining projects from being developed in those provinces (Holden and Jacobson 2006). An argument could well be made that in the absence of the mining moratoriums in these provinces the overlap between mining and NPA activity in the archipelago as a whole would be even more pronounced. With such a high overlap between NPA activity and mining projects the potential for NPA extortion of, or attacks upon, mining project proponents is a distinct possibility.

The government is well aware of the role played by poverty in fostering the armed groups but it maintains that mining projects will reduce poverty and thus *eliminate* the insurgencies that pose a threat to mining projects. Romulo Neri,

the Director General of the National Economic Development Authority, went on record stating that mining operations will 'reduce insurgency' as they will 'generate jobs and reduce poverty' (Neri 2005, 21). In this regard, the government is adhering to the view espoused by writers such as Davis (1995, 1999) who reject the existence of the resource curse thesis and perceive the long-run prognosis for mineral economies to be good. This view is problematic for three reasons: first, mining has a limited scope for generating employment, second, mining has the potential to generate long-term environmental costs through its environmental effects and third, mining has the potential to make poor people poorer.

Modern nonferrous metals operations that extract low-grade ore deposits from open pit mines are capital intensive, not labour intensive, operations, that offer little potential for employment creation (Tujan and Guzman 2002). In 2000, less than two percent of the Philippine population was employed by the mining industry (Balisacan 2003). Tauli-Corpuz and Alcantara (2004) provide an example of mining's low potential for employment creation in their discussion of the Taganito nickel laterite mine (Figure 2 and Table 1) in *barangay* Taganito, in the Municipality of Claver, in the Province of Surigao Del Norte. According to Tauli-Corpuz and Alcantara (2004), out of the work force of 350 persons, only 110 are full time employees and the remaining 240 workers are hired only on a casual basis and are paid approximately US\$1.50 per day.

One of the most serious aspects of nonferrous metals mining are the high reclamation costs associated with mines once mining has ceased. In the United States, the Environmental Protection Agency engaged in a study of 156 hardrock mining sites from March of 2002 to June of 2003; these 156 sites 'have the potential to cost between \$7 billion to \$24 to clean up' (US Environmental Protection Agency 2004, 49). The conjoint Zortman and Landusky mines, in the state of Montana, for example, will cost \$85 million dollars to reclaim (US Government Accountability Office 2005). In Montana, the environmental effects of nonferrous metals mining have been so serious that visitors from 'countries contemplating mining investments have recently been coming to Montana to inform themselves at first hand about bad mining practices and their consequences' (Diamond 2005, 41).

19 The Autonomous Region of Muslim Mindanao is excluded from the analysis since there is no NPA activity in this area (Rood 2005).

