

**Volatile Commodities:
A Review of Conflicts and Security Issues Related to Extractive Sectors**

Philippe Le Billon, Department of Geography University of British Columbia
Jonathan Kishen Gamu, Department of Political Science, University of British Columbia
Martha Condé, Inst. of Environmental Sciences and Tech., Autonomous University of Barcelona

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Contents:

Key Messages.....	2
Executive Summary.....	3
Key Findings	6
Approach.....	9
Results.....	10
Additional Resources	30
Further Research and Research Gaps	31
Knowledge mobilization	32
References	33
Appendix.....	49

Key messages

What main types of conflicts relate to extractive sectors?

Extractive sectors - oil, gas, and mining - directly relate to three major types of conflict and security concerns. First, *resource supply* conflicts relate to international, and especially intra-regional disputes over resources, but also social unrest associated with major commodity price hikes and supply disruptions. Second, concerns over *conflict resources* are associated with the funding of armed groups through primary commodity revenues. Third, *community-level resource conflicts* relate to concerns associated with tensions and open disputes between companies, government authorities, and local communities (and their supporters) over extractive sector activities and the distribution of the costs and benefits, as well as more broadly over the control of, and access to resources. This report focuses on the latter type of conflicts, especially community-level conflicts in relation to mining projects.

Why have community-level conflicts over extractive sectors increased over the past two decades?

The number of community-level conflicts have risen in the context of mining boom seeing an increasing number of extractive projects taking place, often in liberalized extractive sectors and partially democratized political systems. This context resulted on the one hand in more assertive and institutionally-legitimated demands by local communities, civil society and local authorities to participate in decision-making and to directly benefit from mineral development, and, on the other, often still inadequate government or corporate will and/or capacity to address rising expectations and to constructively engage these grievances and contestations. Triggering events then often turned tensions into open-conflicts, notably as a result of unfulfilled development promises or expectations, failure in proactive community engagement in decision-making and grievance mechanisms, accidents potentially attributable to companies, and political events such as electoral campaigns.

How can these conflicts be prevented or positively transformed?

Government authorities, extractive companies and communities can implement initiatives facilitating fair, transparent and participatory relations between stakeholders at all stages of the project lifecycle. These include participative forms of social, environmental, and political risks and impacts analyses; inclusive dialogue and negotiation processes; and a right for free, prior, and informed consent of affected populations. Deliberative tools have to adhere to established international standards and protocols, including creating space for third party oversight and civil society involvement, and mitigating frequent power asymmetries in bi-lateral community-firm relations. Agreements secured between communities and companies need to be transparent, precise in their language, and receive the backing of the state to uphold the rights of communities. Governments need to ensure transparency, accountability, and efficacy in the appropriation and usage of resource revenues, including prevention of corruption. Overall, community members want to have their views and recommendations taken into account. This not only requires the application of strong norms, but also adapting government and corporate procedures to local contexts, surpassing historical legacies of distrust by communities towards companies and authorities, addressing conflictive intra-community social relations, as well as recognizing alternative perspectives and understandings by communities of what may be presented by companies and government authorities as technical issues to be only seen and resolved through non-community-based 'expert knowledge'.

What role for Canada?

As a major mineral producer and a leading jurisdiction for mining corporations, Canada has been called upon to help prevent or resolve mining-related conflicts. The main strategies of the Canadian federal government - Building the Canadian Advantage/ Doing Business the Canadian Way - have been praised by some business interests for combining international competitiveness and high standards of social responsibility, yet they have also been criticized for having limited effects and failing to offer a robust dispute resolution and enforcement mechanism. As a result, Canadian courts are being asked to provide redress for alleged abuses. Canada's role in addressing the causes of community-level conflicts can be further enhanced in the areas of international norms, domestic regulation of overseas corporate practices, and collaboration with host communities and governments.

Executive summary

Conflicts at the community-level around extractive projects sharply increased in number during the recent commodity boom, becoming a major source of concern for companies, communities and governments, as well as international human rights, environmental and development organizations. Focusing on community-level conflicts associated with mining, this study reviewed 305 publications to identify potential factors exacerbating the risk of conflict onset, as well as approaches to conflict prevention and resolution.¹

This study suggests that the recent rising trend in reported community-level conflicts over mining projects mostly results from three main sets of factors:

- At the structural level, and drawing upon findings derived from the broader literature on social conflicts, the recent decade-long commodity boom was preceded by extensive neo-liberalisation reforms and structural adjustment plans that attracted new extractive sectors investments while loosening regulatory frameworks and reducing state capacity. Some of these investments flowed into conflict-prone and under-regulated countries undertaking democratization processes frequently characterized by greater public protests, distrust towards government authorities, rising inequalities, and recurrent state repression. The acceleration of global economic growth and increasing demand for primary commodities at the turn of the millennium resulted in rising prices and number of extractive activities, including by companies from 'emerging countries'.
- At the contextual level, liberalization reforms taking place in situations of partial political democratization often resulted in contentious forms of politics involving more open challenges to government authorities and business interests. This notably took the form of more assertive and institutionally-legitimated demands by local communities, civil society and local authorities to participate in decision-making and to directly benefit from mineral development. The accelerating pace of exploration and mine development across most parts of the world raised expectations of benefits as well as concerns among host societies, and in particular poor and historically marginalized communities, as well as among authorities in affected regions. Ill-designed or poorly implemented mineral development strategies, in part due to weak government capacity, left authorities in a challenging position to address the expectations and concerns of many communities.
- At the proximate or 'triggering' level, diverse factors often combined with contextual factors to mobilize communities and their supporters against some of the specific developmental and environmental impacts of mining projects. While such concerns motivated unprecedented efforts in resource governance on behalf of an array of corporate, government and civil society actors, they also translated into greater mobilization against mining activities, most notably in Latin America, in a context where the liberalization of the sectors as well as further democratization (and decentralization) were not matched by greater government capacity – thereby creating situations often characterised by rising expectations and open contestations. Specific triggering factors identified include extractive sector related threats to land rights and local livelihoods, unfulfilled development expectations and a lack of pro-active community engagement in decision-making or failure of grievance mechanisms, notably with regard to impact assessments and benefits distribution, as well as poor company or government practices resulting in accidents, local frustrations with hiring process, or abuses from security forces. Issues around the distribution of benefits and minimization of impacts were exacerbated by higher commodity prices and expectations for higher corporate standards - especially in contexts of fiscal decentralization, weak local government capacities, deep poverty and limited alternative livelihoods. Greater exchange of information and ease of mobilization through social media and transnational advocacy networks often led to a leveraging of protests by local communities and supporters to articulate demands in contexts of historical distrust towards authorities and inadequate participatory decision-making processes. Violent reactions by governments and companies against public protests and alleged

threats to 'civil order' often led to an escalation of conflicts resulting in casualties, but also renewed negotiations over extractive sector activities and in some cases the cancellation of extractive projects.

Paradoxically, the rise in conflicts has taken place within the same time period of increasing efforts by governments and the extractive sector to prevent and reduce conflicts. These efforts focused on mechanisms to improve resource governance through guidelines for investment companies, conflict negotiation tools and institutions, and stricter norms of transparency and accountability; they provided as well a vast array of recommendations for the various stakeholders in terms of community participation, land-use planning, operational practices, and value chain management.

Mechanisms for mitigating and managing community-level conflicts are generally industry-driven and thus largely directed at companies; however, some reports/studies have produced recommendations for host governments and, more rarely, for communities. With respect to companies, studies generally recommend that mining companies implement diverse initiatives at all stages of the mining lifecycle that facilitate *fair, transparent* and *participatory* relations between companies and affected communities. These activities begin with social, environmental, and political risk analyses and impact assessments prior to investments proceeding. Stakeholder mapping is among the most efficacious early-onset conflict prevention tools available to companies, and can be impactful by identifying the most vulnerable and marginalized groups within society (e.g., women, indigenous groups). Additionally, studies widely emphasize the importance of dialogue and negotiation processes beginning at an early stage and continuing in different forms throughout the lifespan of a mining project, including closure. These processes are diverse and range from grievance management systems/protocols, as advocated by the International Financial Corporation (IFC) Performance Standards, to other multilateral conflict resolution mechanisms such as dialogue tables. Once again, studies emphasize the importance of creating formal institutional space for vulnerable and marginalized groups to be able to exercise voice. For deliberative tools to be effective, moreover, they must adhere to established international standards and protocols, while creating space for third party oversight and the involvement of Non-Governmental Organizations (NGOs). Not only can this bolster the legitimacy of these conflict management and resolution tools, it can also mitigate some of the traditional power asymmetries of direct bi-lateral community-firm relations while providing additional opportunities for informational sharing and networking.

Given that both environmental impacts and material distributional issues trigger and predispose community-level conflict, the literature recommends companies adhere to international standards pertaining to resource management, community resettlement, and sustainable development. Impacts on water, land and livestock are among the most contentious triggering issues between companies and communities, and can be managed through participatory environmental monitoring initiatives. Additionally, impact benefit agreements between companies and communities can ensure a timely and mutually agreed upon dispersal of the material benefits that accompany mining. To reduce conflict risks these agreements, however, must be transparent, precise in their language, and facilitate state involvement in order to ensure the rights of communities are upheld.

Beyond institutionalized deliberative processes and mutually agreed upon distributions of benefits and impacts, conflicts - especially those involving an escalation towards physical forms of violence - are also expected to be mitigated through adherence to international multi-stakeholder initiatives, such as the Voluntary Principles on Security and Human Rights. The behavior of private security personnel and state agencies (e.g., military, police) contracted to protect private assets is a critical determinant of the nature of community-firm relations and the trajectories community-level conflicts take. When security personnel operate in accordance with international human rights standards, the legitimacy of the corporate actor as a governing agent can be enhanced. Moreover, adherence to international human rights standards helps safeguard citizens' rights to peaceful protest and interest expression. In this regard, routine human rights training for security personnel, in addition to regular third party auditing of corporate training initiatives are crucial mechanisms that can reduce the likelihood that community-level conflicts will result in violence and have deleterious long-term impacts on security.

With respect to host governments, conflict mitigation and management begins prior to the commencement of operations by ensuring investments obtain the free, prior, and informed consent of

affected populations. The literature recognizes that consultation processes have generally been limited to environmental, human rights, and health and safety issues. However, affected communities must also be able to decide whether they support extractive sectors projects, and have their decisions legally respected by government and industry if they desire alternative development paths. While free, prior, and informed consent has been resisted by governments and companies, many large mining companies are now expressing commitment to these principles (Oxfam America, 2013; 2015). Yet, even when governments have expressed commitment to it, the implementation of free, prior, and informed consent has been beset by challenges of implementation, not least of which involve the formal identification of indigenous groups who are legally entitled to it. Thus, this international principle can be upheld when complemented by broader processes relating to state development and institutional capacity building. Moreover, studies suggest that host country governments must open up debates over free, prior, and informed consent to permit local long-term residents but non-indigenous groups affected by industrial mining investments to exercise similar rights to prior consultation.

Finally, the literature recommends that central, regional, and municipal governments ensure transparency, accountability, and efficacy in the appropriation and usage of resource revenues. Constructive community-company relationships rest, in part, on effective revenue management. Thus, adherence to international transparency initiatives, such as the Extractive Industries Transparency Initiative (EITI), is promoted as a way to help foster greater trust in national, regional, and local authorities and to ensure the benefits of extractive sectors (e.g., taxes) address basic needs, and thereby reduce asymmetries in the distribution of benefits. To be effective, transparency requires governments to make high-quality information available in user-friendly formats that can be disseminated to citizens and facilitate feedback. While transparency should not be viewed as a panacea for conflict management, it is necessary for greater openness and accountability, and to encourage civil society participation more broadly. Lastly, several studies have shown that the decentralization of revenues can be inefficient as a result of weak sub-national bureaucracies, with decentralized revenues exacerbating, rather than mitigating community-level conflict. Accordingly, the literature suggests that community-level conflicts can be mitigated through institutional capacity-building efforts, such as technical training programs for local authorities and civil servants.

Overall, community members want to feel heard and have their views and recommendations taken into account. For this to happen, institutions and capable personnel need to be in place to ensure high quality communication, formal participation, and procedural fairness. This, in turn, not only requires following strong norms, but also adapting government and corporate procedures to local contexts, including historical legacies of distrust by communities towards companies and authorities, to the possibilities of conflictive intra-community social relations, as well as to alternative perspectives and understandings by communities of what may be presented by companies and government as technical issues to be understood and resolved through non-community based 'expert knowledge'. Lastly, the importance of proactive intervention to preempt/prevent community-level conflict cannot be understated. By their very nature, extractive sector projects are long-term investments in which poor historical legacies can plague even the most conflict-sensitive approaches to extractive development. Seemingly small grievances and disputes, if improperly managed by parties, can have deleterious implications that increase conflict and security risks over the project lifespan. Parties must therefore conceptualize conflict management in preventive terms, not only by managing extant conflicts in a fair, responsible, and efficacious manner, but also by taking parallel action to create lasting conditions for social peace.

Key findings

This report is written within the context of the 'resource boom' experienced by extractive sectors between 2002 and 2014, which involved revenues about twice the size of the previous boom experienced in the 1970s to early 1980s. This recent boom raised concerns about the risk of negative developmental impacts, especially in light of the poor outcomes of the previous boom in many resource-dependent countries (Gelb, 1988; Karl, 1997), and growing evidence from the 'resource curse' literature on the negative economic and institutional impacts often associated with dependence on resource wealth (Freudenburg, 1992; Auty, 2002; Ross, 2012).

The recent boom itself followed the liberalization of many extractive sectors, especially mining, in the 1990s (Bridge, 2004; Campbell, 2010), and largely resulted from fast-paced economic growth associated with the rapid rise of 'emerging economies' in Asia (Schaffartzik et al., 2014) characterized by high material intensity (Wiedmann et al., 2015). The developmental and governance contexts of extractive sectors have evolved during this period, seeing the adoption of the sustainable development paradigm (Buxton, 2012; Dashwood, 2014; Franks, 2015), along with shifts towards more inclusive norms of governance transferring some authority to non-state actors including corporations and civil society organizations (Prno and Slocombe, 2012). In this respect, the regulatory context of extractive sectors has been in part shaped by corporate, national and international initiatives, including voluntary codes of conduct, Corporate Social Responsibility standards, and company-community contracts (Canel et al., 2010; Besada and Martin, 2015). The broader socio-political context of the boom also included growing evidence and concern for climate change and biodiversity loss, which challenged future reliance on a hydrocarbon-fueled economy, as well as rising popular grievances against the deepening of inequalities, and a search for alternative development models, with serious implications for the ethics and sustainability of resource-intensive development models (Bebbington et al., 2008; Escobar, 2010; Martinez-Alier, 2012).

