Introduction

Large-scale mining creates long-term development deficits through long-lasting and costly environmental impacts, particularly on water; human rights impacts, particularly affecting disadvantaged and vulnerable populations; impacts that erode democracy and good governance, including through corruption and regulatory capture; and national and local-level economic impacts that impede development.

As evidence has mounted since the mid-1990s regarding the costs that mining imposes on economies and on human development, a counter argument has gained traction through its promotion by industry lobby groups and governments supportive of the industry. This argument poses that mining could be a source of development in conditions of strong governance. Put another way, it is argued that mining companies are not to blame for negative impacts on development, but weak governments. This argument shifts attention and focus away from the harmful practices of the industry itself, to the governance of jurisdictions, particularly in developing countries, where mining is taking place.

This paper challenges the premise that good governance is all that stands between mining and positive development outcomes, providing examples from Canada, and examines the contradictions in the global mining industry’s lobby for a focus on good governance in light of ongoing efforts by the mining sector itself to undermine attempts to introduce better governance.

1. Catherine Coumans, ‘CIDA’s Partnership with Mining Companies Fails to Acknowledge and Address the Role of Mining in the Creation of Development Deficits. Brief prepared for the House of Commons Standing Committee on Foreign Affairs and International Development’s Study on the Role of the Private Sector in Achieving Canada’s International Development Interests’, MiningWatch Canada, January 2012 https://miningwatch.ca/sites/default/files/Mining_and_Development_FAAE_2012_0.pdf.

2. The introduction to this paper draws on a forthcoming paper of the author: “Minding the “Governance Gaps”: Considering strategy, policy and agency in discourses about mining and governance.” [Henceforth Coumans, forthcoming, Minding the Governance Gaps].
Industrial mining is a source of environmentally detrimental impacts, particularly with respect to surface and ground water, leading to a contamination footprint that may extend far beyond the extraction site. To, among others, increases in sexually transmitted diseases. These human rights impacts, among others, are particularly severe for marginalised people including women and indigenous peoples.6

Additionally, mining is responsible for detrimental local and national-level economic impacts through externalising environmental and social costs; investor-state contracts and trade agreements that contractualise minimum payment of taxes and royalties to host governments; extensive subsidies provided by governments often under pressure from international lenders;7 the use by companies of accounting practices that cause illicit capital flows out of the countries where the resources

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For many years, the industry and supportive governments largely denied the seriousness of the impacts associated with mining [...] are extracted, often into tax havens; and a suite of detrimental economic and social conditions described by the terms “Dutch disease” and the “resource curse.”8 Dan Haglund, of Oxford Policy Management, concludes that mineral-dependent countries “are more likely to have lower economic development than other countries, measured by GDP per capita.”9

The mining industry’s response

For many years, the industry and supportive governments largely denied the seriousness of the impacts associated with mining, and avoided or discouraged discussion of these impacts, even as these were raised with increasing urgency by civil society organisations in the global South and North. While defiance persists, a global acknowledgement of, and discussion about, negative impacts associated with mining did get under way in the late 1990s, following a series of catastrophic mine waste impoundment failures, and, in the early 2000s, this critical analysis paid increasing attention to human rights and economic impacts. A shift occurred in the international debate from outright denial of serious problems, to more complex discussions about the relative significance of core contributing factors and to what the appropriate solutions should be.

In 2004, the industry association International Council of Mining and Metals (ICMM), in partnership with UNCTAD and the World Bank Group turned to the work of a group of academics at Oxford, including Paul Collier. Collier’s work on “resource-rich and policy-poor countries”10 led to his well-known and contested11 equations12 that made good governance the difference between those countries that reap the benefits and those that suffer the curse of resource extraction.

A major and ongoing lobby effort by the international mining industry, supported by the home country governments of many mining companies, such as Canada and Australia, has resulted in new public policy directions and the allocation of millions of dollars in public funds to programs in the host countries of multinational mining companies to help them to better govern their natural resources.13

It is time to challenge the focus on weak governance as a cause of the development

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8. The resource curse literature describes a suite of conditions, to which resource-dependent countries likely to be subject, that are detrimental to national economies and likely to perpetuate or exacerbate under-development, such as: overvaluation of the real exchange rate (RER) leading to price inflation and higher costs for local producers, loss of competitiveness and loss of development of other economic sectors (so-called Dutch Disease); volatility in mineral values; overconsumption based on a non-renewable resource; unequal distribution of benefits associated with mineral wealth; corruption; increased conflict and violence (Auyt 1993; Sachs and Warner 2001; Leamer 1999; Berman et al 2017; Meilleur 2010; Ross 2015; Thorp et al 2012).
deficits created by mining by looking at examples from a country with a long history and expertise in mining, a country with presumed strong governance – Canada.