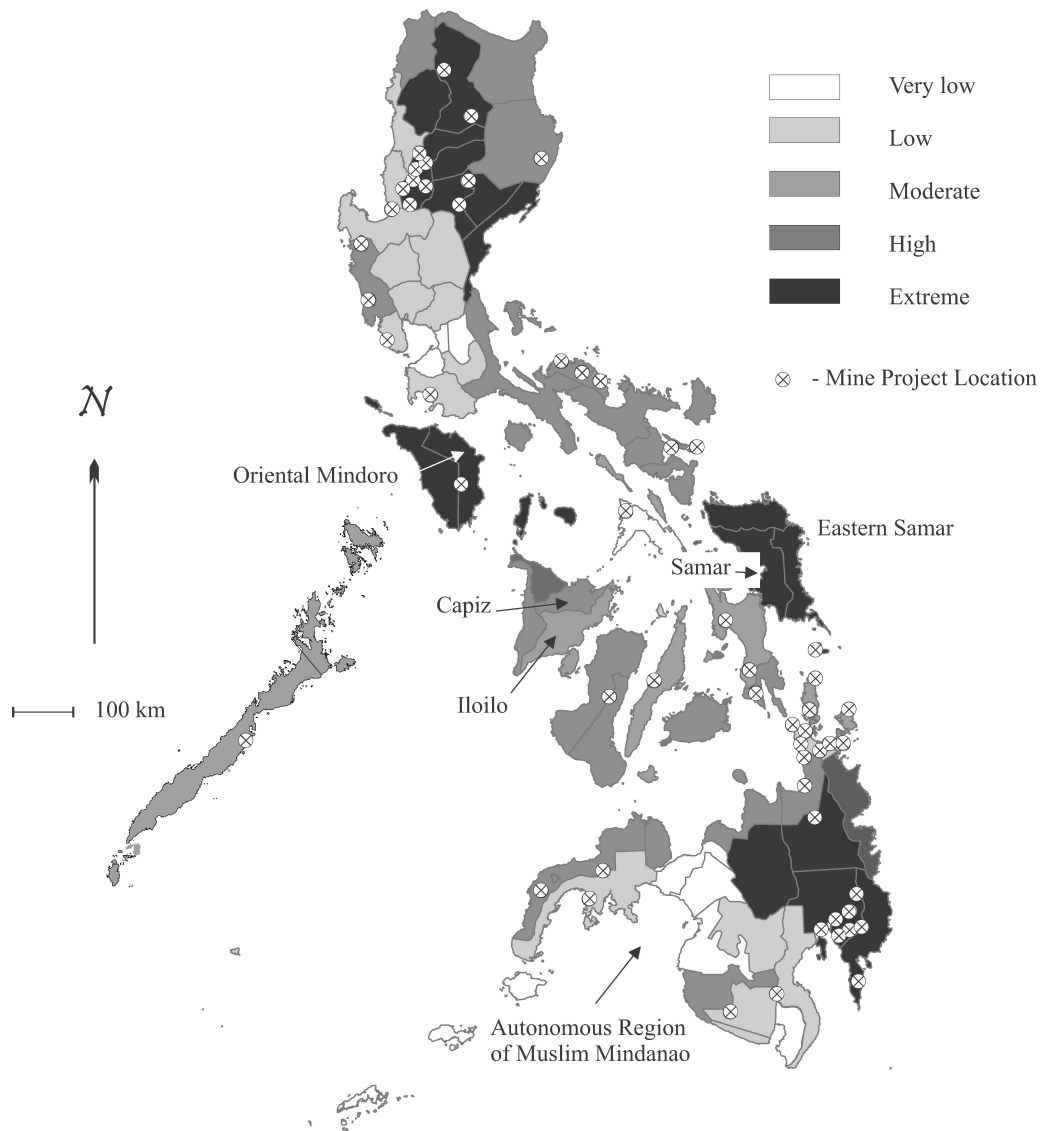


Figure 5
Index of vulnerability to NPA armed activity

In addition to mining's limited scope for employment generation and potential to generate long-term environmental costs, there is also a perspective, articulated in the resources and development literature, that posits that mining actually makes poor people poorer by disrupting the resources they rely upon for subsistence agricul-

ture and subsistence aquaculture (Bury and Kolff 2002; Muradian *et al.* 2003; Bury 2004, 2005). For the government to rely upon a capital intensive and (potentially) environmentally disruptive activity such as mining to ameliorate poverty is to engage in an exercise of 'trickle down economics' and the Philippines has been described as

being 'a society where economic progress hardly trickles down' (Kirk 2005, 123). Indeed, research conducted by Arsenio Balisacan, an economist from the University of the Philippines-Diliman, shows that 'income growth alone does not translate into one-for-one changes in the welfare of the poor' (Balisacan 2003, 338). To truly alleviate poverty, and ultimately eliminate the insurgency that plagues the archipelago, genuine development that encompasses all sectors of society is necessary; institutions, and policies, must be reformed to favour (or at least be more neutral to) the needs of the poor (Balisacan 2003). Simply opening the economy up to foreign multinational mining corporations, as the current President Gloria Macapagal-Arroyo (a Georgetown University trained neoliberal economist) has called for, will not be enough.

Mining (assuming that no Dutch disease effects occur) may lead to economic growth on a macro level in the sense that it may generate capital inflows into the Philippines and it may also generate exports out of the country. On the micro level, however, mining brings numerous problems with it such as the risk of environmental harm that could deprive a local community of its livelihood and the militarization of the area. Many in the progressive sector of Filipino civil society view development programs, such as mining, as being 'development aggression'. Bishop De Dios Pueblos considers 'development aggression' to be 'the imposition of development projects by someone else upon the people that live in an area that ends up making them poorer' (De Dios Pueblos 2005, interview).

To truly alleviate the poverty and social exclusion that so many people in the Philippines suffer from, there must be a qualitative improvement of all groups and individuals in society (not just some groups and individuals in society) and people must feel that they are entitled to participate in this process. To Broad (1988, 233) genuine development is 'a development process in which people participate in making decisions and planning projects that affect their lives where inhabitants of an area decide what kinds of projects they want and what kinds they can afford'.

A good example of participatory development in the Philippines comes from the Roman Catholic Church and its Basic Ecclesial Community (BEC) movement. The BEC is a group of between 50 and 100 families organized by the

Church on a parish-by-parish basis (Gaspar 2006, interview). BECs engage in sustainable livelihood programs such as organic farming, micro-finance projects, marketing cooperatives, herbal medicine projects and handicraft projects (Gaspar 2006, interview). The BEC movement is an attempt to engage in a 'bottom up' development paradigm wherein the poor better themselves as opposed to a 'top down' development paradigm (such as mining) where external actors (the mining companies) are responsible for the amelioration of the condition of the poor.