The resource boom has had many consequences. Rising global demand for energy and minerals have increased investments, financial revenues, and social and environmental impacts; generating greater concerns and conflicts among stakeholder groups, notably with respect to the distribution of risks and benefits (Martinez-Alier and Walter, 2016). The geological and technological dimensions of the recent boom included a turn towards more marginal resource reserves, including 'unconventional' hydrocarbon reserves and lower grade ores accessed through more invasive but cost-effective modes of extraction - most notably hydraulic fracturing and open-pit mining, as well as deposits in hard to reach locations (such as ultra-deep offshore fields) or politically sensitive areas (Mudd, 2007; Siegel, 2013; Short et al., 2015). In this latter respect, many extractive ventures took place in the broader geopolitical context of the end of the Cold War, which initially saw a decline in the number of armed conflicts until the early 2000s and opened up areas for exploration and extraction (Le Billon, 2013), followed by hostilities and political unrest in the Middle East and North Africa (Le Billon and El Khatib, 2004; Ross, 2011; Keenan, 2013), as well as increasing organized criminal activities, and state repression in several Latin American countries (Idrobo et al., 2014; Tetreault, 2014).

The context of high commodity prices characterizing the past decade has exacerbated resource competition among firms and governments (Stevens et al., 2013; Haslam and Heidrich, 2016), increased tensions between central, subnational authorities and communities over revenue distribution (Arellano-Yanguas, 2011), as well as contributed to conflicts over resource access between artisanal and small scale miners (ASM) and industrial mining projects (Hilson and Yakovleva, 2007). The prevalence and rise of community-level conflicts associated with extractive projects within the context of the recent global energy and minerals boom has been empirically demonstrated through new data collection and analysis, with about 485 extractive sector-related conflicts identified around the world by 2015 (EJOLT, 2015; see also Franks et al., 2014; ICMM, 2015), with price spikes increasing outbreaks of physical violence between companies, governments and local communities (Bond and Kirsch, 2015). Some of these conflicts have resulted in grave human rights abuses, as well as major losses for communities, companies and governments - particularly in Latin America, most notably in Peru, Mexico, and Guatemala (Bebbington, 2011; Franks et al., 2014; Bond and Kirsch, 2015; Global Witness, 2014, 2015; Pena, 2014). There is less information and analysis about the conflict and security dimensions of the current

commodity downturn as a result of project suspensions and cost reductions. The suspension or cancelation of new projects should reduce the number of conflicts; however, the sharp decline of commodity prices has also raised concerns about the effects of mine closures, unemployment and strained public budgets (Le Billon and Good, 2016).

The second, and broader context of this study has been the growing level of awareness and concerns for conflicts and security issues associated with extractive sectors. There is now a growing literature and body of expertise seeking to explain and address resource-related conflicts, including the identification of structural factors, triggering events, framing perspectives, and socio-political processes influencing their occurrence, pathways, outcomes and modes of prevention/resolution (Escobar, 2006; Le Billon, 2012; Grzybowski, 2012; Cuvelier et al., 2014), including the role played by extractive companies in governing security issues (Honke and Thauer, 2014; Haufler, 2010; Ruggie, 2013). Both anecdotal and statistical evidence have been found between extractive resources, most notably oil, and armed conflicts (Ross, 2012; Colgan, 2013), while the issues of 'blood diamonds' and 'conflict minerals' have garnered major international policy attention (Nest, 2011; Le Billon, 2012). Though not the core focus of this study, relations between extractive sectors and armed conflicts have informed the study of community-level conflicts and security issues around extractive projects. A first reason is that, though rare, some community-level conflicts have escalated into large-scale hostilities, as documented in the case of the mining conflict and civil war in Bougainville Island, Papua New Guinea (Filer, 1990; Regan, 1998; McKenna, 2015). Second, many extractive projects have taken place in post-conflict societies, with legacies that can affect community-level conflicts (Boege and Franks, 2012; Caxaj, et al., 2013; Rochlin, 2015). Third, there is an interchange of analyses and policies between resource-related armed conflicts and community-level conflicts (Banfield et al., 2005; Brown and Jensen, 2009; Rustad et al., 2011). Finally, the literature on the security dimensions of environmental impacts from resource extraction and consumption have established links with community-level conflicts. Though previously focused on conflicts linked to scarcities of renewable resources (Homer-Dixon, 1994; Koubi et al., 2014), some of the literature has engaged issues relating to the impacts of resource consumption levels, including their relation to climate change (Watts, 2005; Bergholt and Lujala, 2012) as well as water use by extractive projects (Adler et al., 2007; Kemp et al., 2010), especially in arid environments such as the Andean plateau (Bebbington and Williams, 2008).

The third contextual factor has been political. Many conflicts have occurred within the broader context of transitional societies in which formal deliberative and participatory institutions have yet to be fully consolidated. As a result of nascent and/or weak democratic institutional structures, protest activities have become part of civil societies' established "repertoires of contention" (Tilly and Tarrow, 2006). For example, Machado et al. (2011) have observed a resurgence of street protests in Latin America since 2000, noting that in weak institutional contexts protests and riots have become "salient and meaningful" methods of expressing interests and otherwise achieving policy goals. The rising trend in conflicts related to extractive sector activities also appear to be part of a broader rising trend in the number of large-scale protests globally, which may reflect some possible common factors, notably in terms of greater political opportunities, ease of mobilization, grievances against rising inequalities and disaffection towards established political elites. According to Ortiz et al. (2013), 843 large-scale protest movements took place between January 2006 and July 2013 in 87 countries covering 90% of the world's population, with the number of protests increasing from 59 in 2006 to 160 in 2012. Among these eleven major protest movements directly related to the mining sector and seven to the oil sector – two thirds of which started after 2010. Labor issues were the most frequent cause (cited in 7 cases), followed by environmental concerns (6), resource nationalism (6), and local community and indigenous rights (6), with multiple causes sometimes involved, though distributive conflicts seemed to predominate over perceived incompatibility between extractive activities and other forms of production and traditional ways of life. Ortiz et al. (2013) noted that the rise in protests took place in the context of rising commodity prices (especially food and fuel), and in the wake of the 2008 financial crisis – which was followed by austerity policies in many countries, but also high debt levels, and regressive public policies.

The fourth contextual factor has been Canada's major role as a commodity producer, potential regulator of a large number of companies operating overseas, and as contributor to international resource governance policies, including on resource-related conflicts (Campbell et al., 2012; Fast, 2014; Deneault

and Sacher, 2012; Butler, 2015). Not only is Canada a major resource producer and exporter facing frequent resource-related conflicts, most notably with First Nations communities (Bloomley, 1996; Preston, 2013; Haluza-DeLay and Carter, 2014), but it is also hosting about 60% of publicly listed extractive companies in the world (NRC, 2014). The assets of Canada-listed mining companies abroad in 2011, at the peak of the mining boom, was \$215.3 billion, including \$31.6 billion in Africa where it had risen from \$2.9 billion in 2001 (NRCan figures cited in, Bhushan and Heidrich, 2013). In turn, the position and perception of Canada in extractive regions of the world relate in part on the practices of 'Canadian' companies and their staff (Black, 2015), and the often deeply uneven and racialized relations on which they rest (Butler, 2015). The role of Canada is also associated with the pro-active stand taken by the Canadian federal government in relation to the promotion of 'Canadian' extractive ventures and the 'good governance' of extractive sectors overseas. Following the National Roundtables on Corporate Social Responsibility (CSR) and the Canadian Extractive Industry in Developing Countries (AG, 2007), though without pursuing many of its recommendations, the Canadian Federal government initiated the 'Building the Canadian advantage' (BCA), provided major funding into this domain (Brown, 2014), and mobilized Canadian diplomatic assets. The linkage between Canadian government international development assets, notably CIDA, and extractive sector activities raised a number of critiques, including the "recommercialization" of Canadian development assistance (Brown, 2014) and a lack of acknowledgement of the counter-developmental effects of some extractive activities (Coumans, 2012). In its review of the federal government's BCA initiatives, the Canadian Chamber argued that "Canada's focus should not be on punishing companies, but on ensuring they have the tools and support to conduct their operations responsibly and to the benefit of the communities in which they operate."

If the BCA has been praised for ensuring the Canadian mining industry remains internationally competitive while adhering to the highest international standards of social responsibility (Canadian Chamber of Commerce, 2014), it has been the subject of intense criticism from both academic and NGO communities, which have questioned not only of the strategic motivations behind the initiative, but also its efficacy in reducing community-level conflicts in developing countries. The BCA has been criticized for providing corporate actors with undue influence over Canada's international development agenda, while diverting government resources and diplomatic influence to help mining companies obtain social licenses to operate abroad (Bodruzic, 2015). Others have critiqued its enforcement capabilities in light of its preference for voluntary standards (e.g., OECD Guidelines for Multinational Enterprises, IFC Performance Standards on Social and Environmental Sustainability, Voluntary Principles on Security and Human Rights, and Global Reporting Initiative) (Coumans, 2014). The initiative's fourth "pillar" in particular (e.g., creation of a "CSR Counsellor" to mediate disputes between Canadian companies and affected communities) is regarded as having limited effect. Not only must aggrieved communities demonstrate they have exhausted all corporate dispute settlement mechanisms before their case can be brought before the CSR Counsellor, companies themselves may refuse to participate in mediation efforts (Bodruzic, 2015; Coumans, 2014). In this regard critics have called for the creation of a more robust dispute resolution and enforcement mechanisms through the creation of an independent mining Ombudsperson and Compliance Review Committee (Coumans, 2010). In 2014 the Canadian government launched a second policy initiative entitled 'Doing Business the Canadian Way: A Strategy to Advance Corporate Social Responsibility in Canada's Extractive Sector Abroad.' This policy improves upon the BCA by providing the CSR Counsellor with a more robust role, empowering the office to provide advice and guidance to companies with respect to adherence to CSR standards, and to determine whether companies have adhered to international CSR standards, among others. While this new policy is regarded as "a step in the right direction", the CSR Counsellor still lacks enforcement capabilities over companies, or the ability to act as a "quasi-judicial body" (Simons, 2015: 20).

In this regard, developing country communities adversely affected by Canadian mining companies have sought justice and compensation through extraterritorial judicial mechanisms failing an ability to utilize domestic courts to sanction the human rights violating behaviour of Canadian companies and their contracted personnel. High profile cases in which Canadian courts have been utilized in an attempt to sanction companies for their actions abroad include HudBay's Fenix mine and GoldCorp's Marlin mine in Guatemala, and Vancouver-based Copper Mesa's operation in Junin Ecuador (Keenan, 2010; Maheandiran et al., 2010). Recently, the Canadian Supreme court ruled that communities affected

by Chevron's oil spill in the Ecuadorian Amazon can proceed with their lawsuit against the American-based oil company in Ontario given that a corporate office is located in the province. While debate exists over the jurisdictional reach of the Canadian court system (Seck, 2008), affected communities have increasingly turned to extraterritorial mechanisms for legal remedy, placing Canadian companies and the industry in the spotlight.

Systematic review and analysis of the factors involved in community-level conflict and violence in the extractive sectors, and the mechanisms available for conflict prevention and management have implications for local communities, host societies, and the reputation and performance of the industry. Besides more fundamental debates on the unsustainability of resource-intensive economic models (D'Alisa et al., 2014; Kothari et al., 2014; Exner et al., 2015), the current context of community-level conflicts over extractive sector development requires finding fair and effective forms of resource governance, especially in countries with weak or distrusted regulatory frameworks and institutions wherein de facto responsibility for resource governance has often fallen upon extractive companies, which in turn have often had to operate under inadequate accountability frameworks (Simons and Macklin, 2014). What's more, in the socially responsible era of global resource extraction, companies are now expected to contribute to the sustainable development of host communities and countries through a range of resource management, poverty reduction, revenue transparency, and deliberative initiatives, among others. Conflicts often draw attention to the discrepancies between companies' rhetorical commitments and their actual performance, which can easily generate reputational challenges to individual firms and the industry more generally. For companies operating in high-risk environments, moreover, a strong "business-base" exists for community-level conflict management, as escalations can result in project delays and suspensions with significant financial losses (Franks et al., 2014). Conflict, human rights abuse, and environmental mismanagement can also increase companies' international risk ratings, preventing them from accessing investment capital from multilateral lending agencies, or prompt institutional investors to divest. As global leader in resource extraction, the competitiveness of Canadian extractive industries, and especially overseas mining operations, has become increasingly tied to socially responsible performance.

Approach

This study draws on 305 publications, including 117 studies specifically examining community-level conflicts over mining projects.² Studies in English language were identified through Google Scholar using key terms (conflict, mining, extractive sectors, protests) and citation links. This was complemented by a general web-based search to find relevant policy reports, as well as suggestions from informants and reviewers. The 117 studies were selected for their empirical approach, classified by methodology and number of case studies, as well as assessed for the quality of their empirical evidence. Much of the literature relies on case study analyses confirming a broad range of factors involved in conflict processes. The main strengths of this case study literature is to provide in-depth and often nuanced understanding of individual cases across a wide variety of factors stretching historical and geographical scales. Still, most studies look at recent and community or district-level factors, and are largely for Latin America and to a lesser extent from Sub-Saharan Africa and Oceania, with few examining other regions of the world. While highly instructive, these studies frequently lack clearly defined and identified variables, making the testing of generalizable claims across the universe of cases difficult. Most of the academic studies also have a limited coverage of the perspectives and practices of mining companies, and to a lesser extent of state institutions, as compared to those of local communities and civil society organizations. Only seven studies used statistical analyses with a large number of variables (at sub-national, national or international levels). These quantitative studies tend to confirm a number of major factors triggering or aggravating conflicts, such as sharp increases in commodity prices (with yet no study examining the impact of the recent fall in prices), operations with broad footprints such as open-pit mining, and the socio-economic characteristics of host communities (e.g., poor agrarian households at the peripheries of state influence), while the marginal effect of the quality of governance institutions remains debated in part because of the lack of sub-national and finely disaggregated data (Arellano-Yanguas, 2011; Ponce and McClintock,

2014; Haslam and Tanimoune, 2016). Future studies could usefully employ mixed methods-based research to examine the conflict inducing effects of some of the factors identified in the case study literature and clarify some of the level of causality proposed for these factors.³ The literature review was also complemented by a week-long fieldwork trip to Peru in February 2016, during which we conducted twelve in-depth interviews with a diverse set of key informants, including academics, government officials, NGO representatives, and company officials. Peru was selected as the country for our fieldwork interviews due to the rising number of community-level conflicts and violence the country has experienced during the recent community boom, with informants selected using purposive sampling techniques.

