The Rise in Conflict Associated with Mining Operations: What Lies Beneath?

By: Tony Andrews, Bernarda Elizalde, Philippe Le Billon, Chang Hoon Oh, David Reyes and Ian Thomson
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The research conducted for Phase 1 of this study was a collaborative effort. All members of the ‘Unraveling Mining and Conflict Team’ contributed their ideas and creativity to the design, implementation, analysis and interpretation of the overall study. As outlined below, each member also took responsibility for conducting individual components of the research, analyzing the results and documenting them in preliminary reports. These reports then formed the basis of the Phase 1 final report.

Philippe Le Billon was responsible for the literature review, Chang Hoon Oh for the quantitative database analysis, David Reyes for the African field case study investigations, Bernarda Elizalde for the Latin American field case study investigations and Ian Thomson for the summary and comparative analysis of the field case studies and the development of the Normative Model. Tony Andrews was the project lead and was responsible for the study concept, proposal, project design, management and coordination. In collaboration with the Team he was responsible for the integration of the 3 study components, the overall study analysis and the writing of the final report.

ASSISTANTS
Marta Conde and Jonathan Gamu were research assistants for Philippe Le Billon and conducted much of the research for and writing of the Literature Review under his supervision. Maria Jose (Majo) Gonzales and Héctor Córdova provided their local knowledge and expertise in assisting Bernarda Elizalde with the field investigations in Peru (Haquira-Las Bambas) and Bolivia (San Cristobal) respectively and in reviewing early drafts of the field study reports. Rames Abhukara provided local knowledge and expertise in assisting David Reyes with the field investigations in Madagascar (Ambatovy) and in writing the field case study report.

ACKNOWLEDGMENTS
The lead authors extend their appreciation to the Canadian International Resources and Development Institute (CIRDI) for their financial and administrative support for Phase 1 of this study and in particular to Marie-Luise Ermisch, the CIRDI Program Manager assigned to our project and who provided excellent facilitation and administrative support.

We thank the International Council for Mining and Metals (ICMM) for sharing the results and raw data from their recent desktop study of conflict incidents associated with mining, which formed the starting point of our quantitative analysis of conflict incidents associated with mining in Phase 1.

We extend our appreciation to Feroz Ashraf, President and CEO of Uranium One Inc and his staff in Dar es Salaam; Steven Kisakye, Community Relations Manager at Acacia in Tanzania; Mark Sitter, Director Corporate Affairs and Sustainability and Winifred Fitzgerald, External Relations Advisor, both at Sherritt International Corporation; Victor Grande, Community Relations Manager at First Quantum Ltd. and Javier Diez de Medina, CSR and Environmental Manager at Minera San Cristobal S.A., all of whom gave generously of their time and energy to assist us in gaining access to government and company representatives for our field studies in Tanzania, Madagascar, Peru and Bolivia respectively.
The Ambatovy Case Study Report benefited from helpful comments and suggestions by Mark Sitter.

Last but not least we extend our sincere gratitude to the External Review Group who examined various drafts of the individual study component reports, including a draft of the final report. Their comments and suggestions resulted in significant improvements to the project outcomes and the various reports. Special thanks are extended to Luc Zandvliet who was very generous with his time and ideas regarding the field case study investigations.

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SUMMARY

The purpose of this research project is to delve beneath the surface manifestations of conflict related to mining activities in order to develop a deeper understanding of their nature and uncover their root causes, systems and pathways. We believe that a more systematic understanding of conflict will help those involved to apply more effective preventive rather than reactive measures and to further improve approaches to prevention, management, mitigation and transformation.

This study was motivated by indications that conflict incidents associated with mining operations worldwide, have increased dramatically in the period from about 2000 to 2013. We also observed that in spite of a rich literature on mining-related conflicts, most studies have focused on the company-community interface and there are still limitations to our understanding of what lies beneath their obvious manifestations. Furthermore, there has been relatively limited, systematic analysis and documentation of the individual and collective behaviors of the players involved, their interrelationships and how they actually contribute to conflict situations over time.