In 1987, 'sustainable development' was defined as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (World Commission on Environment and Development 1987, 43). According to Martin (2003), this consists of intergenerational equity (deference to the needs of those in the future—a necessary condition for sustainability) and intragenerational equity (an equitable sharing of benefits among those alive today—a necessary condition for development). Through the BECs, the Church is attempting to achieve sustainable development by improving the conditions of the poor without harming the environment upon which the poor depend for their livelihoods (intergenerational equity) and in a manner, which fosters social equity (intragenerational equity). The BEC movement is an attempt to provide development for the poor at a local level as opposed to having development come to the poor by including them into the global economy. As Brother Karl Gaspar said, 'A movement of localization is the only alternative to globalization' (Gaspar 2006, interview).

Should the government of the Philippines impose a freeze on all new mining projects? Many members of Philippine civil society would answer this question in the affirmative, adopting the view that mining's costs outweigh its benefits (Holden 2005). Acting to prevent mining's environmental effects from prejudicing the livelihoods of their constituents, the governments of the provinces of Capiz, Iloilo, Oriental Mindoro, Eastern Samar, and Samar (see Figure 5) have imposed moratoriums banning mining within their jurisdictions (Holden and Jacobson 2006). In any event, the answer to this question notwithstanding, one thing the government must certainly do is address the pronounced inequality that exists in Philippine



society. Where the inequality in Philippine society becomes noteworthy is with respect to the lack of access to productive resources by the poor (Gutierrez and Borrás 2004). The Philippines is a nation where 'extreme disparities exist between the rich and the poor in terms of land holdings' (Choguill 2001, 86). Consider coconut land ownership. In the Philippines, two percent of all coconut farms occupy 40 percent of all coconut farming areas while the remaining 98 percent of all coconut farms occupy 60 percent of all coconut farming areas (Gutierrez and Borrás 2004). The government 'has yet to define a national land-use policy for the country that can guide the allocation and use of resources' (Llanto and Ballesteros 2003, 202). It is this process of social exclusion that creates the mass poverty and it is this mass poverty that gives rise to the insurgencies. Unless, and until, the social exclusion is effectively dealt with, the violence committed by armed anti-state will continue. Inserting multinational mining corporations will not stop the social exclusion and poverty, and it will, through the mechanisms discussed above, aggravate the situation thus leaving the archipelago an impover-

ished land where violence remains a brutal aspect of daily life.

Conclusion

A topic of increasing importance in the geographical literature is the extent to which natural resource abundance can contribute to armed conflict. This article has examined how nonferrous metals mining by multinational corporations amid armed conflict can contribute to conflict in the Philippines. Mining amid conflict can exacerbate the conflicts underway in this nation by generating opportunities for extortion, by leading to grievances that can act as an impetus for recruitment into armed groups, by lengthening the separatist conflict engaged in by Muslim groups in the southern Philippines, by leading to a militarization of areas where mining projects are located, and by interacting with the high degree of corruption that exists in the archipelago (see Table 2 for a summary of these factors). Mining provides limited scope for employment generation and it is accompanied by substantial potential for inflicting environmental harm. These

Table 2
Contextualizing the concepts within a Philippine setting

Problem	General concept	Its manifestation in the Philippines
The 'looting mechanism'.	Armed groups may demand payments in exchange from mining companies in exchange for being allowed to operate unmolested. This provides funds to the armed groups that allow them to buy new, and better, weapons that can be used to continue the conflict.	The NPA demands 'revolutionary taxes' from businesses and the MILF has insisted that it be hired to 'provide security' for businesses in its area of operations.
The 'grievance mechanism'.	Mining's environmental effects lead to grievances among the affected population and these grievances act to generate conflict.	The NPA is using the effects of mining to increase its influence among the poor and disaffected.
The lengthening of a separatist conflict.	A national government may negotiate a peace agreement with separatist rebels and then renege on it in order to gain access to mineral resources. Similarly, a separatist group may expect a national government to renege on a peace agreement, in order to gain access to mineral resources, and become reluctant to sign a peace agreement.	There is speculation in the Philippines that the government is reluctant to sign a peace agreement with the MILF that would cede territory to an independent Muslim state because this may entail a loss of resources.
The militarization of areas in the vicinity of mining projects.	Military forces deployed to protect a mine can engage in human rights abuses against the local population.	The AFP has a reputation for behaving in a heavy handed and antagonistic manner. Serious allegations have also been made about human rights abuses having been committed by paramilitary forces used for mining security.
The relationship between corruption and conflict	Military forces can be rendered ineffective by corruption. Military forces can sell weapons to insurgent groups.	There are widespread allegations that the AFP sells weapons to the MILF and the NPA.

two factors make it a questionable vehicle for the amelioration of poverty and it is, ultimately, this poverty that drives these armed groups. Unless, and until, there is a substantial reduction of the poverty that so many Filipinos suffer from, these armed groups will continue to exist and the insertion of large-scale corporate mining into their midst will cause these armed groups to thrive. As Father Albert Alejo, a Jesuit Priest and Professor of Development Studies at Ateneo de Davao University, stated: 'Mining, in its present volume of applications, and in view of the way the government is forcing it, will lead to violence. There will be blood in [the] gold' (Alejo 2005, interview).

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