Results

The results of this study are presented through three main sections. The first reviews evidence for trends in conflict occurrences since the turn of the millennium, and confirms a rise in the number of conflicts and use of physical violence. The second covers findings from the literature on the major explanatory variables for this rise in conflict at global, national and local levels. The third section reviews findings related to conflict prevention and resolution mechanisms, including major recommendations from the main policy reports.

1. Trends in community-level conflicts around extractive sectors projects

Based on two studies examining recent trends in extractive sector related conflicts at the global level, data indicate an increase in the number and severity of reported conflicts since the mid-2000s.⁴ The International Council on Mining and Metals' (ICMM) latest report on company-community conflicts records an increase in the number of reported incidents, from 10 in 2002 to a peak of 90 in 2012 (ICMM, 2015). This report is based on "publicly available resources," most notably data collected by the Business and Human Rights Resource Centre. This estimate is conservative, as it only accounts for conflicts involving open protest, the use of force, and/or legal proceedings, and thereby does not include other indicators of conflict such as written declarations and inter-personal expressions of grievances that are less visible.⁵ The Global Witness (2014) database shows an increase in the number of killings of environment and land defenders, in general, with nearly three times as many people killed in 2012 (147) than 2002 (57). Between 2002 and 2012, at least 150 of 908 killings related to extractive sector conflicts, including oil and gas. Perpetrators were generally private security contractors, state security forces, or members of organized crime. Peru had the highest number of killings (46), followed by the Philippines (41).

Several databases and studies also provide information for the Latin America region. The Latin American Observatory of Mining Conflicts (OCMAL) report an increase in conflicts, most of which began in the 2000s, with 210 active mining conflicts in the region affecting 315 communities (OCMAL, 2015).⁶ The Center for International Environmental Law (CIEL) examines 14 cases from Mexico, Guatemala, Honduras, El Salvador and Panama, describing violence such as the destruction of personal and communal property; forced relocation; death threats; kidnappings; arbitrary detention and killings (CIEL, 2010). Although it is unclear whether incidents increased over time, the report documents various instances of violence in the late 2000s. At the national level, Firpo Porto et al. (2013) recorded 400 socio-environmental conflicts in Brazil, of which at least 16% are directly related to mineral extraction. In Colombia, Perez Rincón (2014) observed a sharp rise in the number of conflicts after 2001, with a peak in 2009. In Peru, the country's Ombudsman has documented a proliferation of conflicts involving extractive sectors since the early 2000s. Between 2006 and 2011, mining activities accounted for 41.7% of all conflicts, and were responsible for 73 civilian deaths (Defensoría del Pueblo, 2012).

2. Factors driving community-level conflicts

The analysis of conflicts classically involves the systematic study of types, causes, actors and dynamics (CSC 2012; Ratner 2013). Conflict types generally relate to scale, form and intensity, with a basic distinction between community-level, national, and international conflicts, between the object of the dispute, and between social and armed conflicts. The focus here is on social conflicts over resources, the impact of their exploitation, and distribution of their revenues at the community level, though we recognize multiple scales and intensities may be involved. The primary categories of actors involved are generally identified as local communities, extractive companies (mostly large-scale industrial ventures, but also their conflicts with artisanal and small-scale miners), and host governments. Others include NGOs, unions, security forces (public and private, as well militias), political entrepreneurs and parties, local business elites, and international financial organizations (Arce, 2014). Finally, conflict processes are understood in terms of temporality, geography, and intensity. Our main concern here is with the factors relating to extractive sectors, and in particular mining, that were involved in the escalation of conflicts, notably towards violent forms. As such, we do cover in detail broader factors that may contribute to the rise of conflicts (see Tilly and Tarrow, 2015), such as a widening of *political opportunities* for social movements and community-level protests associated with democratization processes; the growth of *polarized interpretations of social relations* across society such as increasing inequalities following neoliberalization processes; and factors influencing the *mobilization of broad coalitions* such as the diffusion of internet, social media, and mobile phones.

Conflict factors are generally categorized as structural, contextual, and proximate (or triggering), and are situated at (but also frequently straddling) global, national, and local scales (CSC, 2012; Grzybowski, 2012; Ratner et al., 2013). Structural factors are generally understood as conditioning or generic risk factors often taking place at a global level (e.g. international commodity prices, international norms and rules governing resource extraction, development paradigms). Contextual factors capture the specificities of a particular case, often at a national scale (e.g. dispossession of indigenous populations, socio-economic and political inequality, host country regime types, and quality of domestic institutions). Proximate or triggering factors are identified as tipping points that transform otherwise latent tensions into outbreaks of open (but not necessarily violent) conflict, with many of them taking place at a local scale (e.g. opening of a new mine; environmental disaster; repression of dissent). Distinct triggers may also lead to variations in conflict trajectory (e.g. social protest vs. court case). While triggers are more easily identifiable, they may not have produced an open conflict outcome in the absence of contextual and structural factors. Local-level conflicts are therefore likely to be a function of multiple variables that coalesce. As such, we treat each individual factor as being neither necessary nor sufficient for an outcome, but rather constitutes a singular element in a larger combination of factors that together are *jointly* sufficient (Mahoney, 2010: 131).

As discussed below, studies have identified a number of *potential* factors (Anaya, 2011; Bury, 2007; Bebbington et al., 2008; Bond and Kirsch, 2015; Hilson and Yakovleva, 2007; ICMM, 2015; Kirsch, 2015; Kemp and Owen, 2003; Odell and Silva, 2006; Ríos et al., 2015; Watts, 2005).

- *Structural factors*: colonization and presence of indigenous groups; pluri-legal land tenure regimes; high levels of inequalities and poverty; historical lack of public service to local communities (e.g.); high dependence on land-based livelihoods; high biodiversity and strong local environmental conservation agenda.
- *Contextual factors*: rise in commodity prices; increase in land pressure and water demand, including from extractive projects; political changes; weakening of the quality of public institutions; type of extractive project (e.g. higher likelihood for open-pit mines); type of commodity produced; size, capacity and ‘nationality’ of mining company (e.g. higher likelihood for mid-size and foreign companies); overlapping claims and exploitation by artisanal miners and industrial projects; previous history of conflict, including related to the extractive sector.

- *Proximate/triggering factors*: lack of consultation; dissatisfaction on local content or revenue distribution issues; land dispute; corruption; environmental risks and impacts; labour layoffs; failure to delivered on promised services and compensation; abuses by security forces; failure of grievance mechanisms.

As further detailed below, the *recent* rise in extractive-related conflicts globally can be interpreted as the result of the combination of the following: First, an increase in resource prices and revenues, which was associated with greater struggles over revenue/benefits redistribution, especially within contexts of revenue decentralization. Second, an increase in the number and relative size of extractive projects, as well as in the number of artisanal and small scale miners, with frequent tensions between these different groups, as well as with local communities facing increased risks and uncertainties with regard to their environment and livelihoods.⁷ Third, an increase in criticisms expressed towards extractive-sector led development, due in part to growing awareness of poor past records (as demonstrated by a voluminous academic and policy literature on the 'resource curse'), as well as rising environmental concerns and aspirations for alternative models of 'development'. Beyond these broad trends, each conflict is unique and draws from the particular histories, institutional dynamics, and power relations of places where extractive activities take place. As such, and in part due to space limitations, this literature review documents but does not go into the details about contextual factors that have contributed to conflicts.

2.1 Structural factors

2.1.1 Neoliberal reforms and structural adjustment plans

Throughout the 1980s, international financial institutions and donor agencies proposed developing countries reduce severe indebtedness and poverty through a series of macroeconomic reforms known as “Washington Consensus”. Policy prescriptions included public-sector cutbacks, the privatization of state-owned enterprises, and deregulation, among others. Reforms also sought to create regulatory frameworks that enabled mineral-rich developing countries to exploit their comparative advantage in extractive sectors. For instance, in 1992, the World Bank set out its ‘Strategy for African Mining’, which argued that the ‘underperformance’ of African mining was due to inefficient state-owned enterprises, informal exploitation (i.e., ASM), and under-resourced mining sector support institutions. Reforms focused on attracting FDI in order to develop economies and tackle poverty, and generally translated into changes in investment and mining legislations, including more attractive fiscal terms for companies.

While these reforms had notable successes in countries such as Ghana (Owusu-Koranteng, 2008) and Chile (Bridge, 2004; Schaffartzik et al., 2014), they did not always achieve their promised goals (Campbell, 2009). In some cases, they reduced institutional capacity, and drove down social and economic development standards (Campbell, 2004; UNEC, 2011). As a contributing factor to poverty and inequality in mineral-rich developing countries, neoliberal reforms and the ways they were implemented contributed to some of the conditions creating higher risks of conflicts (Roberts, 2006). Studies on Peru, for example, suggest a link between social conflict and the institutional arrangements of the post-structural adjustment period. Within the context of greater, but highly fragmented democratization following the end of the civil war and fall of the Fujimori regime, political and fiscal decentralization schemes increased the number of contentious episodes at the sub-national level (Bland and Chirinos, 2014), which have interacted with the global resource boom to affect social conflicts over resource extraction and the distribution of the resulting benefits – the distribution of revenues (*Canon Minero*) at the regional, provincial and district having exacerbated conflicts between local political competitors, and with communities (Arce, 2014; Arellano-Yanguas, 2010, 2011).

2.1.2 Investment in conflict-prone and under-regulated countries

Exploration and production have increasingly taken place in more conflict-prone (or 'fragile') countries, and/or in those with weaker environmental regulations (or enforcement), where it is possible to use more controversial processing techniques (Ganson and Wennmann, 2012; Erdogan, 2014).⁸ As companies operate in countries with higher national baseline levels of conflict, the potential for specific operations to be affected by local-level social conflict is expected to increase. Likewise, as companies operate in countries with lower regulatory standards and governance capacity, the likelihood of socio-environmental grievances galvanizing resistance should also increase - although firms that adhere to higher international voluntary standards seem to see less conflicts around their particular operations - though this is not specifically tested for conflict-prone areas (Haslam and Tanimoune, 2016).

The literature on firm attitudes towards conflict-prone areas is mixed, and generally points towards company profiles as the salient determinant of risk-aversion (Wolf et al., 2007; Deitlehoff and Wolf, 2010). Larger firms generally seek to avoid conflict areas because of potential losses and reputational damage, whereas juniors tend to be less risk-averse, though there are major exceptions where companies believe they will have the capacity to address existing risks. Others suggest the type of stakeholder pressure (domestic vs. international) may also influence firms' proclivity to operate in and respond to conflict-prone environments irrespective of size or industry (Oetzel and Getz, 2012). Some firms may even benefit from operating within the context of armed civil conflict in light of the entry barriers it creates for competitors, weaker government bargaining power, and secrecy in licensing processes (Guildolin and La Ferrara, 2007). While Franks et al. (2014) have demonstrated the financial losses generated by social conflict, studies have not yet systematically assessed whether firms will avoid investing in areas prone to *social* conflicts, nor have they demonstrated the probable financial losses associated with policies and actions that delay or divert rather than resolve conflict.

Mining investments have transitioned from the global North to the global South, where government capacity as well as regulatory regimes are generally weaker (Hilson, 2002; Bridge, 2004; Bebbington et al., 2008), and while fears of inadequate controls and a 'race to the bottom' may be tempered by the voluntary social, environmental, and labor standards many companies now subscribe to (Schiavi and Solomon, 2006), major concerns remain including a lack of accountability (Coumans, 2010; Simons and Macklin, 2014), and biased use of voluntary standards (Enns, 2016). Moreover, the recent decline in commodity prices raises concerns that implementation of these voluntary standards will be weakened. Assuming companies adhere to lower domestic regulations, social conflict risk may increase as a result. For example, Dougherty (2011) has illustrated that competition between junior firms has led them to invest in countries amenable to low-cost production. In Guatemala, lenient policies and favourable geology have made the country very attractive for gold exploration and low-cost production contributing to high levels of conflict between communities and mining companies and high risk of corruption (Dougherty, 2015), in a context characterized by civil war legacies, oppression and lack of trust of government.

2.1.3 Commodity demand growth and 'emerging' companies

Economic growth has driven increases in the level of resource consumption by developed countries and 'emerging economies' (i.e., physical flows of material and energy between societies and the environment). Rising demand for subsoil commodities may play a distant causal role by increasing the number and scale of extractive projects, and by extending the 'commodity frontiers of extraction' into more remote, under-regulated, ecologically sensitive, and politically risky areas.⁹ Europe and North America, have long been net importers of materials from developing countries (Giljum and Eisenmenger, 2004), while growth of the Chinese economy has steadily increased demand for natural resources worldwide (Muradian et al., 2012). These economies, moreover, have industrialized agriculture, shifted to the service sector, and largely outsourced mineral extraction (Krausmann et al., 2008). This has led to heavier reliance on (often less materially-efficient) imports from developing countries (Bruckner et al., 2012). As a result, the commodity frontier further expanded into the global south, facilitated by sector reforms (see below), rising mineral prices (mid-1990s-mid-2010s), strong equity markets and low domestic interest rates (Bridge, 2004). Technological advances have also made previously economically unviable reserves accessible (Moore, 2000). As a result, companies are now able to go deeper and farther,

often into areas inhabited by ecologically vulnerable communities (Martinez Alier, 1991, 2003, 2009). For example, OCMAL (2014) points to an increase in the number of investments in environmentally sensitive areas such as moors, highland water reservoirs, glacier fed headwaters, and the Amazon.