Our approach is based on a number of key premises as follows: a) given the nature of mining and its inherent impacts, the potential for conflict always exists and that potential should be considered a normal aspect of the relationship between mining companies and their stakeholders; b) that conflict is rarely the result of a single party; more-often-than not it is the result of the interplay of multiple actors including companies, various levels of government, communities, civil society organizations and others, all of whom contribute to conflict situations in different ways and c) while conflicts inevitably manifests at the company-community interface, this does not mean that the conflict is sensu stricto a community-company conflict, but in fact, has a much longer prior history.

Our study is based on three main components including a literature review, a compilation and analysis of existing global conflict incident databases and field investigations of 18 case studies, primarily in Latin American and Africa. While the literature review and conflict incident database analysis provide an opportunity to analyze the topic from a broad, high-level perspective, involving a relatively large number of incidents, the on-site, field-based investigations allow for a deeper, more penetrating analysis, a field-truthing, based on a carefully selected sampling of existing and recent conflict cases. The study is being conducted in two phases. Phase 1 is the subject of this report and consists of the literature review, the initial results of the quantitative database analysis, focused on 2012 and 2013 and four of the 18 field case studies, including the Ambatovy mine and plant in Madagascar, the Bulyanhulu mine in Tanzania, the Haquira and Las Bambas advanced exploration and development stage projects in Peru and the San Cristobal mine in Bolivia.

It is our belief that valuable lessons can be learned not only from analysis of conflict cases that involved organized protest and sometimes violence but also from situations where a) the potential for conflict, violent or otherwise, existed but was somehow avoided and b) relationships which were generally positive and tensions that could have resulted in sustained conflict were redirected to achieve constructive outcomes. As in any relationship, conflict can be used and experienced as a natural, evolutionary process, which, if properly
managed, can give rise to constructive outcomes and progress for the parties involved.

Given the preliminary nature of our work at this stage, the key observations set out below are suggestive rather than conclusive at this point in time. Expansion and verification will require the additional research and deeper analysis planned for Phase 2, which will include the bulk of the quantitative database analysis covering the period 2002-2011 and the additional 14 field case study investigations.

1. The significant increase in conflicts associated with mining operations since about 2000 has occurred in the context of a general rise in large-scale protests globally, particularly associated with land and environmental issues, and an unprecedented increase in global exploration and mining activity during this period. The data show a direct correlation between the frequency of conflict incidents and the rise and fall of global mining activity. Further analysis shows that when the industry is well-financed and expanding there is a declining per-activity conflict count, but when financing is restricted and the industry is contracting, there is an increasing per-activity conflict count. This relationship is particularly noteworthy during the liquidity crises of 2007-08.

2. A compilation and analysis of 167 conflict incidents documented in 2012 and 2013 indicate that the majority of conflicts incidents occurred in Latin America (46%) followed by Africa (24%) and then Asia (17%). Again, these relative proportions correlate with the level of industry activity reported for these regions in 2013, with Latin America at 29%, Africa 14% and Asia 9%. The most conflict prone countries were South Africa, Mexico, Peru, Chile, and Guatemala. Our collective observations suggest that escalation of tensions into organized opposition to mining, accompanied in some cases by violence are rare in African countries compared to Latin American countries. The explanation for these differences will require further research planned for Phase 2 of this study, however, we suspect that they are related to broad structural factors characterizing the history and social dimensions of the two regions.

3. A significant outcome of the literature review is the identification and understanding of the determinants involved in the initiation and evolution of conflict, which define the broad enabling environment in which conflict is either created or avoided. These are categorized in terms of structural factors, contextual factors, conflict drivers and triggers, which define a descending order of conflict determinants in terms of the geographic extent and duration of their influence. We employed this framework in our approach to the field investigations and analysis of the four case studies included in this phase of our research.