**Canada: “strong governance,” but weak performance at home**

Since 2009 the Government of Canada has allocated tens of millions of dollars from public funds to programs purporting to develop natural resource governance in countries hosting Canadian mining companies.\(^\text{14}\) Canada’s officials tout Canada’s presumed leadership in mining and in good governance as valued expertise to be shared. However, communities in Canada struggle with the same mining-related afflictions suffered by communities overseas where Canadian mining companies operate. The following examples are by no means exhaustive, but give a sense of the range of serious and costly mining-related problems that undermine human development in Canada.

**Costly environmental disasters and corporate capture of regulators**

Containment of toxic waste and tailings is a most basic requirement of any mine to ensure environmental protection and to safeguard human rights and long-term economic opportunities of local communities. Bowker and Chambers’ 2016 in-depth study of global tailings impoundments found that “[t]hroughout Canada and all over the world new mines and new dams are approved within regulatory and legal structures that do not hold miners to best available technology and best applicable practices.”\(^\text{15}\) It is therefore not surprising

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14. Coumans, forthcoming, Minding the Governance Gaps
The tailings dam failure released over 24 million cubic metres of contaminated water and mine tailings, containing nickel, arsenic, lead and copper, into Polley Lake, Hazeltine Creek and Quesnel Lake.

that a 2017 review of global tailing dam failures by the UN Environment Programme (UNEP) found “the number of serious failures has increased in the last three decades.”16

The same report found that of 40 tailings dam failures it considered world-wide, between 2007-2017, seven occurred in Canada, only one less than reported in China, the country with the worst performance on the list.

To consider just one example, on 4 August 2014, a four square kilometre tailings impoundment at Canada’s Mount Polley mine failed. The open pit copper and gold mine owned by Imperial Metals has been in operation since 1997 in the Province of British Columbia (B.C.). The tailings dam failure released over 24 million cubic metres of contaminated water and mine tailings, containing nickel, arsenic, lead and copper,17 into Polley Lake, Hazeltine Creek and Quesnel Lake. Quesnel Lake is one of the world’s deepest fjord lakes, a source of drinking water for the local settler communities, as well as for Indigenous peoples within the Secwepemc Nation, and the lake is the spawning ground for up to 25% of all salmon in B.C.. The annual salmon run is of economic, social, cultural and nutritional significance to local Indigenous peoples.


Amnesty International has reported on the human rights impacts of the waste spill. An independent panel found that in regard to tailings storage the mine had “adopted a minimum factor of safety” and did not take steps it could have to avert the disaster. The panel also noted the “limited ability of the Regulator to influence the design issues” concluding that the only way to reduce dam failures is to increase the standards to “[t]ailings hose developed by the U.S. Army Corps of Engineers for water dams” and to reduce the use of dams through a dry-stacking method of tailings impoundment. The independent panel noted that without these significant changes to current mining practices “on average there will be two failures every 10 years.”

The mining industry has pushed back on the findings of the independent panel by insisting that “tailings dam failures are very rare” and that “[t]ailings dams have a high safety record in Canada.” Since the Mt. Polley spill three more mines have been approved in B.C., none of which meet these independent panel’s recommendations. Furthermore, no sanctions or fines have been levied on Imperial Metals for the Mount Polley disaster and the mine has been permitted to continue operating. As Bowker and Chambers point out, Canadian “[r]egulators have clearly

When tailing dams fail, it is Canadian taxpayers who end up having to cover the bulk of the costs for environmental remediation.

The disaster that was the Mount Polley tailings pond collapse is not over for those of us who live and depend on the lands and waters, and particularly on the salmon that have always sustained us. What is the point of having laws if governments and industry are not held accountable when they are violated?