As Krausmann et al. (2009) show, non-renewable resources accounted for more than 70% of total material use by the end of the 20th century, with worldwide extraction having increased by an estimated 3.4% per year between 1950 and 2010 (Schaffartzik et al., 2014). Growth in mineral extraction is compounded by the decline in the quality of reserves, often requiring larger energy inputs and generating higher waste outputs (Bridge and Wood, 2010; Northey et al. 2014). Several studies have linked the increase in global demand for extractive resources in countries like Ecuador, Colombia and Argentina to an increase in socio-environmental conflicts (Vallejo et al., 2010; Vallejo et al., 2011; Walter et al., 2013). Based on a review of 59 cases, Bond & Kirsch (2015) suggest that the resulting price spikes between 2002-2011 associated with a dramatic increase in exploration and mining activity worldwide, led to an escalation of physical violence in company-community conflicts.

One more aspect of the recent boom has been the further rise of extractive companies - and investment financing - from 'emerging' countries, and most notably Chinese, Indian and Malaysian companies. Such companies have frequently been decried for their poor practices and for their investments in authoritarian countries (Amnesty International, 2013). Some empirical studies have nuanced this assessment, suggesting that in many cases these practices were not comparatively worse than that of companies from the OECD and much depended on the regulatory context of the host country (Irwin and Gallagher, 2013; Haglund, 2008; Pegg, 2012; Tan-Mullins, 2015), while it was noted that Chinese authorities and some companies were increasing their efforts to reduce negative impacts (Shankleman, 2008; Greenovation Hub, 2014).

2.1.4 Anti-extractivism and cultural friction over resource usage

Extractive-led development models have come under much criticism over the past two decades as a result of the general rise of environmental or social concerns about climate change, water access, massive biodiversity loss, 'resource curse' effects, and the undermining of traditional livelihoods and cultures (especially in light of large-scale foreign-run extractive projects perceived as the embodiment of globalization, modernization, and formalization processes, see Polier, 1996; Marsh, 2013). Opposition has been particularly strong against extractive activities with high climate change impacts, such as oil and coal, and those taking place in environmentally and culturally sensitive areas - especially where indigenous cultures consider land and water as sacred (Ali, 2003; Li, 2015). These criticisms are important not only due to the opportunities they create for networking and cross-scalar alliances, but also for the increasing visibility and legitimacy of resistance to extractive projects. Concerns over extractive-led development have been extensively investigated by academic and policy organizations, most notably with a focus on oil (see Barma et al., 2012; Ross, 2012), and while findings have motivated development-focused organizations to improve resource governance, they have also questioned the value of extractive activities for host countries and communities.

Various studies have demonstrated the salience of culturally-rooted critiques in community-level conflicts surrounding extractive sectors in countries as diverse as Argentina (Merlinksy and Latta, 2012), Bolivia (Gudynas, 2011; Acosta, 2009), Chile (Urkidi, 2010), Colombia (Chomsky and Striffler, 2014), Guatemala (Urkidi 2011), India (Shrivastava and Kothari, 2012), Nigeria (Nixon, 2011), Peru (Muradian and Martinez Alier, 2003), and Romania (Velicu, 2012; Badera 2014). Escobar (2006) has highlighted the importance of accounting for cultural differences when explaining resource-related conflicts. For many indigenous communities, the natural environment is understood and used in markedly different ways than that common among 'industrialized' societies, which treat humans as external to nature and generally take a more materialist and utilitarian perspective on 'resources' and the places from which they can be extracted. Environmental Impact Assessments (EIAs) seek to address some of these issues, including through cost-benefit analyses calculating the trade off, as well as gains and losses of environmental change and cultural impacts caused by projects (de Groot et al., 2002; Martinez Alier et al., 2010). Although seeking to integrate the non-monetary significance of impacts, these methods do not always adequately capture the cultural and environmental values people actually hold, such as sacredness, livelihood, human rights, collective territorial rights, aesthetic value, and/or biodiversity (Spash, 2000;

Söderholm, 2001; Martinez Alier, 2009; Temper and Martinez Alier, 2013; Hoogeveen, 2016).¹⁰ Concluding an extensive study of mining-related conflicts in Peru, Li (2015) suggests that the politics of 'equivalence' - the "methods with which to quantify and compare things such as pollution" across cultures and interest groups - is central to mining controversies. Cultural elements can also be instrumented as part of struggles over mining-related benefits, notably in term of claims for compensations. As pointed by Bainton et al. (2012) in the case of the cosmological dimensions of a rock formation in Papua New Guinea, tradition is "regularly harnessed as a resource in the political and economic struggles which [local communities] wage against one another, the mining company, and the State" (see also Otto and Pedersen, 2005).

Globally, various social movements and transnational advocacy networks have arisen to protect human rights or express a deep rooted defense of local ecologies, traditional livelihoods, and a desire for modes of development more harmonious with nature. Commonly referred to as the "environmentalism of the poor", these movements generally seek a transformation of the global economic system into one that is less environmentally malign, and provides marginalized peoples with greater opportunities for participation (Escobar, 2001; Marinez Alier, 2003). As Nixon (2011) suggests, impoverished peoples often use resistance to extractive sector projects to articulate deeper critiques of global economic relations and development paradigms, not to mention concerns for poorly implemented mining practices - including in light of previous projects and their legacies (Graetz, 2014). Although local communities may not be against the economic development that may come out of mining (which can put them at odds with counter-globalization supporters, see Kirsch, 2007), they can also express concerns about historical patterns of social injustices, examples of technological failures around the world, and specific local conditions that may contrast with official risk assessments presenting a reassuring view of mining projects and sense that they are both 'controllable' and 'inevitable' (see for example Haalboom, 2014).

More generally, there are also frequent cultural differences between communities, companies, and authorities in terms of perceptions and practices. Such differences affect both the ways in which mining and its social consequences are understood at the various stages of a project, including through culturally specific "conceptions of change, wealth, and resources" (Filer and Macintyre, 2006: 215), and the ways of 'doing things'. As Farrell et al. (2012: 194) note in the case of the Mogalakwena platinum mine in South Africa there is a greater risk of conflict when companies adhere to and emphasize "the technical and logistical facets of due diligence [notably on human rights], without sufficient attention to the relational, communicative and emergent aspects." Thus, these scholars recommend company management "become more conscious of this cultural dimension of effective social management, particularly when interacting with communities whose cultures are markedly different from those of business corporations".

2.2 Contextual factors

2.2.1 Ill-designed or poorly implemented mineral development strategies

Saad-Filho & Weeks (2013) reject the notion that mineral wealth tends to have systematic deleterious effects on the institutions of mineral-rich developing countries, as some of the resource-curse literature suggests (Busse and Groning, 2013; Kennedy and Tiede, 2013). Instead, they argue that curse-like symptoms are attributable to ill-designed or poorly implemented resource-based development strategies, including the inability "to build distributive economic policy alternatives" (Saad-Filho and Weeks, 2013: 13). In a report for the ICMM examining four cases - Chile, Ghana, Peru, Tanzania - McPhail (2008) found host-governments have a critical role to play in governing extraction-led development. National level policies designed to enhance the fairness of the tax regime; promote fair and adequate revenue allocation to resource producing areas; and clearly define land use and property rights could have social conflict reducing effects. Overall, scholars generally agree that government policies are a critical intervening factor in the relationship between mineral resources and socio-economic and political outcomes. In this regard, their ability to manage liberalized resource sectors is an important contextual factor that can shift the socio-political terrain towards, or away from community-level conflict. Moreover, since the early 2000s several countries have attempted to ensure that resource extraction better promotes local level development through the implementation of fiscal decentralization schemes (Arellano-

Yanguas, 2011). Neoliberalism and decentralization have thus raised the stakes of extraction-led development. In the Philippines, decentralization efforts increased conflicts as various groups in Mindanao sought to "influence trajectories of institutional change, and the associated distribution of mineral wealth" (Verbrugge et al., 2015: 449). Crucially, as discussed below, host governments must complement revenue decentralization schemes with multilateral partnership efforts to enhance the capacities of regional and local authorities to manage and invest rents (McPhail, 2008).

2.2.2 Weak government capacity

Weak institutional capacity, including in the presence of sound policies, can increase the likelihood of conflict, notably through its relationship with corruption and the unwillingness or inability of authorities to realize development outcomes. Tensions are particularly likely where decentralization has resulted in a mismatch between the capacities and responsibilities of local authorities (Arellano-Yanguas, 2011; Pattenden et al., 2011), and where little accountability exists with regard to corrupt practices on the part of authorities. Distrust in public authorities is often prevalent as a result of previous neglect, corruption, and human rights abuses, and can easily combine with grievances towards companies which are seen as associated with (or even replacing) the state, and not sharing the benefits of extraction (Gibbs and Nash, 2014). One of the main negative relationships between mineral wealth and governance relates to a lack of transparency in the appropriation and use of state revenue (Bebbington, 2007; Collier, 2010). Mineral rents can lead to rent seeking behavior through bribes and patronage, and corrode the quality of government (Auty, 2008; Leite and Weidmann, 2002; Torvik, 2002). This can further diminish the often limited trust communities have in national and regional governments (Le Billon, 2014; O'Higgins, 2006; Rothstein, 2011). Using data covering the 2004-2011 period, Bland & Chirinos (2014) found weak institutional capacity increased the likelihood of social conflict in Peru's revenue-flush mining regions. In these areas, subnational authorities did not have the experience, personnel, and administrative systems to manage rents adequately, giving rise to wasted revenues, inadequate service provision and corruption (see also Ponce and McClintock, 2014). Hinojosa's (2011) comparative study of Peru and Bolivia echoes these findings, concluding that socio-economic development in mining regions have had limited success in part due to the lack of technical expertise of subnational bureaucracies. The impact of weak government capacity, including for enforcement in the areas of health and safety, environment and labour have also been recognized (see Warhust, 1999; Honkonen, 2013), though not specifically and systematically in terms of conflict likelihood or escalation.

2.2.3 Legacies of state repression and contentious politics

The legacies of civil wars and repressive authoritarianism can undermine the trust placed in government by local population and thereby increase the risk of social conflicts, especially in contexts where contentious politics combines with ineffective institutionalized conflict resolution mechanisms, such as an independent and accessible judicial system. In some resource-rich developing countries, the strategic importance of extractive sector projects has been accompanied by a growing intolerance towards social resistance, resulting in the increasing use of repressive measures and the criminalization of protest (Global Witness, 2014). In others, improved respect for human rights and less repressive policing have facilitated the growth of social movements openly contesting extractive projects when less oppositional tactics fail to yield results (on contentious politics, see Tilly and Tarrow, 2015; Machado et al., 2011). In turn, a combination of greater civil liberties but weak governance institutions can increase the number and the violent character of protests and policing, resulting in frequent occurrences of fatalities and temporary states of emergency. Reactive and coercive responses have often overshadowed preventive and deliberative policy responses by governments, with NGOs and some community members expressing great concern (particularly in Latin America, see OCMAL, 2015; GRUFIDES, 2013; but also in Africa, see CNRG 2015). Although appearing transversally in the academic literature and recent legal precedents, this reaction by governments has yet to be examined in detail (Bebbington, 2011; Walter and Urkidi, forthcoming; Martinez Alier et al., 2014; Özen and Özen, 2009; Ward, 2011). The industry has a crucial role to play in this regard, as mine installations and property are often protected by state and private security forces, including through surveillance (Ferguson, 2006; Bebbington, 2007; Kamphuis, 2011;

Campbell, 2006). Adherence to international and generally multi-stakeholder initiatives, more specifically the Voluntary Principles on Security and Human Rights, and the UN Guiding Principles on Business and Human Rights can help address some of the concerns associated with the coercive tendencies of particular host governments and the challenging security context in which companies operate (Guaqueta, 2013; Slack, 2012). As demonstrated in the case of the Kilwa/Dikulushi mine in the Democratic Republic of the Congo, implementing such principles can prove very challenging (not only for the company, but for investors too), especially in areas affected by armed conflicts (CAO, 2005). As further discussed below, and while governments must be held accountable for repressive tactics, it is important to note that in the absence of formal deliberative institutions, local communities may also have a strategic interest in utilizing conflict escalation as a bargaining tool. Given the asset fixity, large sunk costs, and reputational concerns of extractive sector projects, communities can strategically and credibly utilize conflict escalations to force dialogue (Anguelovski, 2011; Trebeck, 2007).

2.2.4 Poverty and marginalization

The published literature reveals mixed reviews on the impact of the extractive industries on poverty (Gamu et al., 2015). Whilst companies, states and international development agencies point to growth, fiscal transfers, job creation and forward and backward economic linkages as positive arguments for poverty alleviation (ICMM, 2006, 2013; Kumar, 2007; Pedro, 2006), the majority of academic studies challenge this optimistic narrative (Pegg, 2006; Ross, 2012; Gamu et al. 2015), with studies notably demonstrating economic underperformance, increasing inequality, employment volatility (Deaton and Niman, 2012), limited linkages (Bunker, 1985; Ferguson, 2005), as well as governance challenges (Ross, 2007). Some studies suggest that despite high social and environmental impacts artisanal mining can in *some areas* have much more forward and backward linkages with local economies and higher job creation, and would generally have more potential for poverty reduction than industrial mining (Gamu et al. 2015; Maconachie and Hilson, 2011). Accordingly, it is important to consider the roles of poverty and socio-political marginalization in conflict around projects, as well as the ways through which 'grassroots resistance' can emerge and challenge extractive interests (Horowitz, 2012).