4. The two Latin American field case studies explore situations that are positioned towards the two ends of the conflict spectrum and present a very interesting comparison. Haquira-Las Bambas is situated at the pole characterized by organized protest and violence whereas San Cristobal is situated at the other pole characterized by a strong, positive relationship, resilient enough to transcend the occasional conflict outbreak and maintain stability. The two African case studies (Ambatovy and Bulyanhulu) are positioned somewhere in between these two extremes and present conflict which has been contained, at least for the time being, and is expressed in a latent or passive
aggressive manner. It has the potential to either erupt in a negative and possibly violent manner or transform into a more positive situation, depending on the behaviors of the players.

5. Emerging from the collective observations of all 3 components of the study is a conceptual model for conflict as a ‘process’, allowing for the analysis and discussion of conflict associated with mining in a systematic way and useful for a comparative analysis of the 4 field case studies. The conceptual model is based on a) the hierarchy of conflict determinants as identified above, which reveals the relationships among determinants, the players involved and their primary contributions to conflict and b) a conflict continuum, which illustrates how the determinants and players interact over time, which brings to light the history and pathway involved in a conflict situation. In general, there is interconnectivity and sequential causation from one layer to the next in the conflict hierarchy, proceeding from structural factors, through contextual factors, to conflict drivers and triggers. Importantly, structural and contextual factors influence the formation of conflict drivers, which in turn shape the manifestation of conflict at the community-company interface and the behavior of the players at that level.

6. Applying the conceptual model to the analysis of our 4 field case studies reveals that while conflicts inevitably manifest at the company-community interface, this is not the first chapter in the narrative, but in fact, there is a much longer prior history involving other players who contribute in important ways. In particular, in the 4 field case studies we investigated, it demonstrates that government is of equal importance as a player in conflict as companies and communities. Government agencies at the central, regional and local levels are implicated across the complete conflict hierarchy and continuum, from structural factors through to triggers, but with a singularly important role in the field of contextual factors, which create the enabling environment for conflict to occur and strongly influence its creation or avoidance. Whereas central government agencies can display a persistent role right down to the local level, regional and local government agencies tend to prevail in the fields of conflict drivers and triggers, active at the regional and local levels. Not surprisingly, the roles of companies and communities also congregate in the fields of conflict drivers and triggers and are most active at the regional and local levels, in proximity to the sites of mining operations.

7. Considering how conflict manifests and plays out at the community-company interface, the compilation of observations and comparative analysis of the 4 field case study investigations provides evidence for two normative characteristics common to all four of the field case studies as a) the extent to which the communities believe that their interests are respected or protected (i.e. the extent to which they feel that they have what they need or deserve from the mining operation); and b) the degree to which communities believe that they can influence outcomes through conflict in the context of their relations with the company and or government authorities (i.e.; the extent to which communities believe that they can gain what they want or need from the presence of a mining operation, by the use of conflict). This can be presented graphically as a model that explains the features of community-mining company dynamics such as resistance, coexistence, containment
and engagement reported in all four of the case studies. The model potentially provides a tool for analyzing the current reality of conflict at the community-mining company interface and looking forward, planning how to avoid or resolve a conflict. Further testing in other conflict situations is required to establish the validity and utility of this model.

Much attention has been focused over the past 20 years on the community-company interface and improving practices at the sites of operations, in order to prevent and manage conflict with local stakeholders. Much less attention has been given to assisting companies to understand the structural and contextual environment in which they are trying to operate and how to best manage and survive in it. Equally important, not enough attention has been given to enhancing the ability of host governments, at all levels, to prepare themselves and their societies for the impacts and benefits of foreign direct investment and the arrival of the large-scale mining industry, and building their capacity to govern and manage the development of their resources in a sustainable manner. The preliminary conclusions emerging from Phase 1 of our study demonstrate the potential of this line of research with regard to:

a) Improving the approach by companies to due diligence and risk assessment of the countries and regions in which they are considering investing and operating;

b) Improving the approach by host governments in preparing for the benefits and impacts of FDI and the large-scale mining industry and how host governments can influence the contextual environment in which the large-scale mining industry is going to operate or is already operating and thus mitigating the probability of conflict.

c) Improving the approach by companies, communities and host governments to managing and responding to conflict outbreak.

d) Providing guidance to government agencies, companies and communities on the best way to structure collaboration, for the prevention of conflict and enhancing sustainable development.