- Bev Sellars, Chair, First Nations Women Advocating Responsible Mining.
Globally, countries are not collecting sufficient bonds from operating mines to manage potentially toxic tailings and mine waste impoundments in perpetuity.

chosen protection and support for the mining industry over reducing public risk and public liability.”

When tailing dams fail, it is Canadian taxpayers who end up having to cover the bulk of the costs for environmental remediation. Independent economic analyst Robyn Allan notes that “[u]nder provincial rules, bonds posted with the province are supposed to cover reclamation after the mine closes, not environmental damage from an accident, and mining companies are not required to prove they have insurance or the financial resources to pay for damage they cause.” B.C.’s Auditor General found that the province’s regulator “has estimated the total liability for all mines at more than $2.1 billion, yet has obtained financial securities for less than half that amount ($0.9 billion).”

The B.C. Auditor General concluded that B.C. regulators’ “compliance and enforcement activities of the mining sector are inadequate to protect the Province from significant environmental risks” and that “emphasis on mining promotion combined with a weak compliance and enforcement program creates the risk of regulatory capture for the ministry.”

Legacy cost

A significant and insufficiently recognised cost that mining commonly imposes on society comes at the end of the mining cycle when mines are often abandoned by the operating companies in partial or un-reclaimed state. Globally, countries are not collecting sufficient bonds from operating mines to manage potentially toxic tailings and mine waste impoundments in perpetuity.

There are an estimated 10,000 abandoned and orphaned mine sites in Canada. In the Province of Ontario alone there are 4,412 officially recognised abandoned mines containing over 15,000 mine hazards. Based on official data made available by some regional governments, the estimated liability for contaminated mining sites across Canada (most of which are abandoned or orphaned) is well above $9.1 billion. These estimated costs can easily double or triple as the true expenses of individual rehabilitations are realised.

One mine alone, the Giant Mine in Canada’s Northwest Territories is currently estimated to require around $1 billion to stabilize 237,000 tons of highly toxic arsenic trioxide left over from gold processing and stored at the mine. Another $2 million per year will be needed to maintain the stabilisation system for the foreseeable future. Nearby lakes are already contaminated.

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31. Ibid
32. Ibid. p. 44. The Auditor General notes that “[r]egulatory capture occurs when the regulator, created to act in the public interest, instead serves the interests of industry” and provides eight signs of regulatory capture.
considered permanently contaminated. In Health studies in the local indigenous Dene population are ongoing. The final rehabilitation solution for this mine has been discussed, without implementation, for years, starting before production stopped in 1999 and the projected costs for stabilisation of the site have risen steadily.

Indigenous opposition to mining and impacts on women

The environmental, human, and economic costs of mining are increasingly well-known and a source of local opposition to newly proposed mines globally. In Canada, some of the most intense struggles to stop mines from going ahead have been led by Canada’s Indigenous peoples. In 2005, the remote Ontario First Nation of Kitchenuhmaykoosib Inninuwug (KI) declared their territory out of bounds for mining. Nonetheless, in 2006, a platinum exploration company, Platinex, set up camp on KI’s land. As members of KI maintained their opposition and blockaded roads to stop mine equipment they found themselves sued for $10 billion and six of their leaders were found in contempt of court and jailed. The community ultimately won the right to keep their lands free from mining three years later, after their story gained international attention, but the struggle took a toll on the community and cost Ontario tax payers $5 million to persuade Platinex to give up its claim. In British Columbia, the indigenous Tsilhqot’ín have never ceded their lands and have been fighting mining since 1995, in defense of their mountain lake, Teztan Biny, and the land around it called Nabas, most recently against Taseko Mines. These are but two of many such examples.

One of the concerns remote Indigenous communities have in regard to mining is its impacts on local women.

In Canada indigenous women are starting to speak out about the impacts of large influxes of construction workers into mine camps. A 2017 report points to evidence that “Indigenous women and girls are subjected to the worst of the negative impacts of resource extraction at every phase” noting that particularly increased “incidence of sexually transmitted infections (STIs) and HIV/AIDS.”

43. Ibid. p. 8.
due to rape, prostitution, and sex trafficking are some of the recorded negative impacts of resource extraction projects, specifically as a result of the presence of industrial camps and transient work forces.\textsuperscript{44}

Tax avoidance

One of the “benefits” the industry touts to offset any negative costs is the payment of taxes and royalties. In reality, mining companies often enter into investor-state contracts that minimise the taxes they will be required to pay, and provide lengthy tax holidays and extensive subsidies from states that are often under pressure from international lenders to provide these investment friendly incentives.