Poverty can have mixed effects on conflict. It may be unlikely to lead to conflict outbreaks as the chronically poor often lack time and resources to mount collective action, or may not want to bear the risks entailed (Bebbington, 2007; Conde and Kallis, 2012; Cleaver, 2005). However, poverty may also reduce the opportunity cost of participating in conflicts (i.e. 'nothing to lose'), and may contribute to a sense of relative deprivation among local populations as their poverty is contrasted with perceptions of resource wealth and uneven distribution of risks and benefits. While extractive projects can provide direct and indirect economic opportunities, including jobs, for local community members, the effects of high levels of poverty on education levels and skills can reduce the employability of local residents by companies. Poverty can also increase the presence of small-scale artisanal miners or oil bunkerers seeking to operate within mining and oil concessions, thereby increasing tensions between local populations, companies and the state (Maconachie and Hilson, 2011). There is also anecdotal evidence of competition over jobs and access to mining sites, as well as conflicts over compensation between and within local community (including returning family members attracted by the hope of benefits) and 'outsiders' (including communities just outside the 'impacted area', or people in search of jobs), as documented in the case of Peru and Sierra Leone (Akiwumi, 2014; Maconachie, 2012). In their study of Latin America, Haslam & Tanimoune (2016) have found that local-level poverty increases the likelihood of conflict via the distributional demands that emerge.

2.2.5 National and host-community demands for a greater share of benefits

States and citizens in the global South have struggled for decades with extractive companies over the distribution of rents and other economic and social opportunities produced by extractive sectors. Demands by societies and their governments for a fairer share of mining revenues, or greater control over national resources, can be a key national-level driver of local conflict and tension, especially in relation to oil and gas industries, as seen in Bolivia (Perrault and Valdivia, 2010), but also with mining as in the case of iron ore in Brazil and Uruguay (Kohl, 2006; Perrault et al., 2011; Bridge, 2013; Gibbs and Nash, 2014). Historically, high energy and commodity prices have spurred nationalizations. Oil producing countries

such as Russia, Venezuela, Bolivia, Ecuador, Nigeria, and Kazakhstan have been re-negotiating arrangements with oil companies, seeking to maximize their share of high oil prices until recently (Stanislaw, 2009). Guinea, Liberia, and Sierra Leone have also renegotiated mining contracts, increasing mineral royalties and corporate taxes, while the government of DRC reviewed 61 local mining contracts, with several cancelled or renegotiated. In Ecuador, Amazonian indigenous peoples as well as national petroleum workers and union members strongly opposed FDI into the oil sector, arguing in favor of more state control (Perreault and Valdivia, 2010). In Bolivia, the favorable conditions for businesses promoted by the IMF during the late 1990s pushed indigenous and union-led social movements to challenge the country's 'neoliberal' trajectory and move towards resource nationalization, which in turn resulted in tensions with some of the traditional elites (Kaup, 2010; Kohl and Farthing, 2012).

2.2.6 Polarization and politicization of tensions

Conflicts related to extractive sectors do not take place in a 'vacuum', but often build from and feed into broader political conflicts. Political opposition forces, for example, can use tensions over projects to bolster their relative position and legitimacy (Macintyre and Foale, 2004). While polarization may strengthen coalitions, it may also prevent constructive engagement between the various sides involved in conflict (Bebbington et al., 2008b). A study of 3,731 subnational social conflict events in Bolivia between 2000 and 2011 suggest that "high-value natural resources [oil, gas and mineral ores] can act as an important catalyst for the politicization of ethnic, specifically indigenous identity, and contribute to social conflict as they limit the malleability of [social group identification] and raise the stakes of confrontations" - in other words, (self) identification as 'indigenous' seems to limit the range of possible negotiated outcomes and increase the risk of social conflict (Mahler and Pierskalla, 2015). Such 'built-in' effect can also occur more broadly with regard to political and economic legacies including the historical neglect of particular regions or ethnic groups by the central government, which in turn can increase grievances and distrust as well as provide ground for claims of greater compensation and control over resource sectors (Le Billon, 2013).

The politicization of tensions associated with extractive sectors can also reduce the chance of bringing about a transformation of economic processes, as emphasis is placed on political rather than economic transformations, and because of a reduced scope for wider alliances with major economic actors. Examining the effects of politicization on social conflicts across Peru's twenty-five regions, Arce (2014) found higher levels of resource revenues to be a good predictor of mining-related social conflict only within the context of the post-2002 political decentralization process, which has increased the number of parties/political entrepreneurs competing for sub-national office. Moreover, Arce (2014) finds a closer relationship between protests and local political conditions, than with resource revenues. Because local parties are often headed by "amateur" politicians with weak ties to national parties, their behavior is difficult to control. As a result, conflict likelihood increases as entrepreneurs adopt confrontational or populist methods to enhance their position vis-a-vis competitors.

2.3 Proximate or triggering factors

2.3.1 Characteristics and perceptions of mining projects

The specific resources being mined and the geographic location of deposits may increase conflict likelihood (without triggering outbreaks) given their relationship to the types of firms involved, and the nature and scale of the socio-environmental impacts. Commodity-types influence not only extraction and processing techniques, but also the size and experience of the firms exploiting deposits. For instance, low-grade deposits or complex mineral processing might require special techniques that only larger firms with more organizational/financial resources can tackle. Accordingly, this may be a useful proxy indicator of the resources/investment firms will make in community relations and conflict management.

First, the geological and geographic location of deposits may predispose conflict if the location has high cultural and/or environmental sensitivity, by influencing the type of mining operation developed and the accompanying livelihood impacts. Haslam & Tanimoune (2016) have shown open-pit mining to have the highest social conflict likelihood (versus underground or surface operations) due to its transformation of landscapes and adverse effects on underground and surface hydrogeology, especially at

altitudes where communities confront an already redistricted livelihood portfolio. Second, Haslam & Tanimoune (2016) demonstrate a non-monotonic relationship (inverted U-shape curve) between firm size and conflict likelihood. While junior firms have no significant correlation to social-conflict, mid-tier and major firms do, with mid-tier companies being associated with a greater risk of conflict, but not majors. Additionally, commodity type determines the processing techniques involved (e.g. flotation, lixiviation, bioprocessing), the reagents used, and as a consequence, the *real* or *perceived* impacts on local communities. For example, gold mining is thought by some to increase the likelihood of social conflict given the usage of mercury in ASM, and cyanide. Research, however, has generated mixed conclusions on the effects of deposit type. While Bond & Kirsch (2015) suggest gold and copper mining to be related to more *violent* conflicts, Haslam & Tanimoune (2016) only find silver to be significantly correlated with conflicts. Third, the stage of the mining operation is another crucial factor influencing how conflict evolves, and notably when communities decide to take action. Before the mine is in operation, communities are more likely to confront and oppose the project, with a risk of violence as security forces are deployed to 'clear land'; but if the mining project has been approved, developed, or has been operating for a long time, the community is more likely to focus on compensation, jobs, environmental impact reduction, or land rehabilitation (Franks et al., 2014; Bebbington, 2012). The construction phase is a particularly sensitive phase, with greater job opportunities not always matching very high expectations on the part of populations, with impacts becoming visible, while compensation may be delayed or people disappointed by the new arrangements (e.g. new housing), and with job and economic losses at the end of construction frequently resulting in rising grievances. Furthermore, incentives and time-pressure for mine construction companies to complete infrastructure projects can undermine the adoption of conflict prevention best practices. While the diversity of conflict causes, types and likelihoods is recognized for different stages of project development, the literature does not yet seem to include a systematic empirical comparison drawing from a large number of cases.

2.3.2 Land rights and impacts on environment and local livelihoods

As the extractive frontier expands into impoverished rural areas, conflict likelihood increases as communities react against the real or perceived degradation of life and livelihood sustaining environmental resources such as land and water (Redclift, 1987; Guha and Martinez-Alier, 1997; Alvarez et al., 1998; Goodhand, 2001; Bebbington, 2007; Bebbington and Williams, 2008). The more direct, visible and immediate the impacts on health or livelihoods are, the more likely mobilization becomes, especially given the lack of options faced by the poor to avoid or address these impacts (Conde and Kallis, 2012). Land rights and riparian water rights, in particular, constitute major factors of conflicts, especially when extractive projects affect indigenous communities already struggling for recognition of their traditional territories. Conflicts often result from the legacies of colonial legislation dispossessing local communities and allocating subterranean resource rights to the state and corporations, and associated controversies over the validity of customary rights entitling local communities to mine or lease their land for mining (Lange, 2008; Umejese, 2012). More generally, inadequate recognition of traditional land uses and compensation for the loss of resource access rights constitute major grievances within communities (Hilson, 2002; Boone, 2015). Environmental and social impacts are inevitable consequences of mining activities, and often affect the livelihoods of local agrarian communities who react to protect themselves. Local livelihoods may be adversely impacted by changes in the quality and quantity of water, industry encroachment on grazing areas, and the erosion of traditional cultural practices and social relations as a result of displacement, in-migration (Bebbington et al., 2010; Bury, 2007).

The environmental burdens of extractive activities are often a proximate cause of conflicts that can transform grievances over livelihood impacts into larger, violent conflicts (Franks et al., 2014; Klare, 2001; Switzer, 2001). While the oppressive and conflict-inducing effects of environmental protection and conservation on local communities are well-documented, especially for biodiversity conservation, forestry, and ecotourism, they have received less attention for the extractive industries (Duffy, 2016). Water is often at the center (Boelens et al., 2010). In Peru, for instance, mining concessions are frequently located in high altitude headwater regions, with water impacts extending well beyond fence-line communities (Bebbington and Williams, 2008). In Bolivia, Perreault (2013) has shown that mining enclosures have driven conflict through the dispossession of land (in a frequent context of unclear and

disputed land tenure system), the accumulation of toxic waste, and water pollution. Haslam & Tanimoune (2016) found that conflicts in Latin America were most likely to emerge around open-pit mining projects located at medium-level altitudes owing to the larger environmental impacts these projects had on communities already confronting restricted livelihood portfolios.

Summing-up findings from the extensive literature on mining-related social conflicts in the Andean region, Arellano Yanguas (2010: 81) concludes that communities are more concerned about uncertainties over resource assets such as land and water key to their sustainable livelihoods, than environmental damage *per se*. Moreover, different community members interpret this uncertainty according to their relative position with regard to the risk of traditional livelihoods unsustainability versus possible opportunities for new types of livelihoods relating to extractive operations and associated revenues (Gamau et al., 2015). In this regard, an open conflict - such as in the form of blockades - can sometimes help communities gain leverage over companies and authorities, either to protect traditional livelihoods or to enhance alternative ones (e.g. through more local employment, higher compensation, or a greater share of royalty revenues; Arellano Yanguas, 2011), while conflicts resolved through strong and constructive government engagement, such as a Supreme Court ruling, can help bring about accommodation or an end to a conflict between project proponents and communities.

2.3.3 Lack of participation or representation of local communities

Conflict likelihood increases when affected communities are prevented from participating in resource governance (Ali and Grewal, 2006; Ballard and Banks, 2003; Horowitz, 2002). Jaskoski (2014: 873) observed in Peru that "very limited spaces for community participation in the environmental impact assessment process ... prompted and transformed popular mobilization in extractive zones, leading to outside scrutiny and the stalling of major projects". Although public consultations are legally required in Bolivia, Perreault (2015: 433) observes that they are tightly managed and non-binding, and suggests that they mostly attempt to "legitimize extractive activities". The presence of formal, if often lengthy mechanisms for deliberation between local stakeholders and companies - such as dialogue tables and grievance protocols- should help reduce the likelihood and intensity of conflict; and various studies have demonstrated the importance of local governance mechanisms (Flor, 2014; Viscidi and Fargo, 2015). Exclusion from these formal mechanisms can itself become the object of conflicts escalating into protests. Still, anecdotal evidence suggests that protests and dialogue can coincide and relate to each other. For example, analyses of social conflict at the Tintaya mine in Peru have found communities utilized protest and confrontation to initiate and transform dialogue mechanisms (Caceres and Rojas, 2013; Anguelovski, 2011; De Echave, 2009; Barton, 2005). Bebbington et al. (2008) show in their analysis of rural and urban protests against the Yanacocha mine in Peru that the objective of conflict has not been to shut down the mine *per se*, but to obtain fair compensation for lost land, increased share of benefits, and crucially, greater participation in the governance structures.

Participation at various project stages is a function of corporate activity (i.e., company policies/practices) and the formal rules (i.e., regulatory regime) governing extraction, with many nuances in levels of information, consultation and effective participation in decision-making. Using a comparative analysis of three mining conflicts in Peru (Conga, Tia Maria, Quellaveco), Jaskoski (2014) shows that the extent to which EIAs facilitate the formal and procedurally fair participation of stakeholder communities at the initial project stages, represent a critical juncture that determines whether or not conflicts morph into anti-mining movements calling for the outright rejection of a project. Much attention has also been given in Peru to 'Dialogue Tables', a mechanism created by law to foster citizen participation or consultation, which can allow for more peaceful and collaborative relations between local population representatives, mining companies and state entities. However, at times they have been resisted by some community members, with Anguelovski (2011: 384) suggesting that an "iterative relationship between dialogue and resistance can improve intercultural relations and mitigate power differentials".

Two broad approaches are often considered. First is the principle of Free, Prior and Informed Consent by local communities (Escobar, 2001; Muradian et al., 2003; Urkidi, 2011). For example, Avci et al. (2010) found that conflict over gold mining in Mount Ida, Turkey was rooted not in the compensatory schemes offered by the company, but in the threat the project posed to local livelihoods and human health, and a demand by some community members to create and exercise a right of refusal for the

project. In Guatemala, communities struggling with the Marlin mine linked local environmental concerns to the defense of their Mayan traditions and culture demanding “legal participation rights and the democratization of decision-making processes” (Urkidi, 2011). *Consultas* - public referendums or plebiscite generally conducted at the local level by community members themselves - are increasingly used by communities in several Latin America countries. Following the 2002 *consulta* at Tambogrande, Peru (Haarstad and Fløysand, 2007; Muradian et al., 2003), as many as 68 *consultas* have since been carried out in five different countries, with all projects being rejected by the communities (Walter and Urkidi, 2015; see also De Echave et al., 2009; Walter and Martinez Alier, 2010; Urkidi, 2011). Free, Prior and Informed Consent and participative processes organized by the state or mining companies can also determine or canalize communities’ responses to conflicts at an early stage (Szablowski, 2010). Second, Exploration Agreements and 'Impact Benefit Agreements' (IBAs) directly negotiated between companies and communities - either before or after governmental granting of mine development permits - are now the accepted way of engaging Aboriginal communities in Canada and Australia; and though they may not be required by law, regulatory bodies may consider them a *de facto* requirement. Though often beneficial to communities, power imbalances between communities and mining companies often need to be addressed prior to IBAs if real changes for communities are to occur (O’Faircheallaigh, 2008; Peterson St-Laurent and Le Billon, 2015).