1. INTRODUCTION AND BACKGROUND

The past 15 years have seen a sharp rise in the number of reported incidents of conflict associated with mineral exploration and mining activities worldwide. This increase in conflict has raised some serious questions about the considerable energy and resources expended over the same period to improve corporate social responsibility (CSR) practices and approaches to conflict prevention and management.

Company practices may indeed be an important element of causality. However, there are a number of additional factors potentially contributing to the exhibited trend of increasing conflict, including for example, a) the unprecedented increase in commodity demand and global mining activity during this period, b) increasingly savvy, empowered and sophisticated communities, c) a tendency in the past for host governments to focus on attracting foreign direct investment in the absence of well-designed mineral development strategies, d) the persistent inability of governments in many host countries, to perform their roles and responsibilities in supporting responsible, sustainable mineral development at the national and local levels, e) the expanding issue of fair distribution of benefits, a key underlying driver of what is commonly referred to as resource nationalism and last but not least, f) the increasing manifestation of water as a socio-environmental issue.

Despite a rich literature on mining-related conflicts, we still do not fully understand what lies beneath the obvious manifestations of these conflict incidents. The Canadian International Resources and Development Institute (CIRDI) has financially supported Phase 1 of this project which commenced in August, 2015. CIRDI was formed in 2013 by the Government of Canada in partnership with three leading Canadian universities (University of British Columbia, Simon Fraser University and Polytechnique de Montreal). CIRDI’s mandate addresses the development of new policies and practices that lead to more responsible, sustainable approaches to mineral development and mining around the world.

RESEARCH PROBLEM AND RATIONALE

The rapid globalization of the mining industry over that past 20 years, combined with the emergent business priority of successfully achieving and maintaining a social license to operate, has stimulated a resurgence of research in the general area of corporate social responsibility (CSR) and stakeholder engagement. However, the proportion of this research devoted to understanding the process of conflict associated with mining operations, has been relatively limited.

Many of these studies have been weighted towards a community-mining company focus and/or perspective, along with a tacit assumption that conflict incidents are normally company instigated. While companies certainly are important contributors to conflict, as outlined above other key players are undoubtedly involved, contributing to conflict inception and affecting conflict trajectories in important ways. However, there has been relatively limited, systematic analysis and documentation of the individual and collective behaviors of these players, their interrelationships and how they actually contribute individually and collectively to conflict situations over time.
Chapter 1: Introduction and Background

Compounding this situation is the fact that in spite of the rapidly expanding profession of social practitioners who specialize in boots-on-the-ground approaches to mining-conflict situations, there has been limited communication of their accumulating experience and insights, due primarily to client confidentiality requirements.

RESEARCH OBJECTIVES

The purpose of this research project is to delve beneath the surface manifestations of conflict related to mining activities in order to develop a deep understanding of their nature and uncover their root causes, systems and pathways. The focus here is on social conflicts over mineral resources that manifest most often at the community level, but recognizing that they often involve multiple scales and a variety of actors. We believe that a deeper, systematic understanding of conflict will help those involved to apply more effective preventive rather than reactive measures and to further improve approaches to conflict management, mitigation and transformation. The questions we intend to answer are as follows:

1. What is driving the recent, unprecedented increases in conflict at the local, regional, national and global levels?

2. What are the most common underlying causes and characteristic pathways that lead to conflict situations?

3. What are the experiences of conflict situations from the perspectives of the key players, including communities, government agencies, civil society and companies?

4. What are the roles and responsibilities of the key players in contributing to conflict creation, prevention and transformation?

5. What are the patterns and evolutionary trends that have occurred over the past 15-20 years and where are things heading now and into the future?

6. What can we learn about conflict that will enable us to recognize its precursors, understand trajectories and harness the energy for constructive outcomes?

7. What can we learn about conflict as a cultural norm and the circumstances that enable it to be transformed into a constructive process?