Additionally, mining companies may use illegal accounting practices that cause illicit capital flows out of the countries where the resources are extracted, often to end up in global tax havens. One of the ways to do this is through transfer mis-pricing. Transfer mis-pricing happens when affiliated companies, for example a parent and a subsidiary, set their own non-market transaction price and through this mechanism avoid paying taxes on profits in the higher tax jurisdiction. This practice robs many developing countries of the taxes they desperately need to support development.

Again, even countries with relatively strong taxation systems, such as Canada, fall prey to this practice. Currently, Canada’s Cameco Corp., the world’s biggest publicly-traded uranium company, is accused by Canada’s revenue agency of having avoided some $2.1 billion in taxes owed to Canada. Cameco is accused of having set up a subsidiary in Switzerland and selling its uranium at below market prices to this subsidiary (transfer mis-pricing), thereby making little profit in Canada, where tax rates are around 30%. The Swiss subsidiary then sells the uranium on the global market at market prices and makes a significant profit, but that profit is taxed at the much lower Swiss rate of 10%.

The Canadian federal government argues that Cameco’s subsidiaries in tax havens have “the sole purpose of dodging taxes because they performed no business activities: all of the activities were carried out by its Canadian head office.”\textsuperscript{45}

Conclusion

The costs mining imposes on environments, local communities and regional and national governments create development deficits that are particularly hard hitting in developing countries. The industry argues that attention should be paid not to the practices of mining companies themselves, but to the weak governance of some jurisdictions in which they operate. This paper has argued that these harmful practices by mining companies also occur in relatively strong governance jurisdictions such as Canada. This review of the ongoing harmful impacts of mining in a strong governance jurisdiction like Canada provides a cautionary tale for Bougainville as it contemplates the role mining might play in its future.

There is no doubt that an argument can to be made that many of the harms described here could possibly be countered by strong regulation. However, it must also then be recognised that large multinational mining companies and their national and international lobby organisations consistently and vigorously resist strong new regulation, and even strong enforcement of existing regulation. This resistance is evident in many specific instances around the world.\textsuperscript{46} Broadly it can be seen in the increasing use by mining multinationals of provisions in trade agreements and investor state agreements that allow them to legally challenge countries that try to protect their environments and human rights through legislation, policy or practices that these companies do not see as being in their interest.\textsuperscript{47}

If the mining industry wants to demonstrate
that it really supports strong governance it should be actively lobbying for regulations to require, among others: that all water bearing tailings dams to be built to the specifications of water reservoirs; realisable bonds that will actually cover the full costs of rehabilitating mines at closure; that only mines be permitted that will not require perpetual care and maintenance; the Free Prior and Informed Consent of Indigenous peoples, and their right to refuse mining on their lands and territories; that fair taxes be paid in the jurisdiction where the resource is extracted; full transparency around environmental and social risk and around financial arrangements, including the disclosure of the beneficial ownership of mines.

The people of Bougainville have experienced environmental devastation, immense social suffering and serious development deficits as a result of under-regulated mining. Perhaps their test for companies that want to mine in Bougainville should be whether these companies can prove they are serious about “good governance” by publicly insisting on strong regulations that prioritise environment protection, human rights, free prior and informed consent, the fair payment of taxes and community-driven economic development.


46. In 1997 so-called “Prove it First” legislation was passed in Wisconsin, USA, that “requires that before the state can issue a permit for mining of sulfide ore bodies, prospective miners must first provide an example of where a metallic sulfide mine in the U.S. or Canada has not polluted surface or groundwater during or after mining. So far, the industry has not been able to find a single example where they have mined without polluting water” (Al Gedicks and Dave Blouin 2017). The Wisconsin Mining Association is now leading a push by the industry to overturn this law. http://www.ienearth.org/wisconsins-mining-moratorium-under-attack/ see also http://midwestadvocates.org/news-events/news/keep-wisconsins-prove-it-first-mining-law/.

47. At least nine such cases have been filed by Canadian multinational mining companies under ICSID alone, since 2004. See https://icsid.worldbank.org/en/Pages/cases/AdvancedSearch.aspx.