2.3.4 Poor company practices

While some communities may oppose mining *per se*, many conflicts arise from poorly implemented company practices, including on health and safety, hiring, reimbursement of local contractors, and community engagement (Zandvliet and Anderson, 2009; McClearn, 2015). Major mining projects can suffer significant financial losses from conflicts (Franks et al., 2014), thus providing a strong business case to address social and environmental risks. Besides reputational harm and delays in construction, financial risks from conflicts include delays or extra-conditions for borrowing, declines in share prices, as well as the withdrawal of permits, imposition of penalties, or the tightening of requirements by host governments (World Resources Institute, 2007). Much of the attention on company behaviour has focused on concepts and practices of Corporate Social Responsibility (CSR) - defined as the sense of responsibility and associated initiatives towards communities and environments in which a company operates. Partly a reflection of the demands from ethically-driven investors and growing awareness of the impacts of antagonistic relations with local communities (ICMM, 2013; Dashwood, 2012), CSR activities have been often given greater importance in contexts where the absence of public services and/or weakness of state institutions has in part relocated *de facto* expectations and responsibilities onto companies frequently identified as state-like (and state-approved) actors by communities. As a result, many companies have radically changed their community engagement practices over the past fifteen years, notably by shifting from little or no information channels to highly developed communication and development strategies encapsulated under the CSR umbrella (Ali and O’Faircheallaigh, 2005; Himley, 2013; Jenkins, 2004; O’Faircheallaigh et al., 2008; Yakovleva, 2005). The broad range of CSR policies and programs include the use of cleaner technologies, improved communication strategies at different levels, as well as better distribution and allocation of benefits to local communities - in part with the aim of preventing costly opposition and minimizing conflicts, and with at times broader goals of building long-term trust and winning community support for their projects (Himley, 2010; Moffat and Zhang, 2014; O’Faircheallaigh and Ali, 2008; Zandvliet and Anderson, 2009). The two main critiques to these programs include their voluntary and non-enforceable nature (Fulmer et al., 2008; Watts, 2005), and poor implementation (Szablowski, 2002).

Companies generally carry out CSR programs at the local level to obtain and maintain a 'social license to operate' (Commdev, 2008; Costanza, 2016). CSR programs may confer material goods and opportunities in support of sustainable development, yet they may also cause or aggravate conflicts by rising expectations, heightening distributional asymmetries between or within stakeholder communities, acting as subtle mechanisms of control, or be implemented in a flawed manner causing unforeseen consequences. Based on research in Peru, Li (2010) suggests that companies have used CSR programs as a strategy to defuse local opposition. In a detailed study CSR practices in Argentina, Mutti et al. (2012) identify widespread disappointment among local community members and civil society organizations

who frequently emphasize that CSR does not respond to their major concerns, and is mostly used in a reactive manner. Comparing diverging community support for two projects run by the same gold mining company in Guatemala, Dougherty & Olsen (2014) stress the importance of the projects' socio-material contexts and impacts (e.g. geology, hydrology, and land tenure), suggesting that such factors are crucial to the success of CSR activities -which should address the specific contexts in which they are deployed, rather than usual 'blue-prints' development projects. The perspectives and concerns of local stakeholders are crucial for assessing the efficacy of CSR to prevent and mitigate conflict (McKenna, 2015). Detailed ethnographies of company engagement into CSR have demonstrated the importance of specific corporate cultures, as well as the individual motivations and particular working styles of corporate managers and their relations with CSR teams and local communities (Dashwood, 2012; Welker, 2014). While some company representatives recognize the importance of good CSR practice and generally have a favorable impression of their effects on conflict management, maximizing CSR's conflict management potential - including through integrated social performance and social investments - requires a refined assessment of the perspectives of local communities (Rees, 2009; Rees et al., 2012). There remains a concern, however, that companies have only integrated short-term fixes to conflict avoidance – some of which may be aggravating factors for future conflicts – rather than long-term solutions towards conflict prevention and transformation (Bond, 2014).

In this regard, several studies of CSR programs for mining projects in Guatemala (Dougherty and Olsen, 2014), Ecuador (Warnaars, 2012), Ghana (Hilson and Yakovleva, 2007) and Kenya (Abuya, 2016) suggest that programs are often poorly designed; increase, rather than alleviate communities' hardship; and can trigger conflicts when CSR projects are delayed or not implemented. Gilberthorpe & Banks (2012) show how CSR weaknesses stem from the companies' emphasis on meeting global 'performance standards' instead of aligning their programs to the needs of each social context. The issue of participation of local communities is another common critique; unlike the state, companies differentiate between recipients of benefits, prioritizing those closer to their project or local elites, ignoring some communities that might also be impacted causing on some occasions inter and intra-community conflicts (Jenkins and Yakovleva, 2006; Newell, 2005; Warnaars, 2012). Moreover, Jenkins (2004) showed through the analysis of company reports, that the community was envisaged in relation to the company (not as an external complex reality) and that the company's actions are determined by external constraints such as conflict, with no attempts to understand the communities' nature and needs. The context in which these programs are developed is also of crucial importance; weak governance (Yakovleva, 2005) or post-confrontational events where the company has already lost its legitimacy do not provide good grounds for CSR programs (Warnaars, 2012). With the ever increasing exchange of information across networks and alliances, communities are already questioning the merits of the extractive 'development' model and CSR programs brought by the mining companies (Bebbington et al., 2008a). In response to these criticisms the United Nations, World Bank and industry advisory bodies like the ICMM as well as other think tanks and researchers have been working on ways to improve community-company relations; developing guidelines and providing advice to both mining companies and communities in order to reach agreements and avoid conflict (see below).

Corporate security practices are also important. While companies have a fiduciary duty to protect the assets of their shareholders, they also have a legal and moral responsibility to ensure that this protection does not violate human rights. Security forces are often perceived to have a major role in the escalation of conflicts and poor outcomes for local communities (Kamphuis, 2011). The security of mining projects is frequently performed through the use of public and/or private security to guard mine installations, protect company employees and supply companies (Ferguson, 2006; Bebbington, 2007). Often hosted and supported by companies, these public forces are often perceived by local communities as allied with, and responding to the concerns of companies, rather than protecting the public interest. Private security can occur with state support that provides and willingly delegates its own security forces (on and off-duty) (Campbell, 2006), while some corporate security strategies have "consciously enlist[ed] local elites as the first line of defence" against environmental activists (on the case of Batu Hijau mine in Indonesia, see Welker, 2009, 2014). Despite efforts to improve the conduct of security forces, such as through the Voluntary Principles on Security and Human Rights (Coumans, 2010; Pitts, 2011), grave human rights abuses continue to occur in association with the extractives industry, including the killings

of environmental defenders (Global Witness, 2014).

2.3.5 Asymmetry in the distribution of economic and social benefits

Franks et al. (2014) have identified distribution of benefits issues as a crucial predisposing factor of community-level conflict. For producing areas, extractive sector projects entail jobs, social investments, and rents. However, these material goods are often concentrated in fence-line communities and producing jurisdictions, and can stoke grievances both within and between communities. Furthermore, social differentiation is often exacerbated or reworked through uneven access to benefits within communities themselves, for example through compensation, employment, or CSR beneficence (van de Standt, 2009). Moreover, high company profits can generate incentives for communities “to claim the fulfillment of promises” as well as compensation for lost assets and livelihoods as in the case of Papua New Guinea (Kirsch, 2007) and New Caledonia (Ali and Grewal, 2006). The alarming increase in social conflict in Peru following the global minerals boom has been driven not by an outright rejection of extractive projects *per se*, but mostly by stakeholder desires to access a greater share of the unprecedented profits, and by tensions between producing jurisdictions seeking access to resource rents (Arellano-Yanguas, 2011).

2.3.6 Distrust and breakdown of constructive relations between parties

Distrust in mining companies and governments can also increase the likelihood of confrontation (Muradian et al., 2003). Trust is a socially constructed outcome of the iterative interactions stakeholders have with companies and government authorities. Based on a longitudinal study of trust between local communities and mining companies in a mining region of Australia, Moffat and Zhang (2014: 61) argue that "community members' perceived contact quality and procedural fairness" significantly contribute to (re)building such trust, even following major environmental impacts. Perceptions of projects' socio-environmental impacts are also an important determinant of the degree of trust communities have in companies (De Echave et al., 2009; Li, 2015; Zavaleta, 2013); with community perceptions and distinct expectations, (dis)trust, and grievances, varying over time as the project is proposed, developed, operated, and closed (Lawson and Bentil, 2014). A study of mining-related conflicts in Zimbabwe points out that community distrust and antagonism towards companies and government authorities are frequently the result of "a crisis of expectation emanating from the promises given by government when introducing a mining project to a community", as well as connections in the form of equity sharing and other forms of partnerships between mining companies and senior government officials, including officers from the security - the latter being seen as one of the causes of harsh repression against dissenting communities and a "culture of fear" (CNRG 2015: 28). While the effects of trust on community-level conflicts are difficult to study systematically, several case studies have provided anecdotal evidence of its role. Studying the decisions of Kanak villagers in New Caledonia, Horowitz (2010) argues that trust was not determined by the scientific validity of the information provided by the company, but by the affiliation of villagers to either the company or the protest group mobilizing against it. In Peru, scholars suggest that resistance to Minera Yanacocha's Quilish, Conga and Tia Maria operations were influenced, in part, by widespread distrust in the company stemming from decades of strained relations (Tanaka and Melendez, 2009; De Echave & Diez, 2013).

2.3.7 Supporters mobilization and tensions within communities

Extra-local alliances between communities and NGOs, as well as the broader political economy network related to extractive projects, manifest at the regional, national and international levels and contribute to the emergence, escalation and geographical expansion of conflicts (Conde and Kallis, 2012; Holden and Jacobson, 2009; Bebbington et al., 2008a). Communities can learn about, mobilize more easily, and communicate more effectively as a result of the availability of internet and social media, with the diffusion of information across national and transnational networks helping communities to identify potential mining impacts, decide on the most effective modes of resistance, raise funds, and mobilize supporters often before operations start (Walter and Urkidi, 2015; Özen and Özen, 2011; Svampa et al., 2009; Bebbington, et al. 2008a; Conell and Cohn, 1995). Communities that do not have extra-local contacts may be less likely to amplify movements of resistance to extractive projects. Alliances also allow

for conflicts to “jump” scales. Through connections with international NGOs, lawyers, scientists, and other communities, affected communities may realize that their struggle is not simply a local problem, but the result of broader issues, such as regional and national regulatory frameworks (Urkidi and Walter, 2011), or a weak position within the global free market (Martinez Alier, 2003; Watts, 2005). Extra-local alliances also affect the strategic framing of conflicts. For example, Haarstad & Fløysand (2007) demonstrate that opposition to the Tambogrande project in Peru’s northern Piura region utilized a local identity frame rooted in the defense of land, a national frame defending Peru’s iconic national dish, ceviche, and a global frame of human rights and democracy. In Chile, activists transformed the Pascua Lama conflict by connecting the project to the broader issues of climate change (including the preservation of glaciers and glacial melt waters), democracy, and access to information (Urkidi, 2010). It is important to highlight that responses to mining projects (or extractive projects in general) are rarely homogenous. Divisions within communities, and their broader networks, are common due to different visions of development, different values, vulnerabilities (e.g. with some community members relying on their land and resources more than others) or some community members obtaining more benefits from the mines than others through jobs or development projects (Horowitz, 2002, 2012; Bebbington et al., 2008a).

3. Mechanisms for conflict prevention and resolution

Adherence to 'good practices' in terms of exploration, mine development, production and closure can decrease the likelihood or severity of conflict. Several reports provide the extractive industry with guidance on conflict prevention and transformation.¹¹ These reports share several recommendations, including:

- Conduct social, environmental and political due diligence and risk analyses prior to going on-site;
- Regularly conduct thorough and multi-level conflict analyses;
- Engage local communities and stakeholders, and promote their active participation in decision-making, including over land-use planning;
- Ensure the enforcement of more stringent environmental regulations, and mitigate negative social and environmental impacts;
- Prevent complicity in abuses by security services, government officials and subcontractors through policies and monitoring;
- Ensure that benefits, including revenue transfers, reduce poverty and promote greater equity;
- Manage revenues in a transparent and accountable way;
- Strengthen legal frameworks and institutional capacity;
- Follow an approach to extractives governance by incorporating a focus on human rights, social inclusion and conflict prevention;
- Promote constructive engagements between the various stakeholders, and address grievances and disputes in a pro-active way.

Most of the guidelines, toolkits and reports are aimed at extractive sector companies, and to a lesser extent governments, rather than to local communities (but see, Collins and Fleischman, 2013; UNPFII, 2008; Oxfam, 2009; NRCAN, 2013). Further guidance for communities - such as PDAC's Mining Information Toolkit and e3 Plus, as well as De Brouckere (2014) and RLI (2105) - would help to achieve much of what company-oriented guides advocate for: community empowerment, broad-based involvement (including women, marginalised groups, etc.), capacity building, community understanding of the project and participation in decision making processes. If communities are well-informed and given the option of refusing or accepting a project, and remain involved in decision-making throughout its lifespan, conflict risks may be reduced. In this respect, three key aspects are identified across the literature: 1) participation in decision-making over projects; 2) negotiation frameworks and agreements over state-company-community relations; and 3) transparency and accountability in revenue management and community-led development.