EXPECTED OUTCOMES

a) A comprehensive analysis of the processes, pathways and dynamics of conflict and mining, including the distinction between conflict as an inhibitor and conflict as an enabler.

b) The development of more effective policies, tools and practices for preventing, mitigating and managing conflict for the benefit of all stakeholders, including government policy-makers and
regulators, civil society organizations, communities, companies, national and international institutions.

c) Understanding the various roles of conflict with respect to responsible, sustainable mineral development and the potential for positive outcomes including national and local economic development, collaboration, partnerships and poverty alleviation.

d) A framework on which to establish and maintain a continuously updated database on mining and conflict case studies, representing a valuable source of historic and current information and learning for all interested parties going forward.

RESEARCH PREMISES
We started with the premise that conflict is rarely the result of a single party. More-often-than not it is the result of the interplay of multiple actors including companies, various levels of government, communities, civil society organizations and others, all of whom contribute to conflict situations in different ways. In the recent past, many studies of conflict and the extractive industries have focused on what they describe as company-community conflict. Given that mining operations and local communities are often in close proximity, it is not surprising that conflict manifests most obviously at the company-community interface. However, manifestations of company-community conflict at the sites of operations are rarely the first chapter of the story but usually arrive somewhat later in the sequence of things and prefaced by a history of events that can involve broad, long-standing contextual factors, the convergence of previously related and unrelated events and the decisions and actions of a significant number of organizations, institutions and individuals. In recognition of this, our approach has been to examine conflict cases from all sides, determining the roles of various players and how each contributed to the conflict trajectory and evolution.

Our second premise hinges on the observation that, due to the nature of mining and its inherent social and environmental impacts, the potential for conflict always exists and indeed, such potential should be considered a normal part of the relationship between a mining company and its stakeholders. Furthermore we decided that valuable lessons could be learned not only from analysis of conflict cases that involved open protest and violence but also from situations where a) the potential for conflict, violent or otherwise, existed but was somehow avoided and b) relationships which were generally positive and tensions that could have resulted in sustained conflict were redirected to achieve constructive outcomes. As in any relationship, conflict can be used and experienced as a natural, evolutionary process, which, if properly managed, can give rise to constructive outcomes and progress for the parties involved.

In consideration of the above we chose a broad definition of conflict as follows:
*The interaction of two or more parties with perceived incompatible goals, who engage each other through a range of practices including dialogue, persuasion, negotiation, arbitration, legal action, protest, intimidation and physical violence.*
RESEARCH APPROACH
To achieve the study objectives we drew upon three fundamental sources of information as follows:

a) A literature review, to better understand project-relevant arguments and findings available from the academic and as much as possible the ‘grey’ literature;

b) An analysis of existing conflict incident databases, including a global desktop compilation by the International Council of Mining and Metals (ICMM) of more than 300 conflict incidents spanning the period 2002-2013, together with a number of more regional/national databases on relevant mining/conflict incidents, and

c) A set of 18, carefully selected, representative field case studies conducted at the sites of conflict events, particularly in Latin America and Africa.

The project is being conducted in two phases. Phase 1, the subject of this report, includes the literature survey, the initial phase of the quantitative analysis of conflict incidents and 4 of the 18 field case studies. Achieving the study objectives to the level of statistical validity desired, will require the completion of the quantitative analysis and the execution of the remaining 14 case studies planned for Phase 2.

DEFINITIONS AND TERMINOLOGY
Various terminologies have been employed in the literature to describe the determinants contributing to conflict. In this study we use the terms structural and contextual factors, conflict drivers and triggers to categorize these determinants. As outlined in the table below, these terms imply a descending geographic scale and time duration. Other studies have employed the terms underlying causes and primary (proximate) causes which generally conform to the way we use structural/contextual factors and drivers/triggers respectively:

- **Structural factor**: Conditioning or generic factors often taking place at the international level but also at national level and existing in the medium to long-term (e.g. fiscal instability, income disparity, climate change, international commodity prices).

- **Contextual factor**: Factors defining the broad environment in which specific cases reside at the national or sub-national level; pre-conditions conducive in some way to the onset, continuation or redirection of particular conflict cases, and existing over the medium to long term (e.g. civil war, government policies and regulations, corruption, lack of trust in government).