3.1 Participation

Establishing fair and transparent dialogues and negotiation processes early on is widely recognised as the

path to lasting agreements with communities (Banks, 2013; Caballero-Anthony, 2013; Helwege, 2015; Sawyer and Gomez, 2008; UNPFII, 2008). As noted above, the industry has increasingly adopted CSR and participatory processes to address community grievances and reach agreements (Baker and McLelland, 2003; O’Faircheallaigh and Corbett, 2005; Perreault, 2008 O’Faircheallaigh, 2013; Kemp and Owen, 2013). As summed-up by Franks (2009), "[b]y opening meaningful dialogue, understanding the community’s past and desired futures, addressing real and perceived community concerns, and negotiating a space for development within that vision, resource companies may be better placed to avoid conflict with community and the costs that conflict brings". Wachenfeld et al. (2014: 33) stress in particular the importance of "reaching out to socially excluded groups to engage them in decision-making that will affect them will help in identifying impacts unique to the group or impacts that may fall disproportionately on the most vulnerable, while at the same time signally important messages about social inclusiveness". Consultation processes, however, have also often been limited to environmental, human rights or health and safety issues, negating resource control issues or the rights of communities to decide their own development path, externally driven rather than owned by communities themselves, used at the onset rather than throughout the life of a project, while still representing a challenge for some communities to defend or articulate their perspectives and demands (ELLA, 2012; Laplante and Spears 2008; Lockie et al., 2008; UNPFII, 2008; Flemmer and Schilling-Vacaflor, 2015). Effective participation thus requires strong principles, practices, adherence to established methodologies and benchmarking to international practices (see e.g., Arbelaez-Ruiz, 2015). Reaching agreement with impacted communities over compensation and support, as well as between large-scale and small-scale miners is especially important when local livelihoods are at stake (Hilson, 2002).

3.1.1 - Participatory principles

A major principle of community participation advocated by some is the concept of ‘Free, Prior and Informed Consent’ (FPIC), which is stated in international law for Indigenous Peoples through the aspirational, non-binding declaration of the UN General Assembly, and the ILO 169 treaty which has so far been ratified by 22 countries. According to FPIC principles, community consent to a project must be entirely voluntary, obtained before legal permission is granted, enable affected communities to know as much about their rights and the proposed project as the proponents, so both can negotiate with equal information (ELI 2004; Goodland, 2004; Prno and Slocombe, 2012; for an implementation guide, see Hill et al., 2010). FPIC has often been resisted by governments and companies, and faces challenges even when legislated, though many large mining companies have now committed to FPIC (Oxfam America, 2013, 2015). International financial institutions have generally favoured a diluted version known as “free, prior and informed consultation” leading to “broad community support” (WB, 2005; IFC, 2006). Part of the industry has recognized the importance of a ‘social licence to operate’ (SLO) through which companies secure broad acceptance from impacted communities (Prno and Slocombe, 2012), and have suggested that embedding FPIC principles "within broader indigenous peoples or community engagement" could be in the long-term interest of companies (Lehr and Smith, 2010: 8). The Inter-American Court on Human Rights has established a jurisprudence requiring the consent of indigenous communities for extractive projects potentially affecting their survival as indigenous peoples (Ward, 2011). Arguing that customary decision-making mechanisms were frequently undermined by intra-community divisions and the exclusion of women and other marginalised groups, the ICMM (2013) has stressed the need for ‘whole community’ processes. In this regard, the rise of community referendums, most notably in Latin American countries and especially Guatemala, is seen by some as a democratic way to implement some of FPIC principles, notably as a mechanism to express local consent, while others point at the use of questionable voting practices (e.g. vote by children) and influence of broader agendas on voting decisions (e.g. self-determination) (McGee, 2009; Comunicaciones Aliadas, 2011; Laplante and Nolin, 2014; Walter and Urkidi, 2015). Reaching ‘definite’ decisions may not be as important as having indigenous peoples’ rights, views and opinions respected, with Owen & Kemp (2014) advocate opening up debate over FPIC beyond its legal applications to include issues such as its compatibility in countries with weak government structures, and the ability of local communities to decide how to weigh the opinions of those who do not participate. One of the main reasons for inadequate participation is bargaining power asymmetries. In Australia and Canada, different land titling legislations give

communities different powers to negotiate (O’Faircheallaigh, 2008). Szablowski (2007) exposed unequal power relations in World Bank consultation processes over involuntary resettlement dominated by expert-led consultations with minimal input from local communities. Smith et al. (2012) uncovered the manipulation of participative processes by the Government of Madagascar that appointed local government officials as representatives of civil society. Such relations not only translate into limited legal rights for communities or biased processes, but can also increase conflict likelihood.

3.1.2 Participatory practices

Stakeholder participation is generally mandated by Environment Impact Assessments, as well as mining legislations (e.g. new Ontario Mining Act). Multi-stakeholder alliances with grassroots organizations, NGOs and churches; processes that are inclusive of marginalized and vulnerable groups; and third party oversight are crucial to empower local communities during participatory processes (Rios et al., 2015; Bamat et al., 2011; UNDPA, 2015; O’Faircheallaigh, 2013; Vieyra and Masson, 2014; Boelens et al., 2010; De Echave et al., 2009; OSSREA, 2006; Schilling-Vacaflor, 2012; Bascopé, 2010). The *Good Practice Guide and Community Development Toolkit* of the ICMM recommends using local languages and allowing communities to reflect and take time when making decisions (ICMM, 2010-3; 2012a), while demonstrating that community inputs affect project design and decision-making (Herbertson et al., 2009). Good participatory practices include baseline studies, social mapping, and cultural heritage assessments and impact assessments (Instituto del Bien Comun, 2008; O’Faircheallaigh and Corbett, 2005; ICMM, 2010-3, 2012a), as well as early dialogue and consensus building platforms.¹² If the creation of new institutions within communities can generate internal conflicts (Padilla et al., 2008), decentralized institutions can help fulfil community-level aspirations for local government participation and help create a 'new governance culture' involving greater democracy, responsibility, transparency and accountability (Knight, 2000). Greater visibility and legitimacy of local actors can be gained through the creation of alliances between them and scientists in order to generate co-produced knowledge, which in turn can increase the aspirations of participation of communities in social and environmental decisions making (Conde, 2014; Velasquez, 2012). Ultimately, trust and high-quality engagement can emerge from these processes. Several studies have demonstrated that community members want to feel heard and have their recommendations taken into account (Rios et al., 2015; Moffat and Zhang, 2014; Zandvliet and Anderson, 2009; Horowitz, 2010; Labda, 2011; Barton, 2005; ICMM, 2009; Commdev, 2008).

3.2 Agreement frameworks

One of the major objectives of participatory processes is to reach agreements between mining companies, communities and the state. Failed agreements over project location and scale, revenue management, environmental impact mitigation, and community compensation and development initiatives can trigger conflict (Rios et al., 2015). Negotiation processes are key to reach such agreements and prevent an escalation of conflicts (Ali, 2003). This requires processes reaching out to local communities and regional authorities, early and long-term investment in community relations by extractive companies, as well as grievance mechanisms and official arbitration mechanisms trusted by local communities (Triscritti, 2013; UNEP, 2015). Agreements with communities over compensation are notably crucial to conflict prevention (Hilson, 2002; Kemp et al., 2011), especially if projects involve resettlement (Carson, 2005; International Alert, 2005), but equitable and fair agreements must also address long-term development goals (ICMM, 2010-3). Negotiations and mediation have also been found to help resolve disputes and bring agreements between artisanal miners and mining companies (Andrew, 2003), as well as between ASM operations and surface landowners (Verbrugge et al., 2015). To reduce the risk of conflict, a compromise of ceding or sub-leasing part of the company’s property can help enable some constructive forms of 'coexistence' between ASM and large-scale mining; especially if the company assist ASM and local communities with technical assistance, including exploration and mining efficiency gains.¹³ Yet, as noted in the case of some water-related conflicts in Peru, while legal and technical agreements can help reduce and delay tensions, agreements need to account for the frequent political dimensions of conflicts associated with large-scale mining (Sosa and Zwartveen, 2016), and seek to achieve a 'sustainable positive peace' - rather than a fragile and imposed end of 'hostilities' - through mutually agreeable terms (see Bond, 2014a,b).

3.2.1 Community Development and Impact Benefit Agreements

Formal agreements such as IBAs and indigenous land-use agreements (ILUAs) are becoming a common feature in the sector, are being advocated by many civil society organizations and international donors such as the World Bank, and generally increase the chance of government approval. Countries like Sierra Leone, South Sudan and Afghanistan - or quasi-autonomous jurisdictions such as Nunavut in Canada - have already made these agreements legal requirements for large extractive projects (Stevens et al., 2013). The ICMM (2010-3) points to different types of agreements based on their financial channel; profit-base, accessing royalties or equity share ownership of the project. Though agreements between companies and communities can help prevent or address conflicts, the confidentiality of negotiations, vague language, and insufficient funding can exacerbate conflicts within communities, undermine intra-community power balance, and exacerbate uncertainty (Sosa and Keenan, 2001; ICMM, 2010-3). The state should remain involved in such 'bilateral' agreements to ensure that the rights of communities are being upheld, and not confine its role to contract enforcer - and thus frequently seen as being on the side of companies (Afful-Koomson et al., 2013; Peterson St-Laurent and Le Billon, 2015). Such agreements should also consider the dilemma of transferring community demands for public services onto extractive companies (CommDev, 2008; Sawyer and Gomez 2008).

3.2.2 Grievance management systems

Companies can more effectively prevent and manage conflict escalation by implementing grievance mechanisms and protocols (see OHCHR 2011, section III Access to Remedy). In his 2010 special report on the operationalization of grievance mechanisms, UN Secretary-General's Special Representative for Business and Human Rights John Ruggie concluded that all mechanisms remained underdeveloped, confirmed the importance of a "corporate responsibility to respect all human rights", and called for greater policy coherence at the domestic and international levels. To be effective, their design and implementation must be culturally appropriate, accessible to all stakeholders, transparent and accountable, predictable and equitable, rights-compatible, based on engagement and dialogue, as well as be able to monitor and review companies' actions to resolve complaints. Specific recommendations include ensuring the anonymity of complainants; facilitating formal avenues for appeals; implementing protocols to transmit complaints to senior management; enabling the participation of third party observers (ICMM 2009a; IFC 2009) (Rochlin, 2015). States should "ensure that they do not erect barriers to prevent legitimate cases from being brought before the courts", and that "the provision of justice is not prevented by corruption", "courts are independent of economic or political pressure", "legitimate and peaceful activities of human rights defenders are not obstructed", and that access to non-judicial and non-state base grievance mechanisms is facilitated (OHCHR, 2011: 28-31). At corporate level, Kolk & Lefant (2010) pointed to a lack of corporate reporting on conflict issues, making it hard to identify cases; Kemp et al. (2011) found there had been negligible attempts to alter power imbalances between companies and communities, and only partial attempts to facilitate dialogue, with collaborative resolutions limited to two out of six cases examined; and advocacy groups suggest that little progress seems to have been made in practice (Hill and Lillywhite, 2015). Studies of corporate-led grievance mechanisms, such as that of Barrick in Papua New Guinea to remedy victims of sexual assaults by company guards (Knuckey and Jenkin 2015: 801), suggest that these can offer "more accessible and convenient remedies", yet should be used sparingly and under strict safeguards as they can reflect major power differentials between victims and companies and act as a substitute to formal or customary legal systems, including criminal processes (see also OHCHR, 2013). Studies on perceptions from within mining companies highlight how community relations staff often struggle to get other departments (e.g. legal, operations and environment) involved in conflict prevention and management, especially those that are the source of the problem (Rees et al., 2012; Kemp and Owen, 2013). These findings renew calls for using formalised procedures, but also organizational cultural change, to involve such departments when mechanisms are trusted and well-timed (CSR, 2009).

3.3 Revenue management, transparency and accountability

Constructive community-company relationships rests in part on effective revenue management (Rios et

al., 2015). International financial institutions have increasingly advocated for the decentralization of revenue management systems in extractive sectors, arguing that local jurisdictions in producing areas best understand their development needs and should have authority to spend fiscal resources accordingly. However, several empirical studies have shown that the decentralization of revenues is inefficient due to weak sub-national institutions, with revenues exacerbating, rather than mitigating community-level conflict (Arce, 2014; Bauer, 2013; Arellano-Yanguas, 2011; Hinojosa, 2011; Paler, 2011; Bland and Chirinos, 2010). To be effective as a conflict management tool, revenue decentralization schemes must be coupled with multi-stakeholder initiatives to enhance the capacities of local governments/authorities (McPhail, 2008).

Another central objective in revenue management involving extractive industries is transparency. Whilst transparency is not a panacea, it is necessary for greater openness and accountability, and to encourage civil society participation (Vierya and Masson, 2014). To be effective, transparency requires governments to make high-quality information available in user-friendly formats that can be disseminated to citizens and facilitate feedback. Created in 2003, the Extractive Industries Transparency Initiative (EITI) has set international norms and mechanisms requiring third party assessments and the involvement of frequently fledgling, coopted or repressed civil society in an effort to redress the balance of power (Aaronson, 2011; Asgill, 2012), and moving beyond the voluntary nature of corporate reporting (Smith et al., 2012). There is also increasing pressure for greater transparency along the whole extractive industry value chain including the contract and licensing allocation process (Alley 2013; Hayman and Crossin, 2005). Another emerging tool to share the benefits of extractive activities with communities is the use of foundations, trusts and funds (FTFs). Wall & Pelon (2011) carry out an analysis of these schemes in several countries pointing to three key aspects: the complexity of FTFs should be proportional to the level of financing and capacity at local level; they need to be based on extensive social assessment of the beneficiaries to achieve their objectives; and FTF activities need to be integrated into local and regional development plans so that the government or other development actors don't see the need to diminish their support. O'Faircheallaigh (2013) also highlight the value of inter-generational equity and fairness through the creation of investment funds for future generations is highlighted. Lockhart (2013) contrasts the experience of Sovereign Wealth Funds showing how the Alaskan experience generated annual dividends but also caused inflation whilst the global markets investments of the Norway experience minimised inflation.

3.4 Bureaucratic efficacy

Community-level conflict risks associated with extractive sector activities are intricately related to the general performance of host governments. As mineral-rich developing countries increasingly adopt the *localist policy paradigm of resource governance*,¹⁴ which has resulted in greater redistribution of resource rents to sub-national governments in producing areas, the performance of sub-national bureaucracies in particular will become a crucial factor mediating conflict outcomes. Recent empirical studies have confirmed previously held assumptions that social conflict and violence are more likely to be associated with mining activities when local authorities are generally unresponsive to the interests and demands of their constituents (Bland and Chirinos, 2014), and specifically when local bureaucracies less capable of investing resource rents to reduce poverty and otherwise address basic needs (Ponce and McClintock, 2014). As noted in section 2.2.4, poverty and marginalization are contextual drivers of conflict, reducing both individual and collective opportunity costs associated protest activities, and aggravating asymmetries in the distribution of risks and benefits that arise from extractive sector activities. In this regard, local authorities and bureaucracies have an important role to play in mitigating the underlying conditions of community-level conflict by ensuring effective institutional structures are in place to reduce socio-economic grievances.