- **Conflict driver**: A condition which exists at the local and/or immediate regional level that propels a specific (potential) conflict situation in a positive, neutral or negative direction; typically existing in the short to medium term (e.g. poor consultation or engagement; a concern over water quality that is not addressed; economic downturn leading to layoffs and community program cuts; decision not to include local community in an important production decision).
Chapter 1: Introduction and Background

- Trigger: An action or event at the local level that acts as a tipping point, transforming otherwise latent tensions into open (but not necessarily violent) conflict, or escalating or de-escalating existing conflict; typically existing in the short term or a moment in time (e.g. the death of a community leader during protests; an accident related to traffic increase; a tailings spill into a local river)

EXTERNAL REVIEW GROUP

An External Review Group was formed comprising nine individuals representing government, civil society, institutions, academia, communities and industry, whose role is to review the project approach and the various draft reports developed during the course of the study. External Review Group members were selected by the Conflict Team and are listed on page 3. During the selection process, attention was given to maintaining gender balance and expertise and experience in the Latin American and African regions.

ETHICAL CONSIDERATIONS

The field-based case study component of this project was subject to the ethics standards the University of British Columbia and Simon Fraser University as measured against their policies on Research Involving Human Participants. A guidance document was developed to ensure that:

1. Participant identities were protected during field studies and will continue to be protected following the completion of the study.
2. Participants were asked for their consent and fully informed of the purpose and expected output of the study.
3. Participants were free to not answer questions or leave if they were not comfortable anymore.
4. Authorization to conduct the field case studies was obtained from relevant host country government agencies prior to their commencement.
2. LITERATURE REVIEW

The purpose of this review is to explore and compile the accumulated knowledge and information on the topic of conflict associated with mining in the published literature and to assess the collective strengths and weaknesses of the literature in its treatment of this topic. In the following we highlight the main findings of the review as they pertain to the objectives of this study. Only selected references have been included here. The Literature Review, including the complete reference list, can be viewed in its entirety in Appendix 2.

METHODOLOGY

We reviewed 303 publications, including those which considered conflict associated with mining operations specifically (117 publications) but also those that examined conflict in association with the extractive sector (including oil and gas). While there are significant differences between the mining and oil and gas sectors, many of their socio-political aspects are expressed in similar ways. Since a significant proportion of the literature does not differentiate between the two sectors, but provides a significant contribution to the subject, it made sense to include rather than exclude them.

Among the total population of 303 publications, 80% originate from academia, 11% from NGOs, 5% from industry and 4% from government or intergovernmental agencies. The 117 mining specific studies presented a similar breakdown with 78% 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, there is a definite bias in the literature towards Latin American cases with 43% from this region, 32% global/multi-regions, 9% Africa, 9% Oceania, 3% Asia, 3% Europe and 2% North America.

STRENGTHS AND WEAKNESSES

Much of the literature relies on case study analyses - most of them informed through fieldwork - 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 this largely for cases in Latin American and to a lesser extent in Sub-Saharan Africa and Oceania as compared to other regions of the world. However, the case study approach followed by these studies and the frequent lack of clearly defined and identified variables make the testing of generalizable claims across the universe of cases a difficult task. 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.

Among the total population of 303 publications reviewed, industry and intergovernmental publications are largely focused on assisting extractive companies to avoid and resolve conflicts affecting their activities, whereas 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. The literature also
displays regional and negative selection biases, which reflect in part the geographical focus of the core groups of academic researchers and a draw towards conflicts that escalated into physical violence. We note that many studies relating to conflicts and corporate social responsibility (CSR) programs reside in confidential documents conducted by or for companies, and for the most part, remain inaccessible.

As such the literature reviewed here is unfortunately not fully reflective of the evolution and current 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 also draws attention to the need for academics and activists to increase their knowledge about industry practices and strategies vis-à-vis particular countries and territories. It is also a call for industry to be more open in the sharing of internal documents that could help gain a more comprehensive understanding of cases and industry perspectives.