While empirical studies have confirmed the causal effects of bureaucratic ineffectiveness on social conflict, the literature has said curiously little about the efforts on behalf of companies, NGOs, and host governments to engage in institutional capacity-building at the local level as a conflict mitigation mechanism. For instance, companies and NGOs can contribute to participatory budgeting initiatives, and technical training programs for local authorities and civil servants to ensure resource rents are invested in

a manner that meet the developmental needs of constituents. Additionally, companies have accumulated significant expertise in performing social baseline assessments, and could thereby contribute to knowledge transfer initiatives with local civil servants that must also conduct similar needs-based assessments and planning if they are to reduce poverty and promote sustainable development. Such activities would amount to what the post-conflict reconstruction literature within the field of political science refers to as “peacebuilding”, which consists of diverse institution and capacity-building initiatives intended to address factors that underlay, but do not necessarily spark, conflict (Doyle and Sambanis, 2006). Moreover, as Honke (2014: 177) argues, the extent to which societies pursuing and extraction-led development mobilize actors towards institution-building efforts as a conflict mitigation mechanism is “crucial for...evaluating the business for peace agenda in relation to extractive industries” (Honke, 2014: 177).

Conclusions

The literature reviewed for this knowledge synthesis study suggests that recent rising trend in reported community-level conflicts over mining projects mostly results from four main factors. A first set of structural factors consists of liberalization reforms, which in the context of partial democratization often resulted in contentious politics taking the form of more assertive and institutionally-legitimated demands by local communities, civil society and local authorities to participate in decision-making and to directly benefit from mineral development. A second set of factors is associated with impact of the global commodity boom in increasing the onset likelihood and severity of conflicts as the pace of exploration and mine development sharply accelerated across most parts of the world, raising both expectations of benefits, but also concerns among host societies, and in particular local communities and authorities in the affected region. A third set of factors, which often combines with the second set of factors to mobilize communities and their supporters, relates to concerns over the developmental and environmental impacts of extractive sector-led growth. While such concerns motivated unprecedented efforts in resource governance on behalf of an array of corporate, government and civil society actors, they also translated into greater mobilization against extractive activities, most notably in Latin America, in a context where the liberalization of the sectors as well as further democratization (and decentralization) were not matched by greater government capacity – thereby creating a context prone to rising expectations and open contestations. Finally, a fourth set of factors consists of triggering events that are more diverse and case-specific, but often include unfulfilled development expectations and a lack of pro-active community engagement in decision-making or failure of grievance mechanisms, notably with regard to impact assessments and benefits distribution, as well as accidents or repressive actions potentially attributable to companies or governments, and political events such as electoral campaigns.

Government authorities, extractive companies and communities can implement initiatives facilitating fair, transparent and participatory relations between stakeholders at all stages of the project lifecycle. Both social, environmental, and political risks and impacts analyses, as well as dialogue and negotiation processes have to begin at an early stage and continue throughout the lifespan of projects, including closure. Deliberative tools have to adhere to established international standards and protocols, including creating space for third party oversight and civil society involvement, and seek to mitigate frequent power asymmetries in bi-lateral community-firm relations. Agreements secured between communities and companies need to be transparent, precise in their language, and facilitate state involvement to uphold the rights of communities. Challenges to implementing a right for free, prior, and informed consent of affected populations need to be addressed. Governments also need to ensure transparency, accountability, and efficacy in the appropriation and usage of resource revenues. Overall, community members want to have their views and recommendations taken into account. This not only requires the application of strong norms, but also adapting government and corporate procedures to local contexts, including historical legacies of distrust by communities towards companies and authorities, to the possibilities of conflictive intra-community social relations, as well as to alternative perspectives and understandings by communities of what may be presented by companies and governments as technical issues to be understood and resolved through external 'expert knowledge'.

Additional resources

- International Alert's "Conflict-Sensitive Business Practice: Guidance for extractive industries" (Banfield and al., 2005).
- ICMM's "Human Rights in the Mining & Metals Industry" (ICMM, 2009b).
- UN Global Compact's "Guidance on Responsible Business in Conflict Affected and High Risk Areas" and UN Guiding Principles on Business and Human Rights (Powell et al., 2010).
- EU-UN's "Toolkit and Guidance for Preventing and Managing Land and Natural Resources Conflict – Extractive Industries and Conflict" (Grzybowski, 2012).
- NRCan (2013) Exploration and Mining Guide for Aboriginal Communities. Government of Canada. Ottawa, Natural Resources Canada.
- PDAC's First Engagement - A Field Guide for Explorers, and E3 Plus Guidelines on CSR for mineral exploration and development.
- IHRB's "Promoting Human Rights, Ensuring Social Inclusion and Avoiding Conflict in the Extractive Sector" (Wachenfeld et al., 2014).
- UN-WB's "Preventing Conflict in Resource Rich Regions" (Rios et al., 2015)

Further research, research gaps

Suggestions for further research include:

- Further clarify and find means to operationalize the variables identified in this knowledge synthesis in order to enhance theorizing resource-conflict linkages and to enable a more systematic assessment of their relative importance through statistical analysis.
- Better understanding of corporate perspectives and practices on conflicts. Such study should include participant observation, full access to internal documents, and ‘candid’ interviews in order to make a more significant contribution. More generally, multi-perspective and multi-stakeholder approaches to analyzing case studies could enrich the literature by comparing perceptions and explanatory narratives, while making the findings relevant to a broader audience.
- Comparative multi-case studies enabling a dynamic analysis of conflict processes and the relative importance of the various factors involved (including the history of exposure to mining projects by local communities). This could involve a collective synthesis of research within an agreed analytical framework among major researchers, and possibly a coding of factors and conflict processes allowing for a statistical analysis of a large number of documented case studies.
- There remains a limited knowledge of the micro-politics and psychological dimensions of conflict escalation. Drawing on the rich literature studying of social movements and public protests, more fine grain analyses of factors, actors, and processes resulting in the escalation of conflicts could include in-depth interviews and micro-level surveys of incentives and motivations to participate in protests, as well as participant observation and other ethnographic approaches.
- Given the debates remaining – at least academically - around the relative importance of institutions, more systematic analyses examining the significance of the quality of diverse institutions at national, provincial and local levels. Statistical and comparative case study analyses at a variety of scales may provide greater clarity on which institutional dimensions matter.
- This review points to gap between community demands (participation, rights, environmental, economic, etc.) and company strategies to deal with them (CSR development programs, conflict management mechanisms). Comparative discourse analysis of internal documents and interviews could help further identify which are the main demands and understand challenges to address them, as well as compare perceptions of what works and what does not from the perspectives of companies, communities and government.
- Most of the literature on conflict prevention and resolution remains geared towards providing advice to extractive companies, though more recommendations have recently been directed at local communities. A study could help further compile and disseminate findings in this area, notably to increase capacity building in negotiating agreements, environmental impacts, legal advice, regulations, with the aim of achieving a satisfactory settlement for both parties.
- Conflicts can have progressive or regressive results. More detailed studies of the various means of conflict prevention and transformation, such as community consultations, dialogue tables or judicial processes, could help match causal factors with the most effective options, and to better understand why some solutions are being adopted while others are not, and what conditions and processes influence progressive or regressive outcomes.
- There is frequent sense of impunity associated with conflicts, some of which is said to be justified by fear of further escalating conflicts. Detailed case studies including in-depth interviews could help identify the legal, political, financial, psychological and ethical factors influencing violent actors (and their relative impunity), including security forces, political entrepreneurs, and illegal actors, and the relative effect this may have on the reproduction of conflicts and reoccurrences of violence.
- Finally, a more integrated account of the types and likelihood of conflicts for the various phases of extractive projects, stages along commodity chains, as well as contexts and types of extractive projects could help build a more holistic model.

Knowledge mobilization

Dissemination of findings rely on a mix of channels, including a policy-focused report, scholarly outputs, public conferences, and postings on web-based platforms.

- Policy report: This policy report is made available, along the guidelines provided by SSHRC.
- Team members will make themselves available for meetings to Canadian policy officials for presentations or further discussions, as well as to other organizations engaged with resource-related conflict analysis and prevention/resolution, as well as civil society organizations pursuing greater corporate accountability.
- Web-based platforms and networks: the policy report and research findings will be diffused through targeted on-line platforms (including GOXI, Ecominerals, Corporate Accountability, NRG1), as well as team members' networks (e.g. ENTITLE).
- Industry media: the policy report will also be made available to leading Canadian industry sources.
- One research journal article: target journals include *Resources Policy* and *Extractive Industries and Society*.
- Conferences participation: though outside the budget, team members will seek to present the research findings at academic conferences and policy workshops they will be attending following the completion of this project.

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Appendix

Summary table of conflict factors

Structural	Contextual	Proximate
Neoliberal reforms and structural adjustment plans	Ill-designed or poorly implemented mineral development strategies	Characteristics and perceptions of mining projects
Investment in conflict-prone and under-regulated countries	Weak government capacity	Land rights and impacts on environment and local livelihoods
Commodity demand growth and 'emerging' companies	State repression and the leveraging of protests	Lack of participation or representation of local communities
Anti-extractivism and cultural friction over resource usage	Legacies of state repression and contentious politics	Poor company practices
	Poverty and marginalization	Asymmetry in the distribution of economic and social benefits
	National and host-community demands for a greater share of benefits	Distrust and breakdown of constructive relations between parties
	Polarization and politicization of tensions	Mobilization of opposition and tensions within communities

Endnotes

¹ Among the 305 publications, 80% originate from academia, 11% from NGOs, 5% from industry, and 4% from (inter)governmental agencies. Whereas industry and (inter)governmental publications are largely focused on assisting extractives companies to avoid and resolve conflicts affecting their activities, much of the academic and NGO sector publications seek to explain conflicts, with a frequent focus on the voices and interests of affected communities – especially for studies from NGOs. We note that many studies relating to conflicts and Corporate Social Responsibility programs are conducted within or for companies, and remain confidential. As such the literature reviewed here is not fully reflective of the state of knowledge, notably on the part of the industry. The dominance of academic studies, often linked or supportive of community and environmental activists, as compared to the perspectives of governments and especially companies, thus not only influence the findings of this review, but as renown geographer Anthony Bebbington (2011: 219) notes also requires academics and activists to "know far more about how industry networks operate and how companies assume particular strategies vis-à-vis particular countries and territories."

² Of the 117 studies, 78% were from refereed journals, 11% from NGO reports, 6% from aid agency reports, 4% from corporate reports, and 1% from government reports. In terms of geographical coverage, 43% were covering Latin American cases, 32% global/multi-regions, 9% Africa, 9% Oceania, 3% Asia, 3% Europe and 2% North America.

³ This would also invite scholars to address some of the methodological and substantive gaps we find in the case-study literature. This includes utilizing statistical methods to analyze sub-national and local level conflict processes. Although local studies using ethnographic methods offer fine-grain insights into the micro-level politics of conflicts, they may seem too idiosyncratic for policymakers in search of scaled-up responses. By using data at the local and provincial scales, additional variables can be controlled for using a combination of statistical and qualitative methods to avoid some of the reductionist tendencies of large-N cross-national studies. Most-similar systems design can help isolate conflict escalation factors and provide more specific recommendations, while greater clarity on the use of process-tracing method can yield more robust findings. Methodological pluralism, particularly when focused on provincial and local levels, could help scholars determine whether a specific mechanism was, in fact, responsible for the outcomes observed.

⁴ These figures, however, do not permit us to determine if this rising trend simply reflects the growing number of extractive projects taking place, or shows an increasing proportion of extractive projects affected by conflicts. Furthermore, most studies rely on press reports and are thus open to a reporting bias that may have under-reported events in earlier periods due to lower journalistic awareness and interest, and in regions with lower levels of reporting (e.g. Sub-Saharan countries).

⁵ ICM data mostly originates from press reports and is not corroborated by the parties involved or by third parties. The Environmental Justice Atlas, part of the European Union-funded EJOLT project, provides a geo-referenced database of 1672 conflicts, 21% are related to mining and 19% to fossil fuels and climate justice issues (Özkaynak et al., 2015; EJAtlas.org). EJOLT data is provided mostly by environmental groups and academics, and includes start and end dates for conflicts, but no trend could be directly assessed from the publicly available interface.

⁶ A definition used for OCMAL data is that of *contention* associated with "sustained, organized and observable collective action expressed through public claims upon authorities" (Haslam and Tanimoune 2016).

⁷ On production trends until 2011, see (ICMM 2012), on efforts level in the coal industry, see (Davison et al. 2014), on the number of ASM miners, see (Seccatore et al. 2014).

⁸ Statistical evidence for this 'Pollution Heaven' hypothesis is not demonstrated for most economic sectors, but there is anecdotal evidence for the extractive sector.

⁹ On concepts of resource frontiers, see Tsing (2003) and Watts (2015).

¹⁰ Mc Neish (2012) warns against the simplified portrayal of communities, and argues that in many occasions "militant pragmatism" drives some community members to seek dialogue and negotiated

settlements with the mining company (see also Ali & Grewal 2006), while others seek to avoid any compromise. Indigenous groups have thus at times struck deals with mining companies in exchange for monetary compensation, and left supporters such as environmental groups aside (Horowitz 2012).

¹¹ See also PDAC(2015) on guidelines for explorers about first field visit; and E3 Plus: on CSR for mineral exploration and development.

¹² See for example in Peru, “Mesas de Diálogo y Negociación”,

<http://prodialogo.org.pe/sites/default/files/material/files/mcsyd.pdf>

¹³ See for example the Adamus Resources Limited (ARL) project at Nkroful in 2015. (Public Hearing on EIA, 2015 of ARL)

¹⁴ This policy paradigm been implemented in countries such as Bolivia, the Democratic Republic of Congo, Indonesia, Madagascar, Nigeria, Peru, the Philippines, and South Africa, among others (Arellano-Yanguas, 2011).