Last but not least, in terms of the key objectives of this study, the literature is revealing with regards the combination of factors that have contributed to the general rise in conflict in recent times, particularly in terms of identifying the structural and contextual factors, conflict drivers and triggering factors. Although indirectly identifying the key players involved, it is somewhat less informative regarding their specific contributions and the interrelationships among them.

ANALYSIS
In this Literature Review we focus attention on identifying and understanding the factors involved in the initiation and evolution of conflicts, including in the escalation of conflicts towards more physical forms of violence (sabotage, detention, physical harm, extrajudicial executions). It is structured around 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 increasing use of physical violence. The second, reflecting the main contribution of the literature to this subject, draws attention to the major explanatory variables for this rise in conflict at global, national and local levels. There is a focus on explaining the main structural and contextual factors which form the fertile ground from which the potential for conflict can arise and the drivers and triggers involved in increasing tensions and leading to conflict outbreak. The third section reviews findings related to conflict prevention and resolution mechanisms, including major recommendations from the main policy reports. The key observations of these three sections are summarized in the following.

Global Trends in Conflict Occurrences
The rising trend in conflicts related to extractive sector activities appears 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 and communication, grievances against rising inequalities and disaffection towards established political elites. During the period from January 2006 to July 2013, 843 large-scale protest movements related to a range of societal issues took place in 87 countries covering 90% of the world population, with the number of protests increasing from 59 in 2006 to 160 in 2012².
Chapter 2: Literature Review

The rise in documented conflict incidents associated with mining over the period 2002-2012 coincides with a) an unprecedented increase in the demand for and prices of minerals and metals resulting in a five-fold increase in global investment activity in exploration and mining and b) a general increase in the number of conflict incidents associated with environment and land issues, an accompanying increase in the level of repression of community and environmental activists, and an estimate of 18% of the total number of deaths (1207) attributable to extractive sector conflicts (mining and oil and gas) between 2002 and 2015.

Key Factors and Players Underlying Conflict
The literature reveals that a number of key structural and contextual factors, conflict drivers and triggers (as we have defined them above), have played an important role in conflict situations recorded around the world. Each of these implicates one or a number of the key players as summarized in the table below.

Table 1: Primary Conflict Determinants

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<td>Structural Factors</td>
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<td>1. Neoliberal Reforms &amp; Structural Adjustment Plans</td>
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<td>Macroeconomic and regulatory reforms encouraged by international financial institutions where introduced in the 1980s and 90s, for reducing debt and poverty and by attracting FDI for mineral-rich developing countries. These measures were successful in some countries but not in others. In the latter cases fragmented democratization, weak government institutions and poorly designed political and fiscal decentralization schemes contributed to conflict over resource extraction and distribution of benefits.</td>
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<td>2. Investment in Politically Risky, Under-Regulated Countries</td>
<td>• Companies • Host Governments</td>
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<td>Increasing global commodity demand drove investment into mineral-rich, underexplored countries many of which were fragile and more conflict-prone with weak governance and pervasive corruption, increasing the likelihood of socio-economic grievances and galvanizing resistance and conflict.</td>
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<td>3. Investment in Environmentally &amp; Socially Sensitive Regions &amp; Countries</td>
<td>• Companies • Host Governments • NGOs</td>
</tr>
<tr>
<td>Increasing global commodity demand drove investment into remote, ecologically sensitive areas and exposed vulnerable communities, galvanizing resistance to mining at the local, national and international levels.</td>
<td></td>
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</tbody>
</table>
Table 1: Primary conflict determinants - Continued

<table>
<thead>
<tr>
<th>PRIMARY CONFLICT DETERMINANTS</th>
<th>KEY PLAYERS</th>
</tr>
</thead>
</table>
| 4. Anti-Extractivism and Cultural Friction Over Resource Usage | • NGOs  
• Home Country Societies  
• Host Country Societies  
• Local Communities |
| Growing criticism of extractive-led development models driven by a) environmental issues including concerns about water, biodiversity loss and climate change b) social issues including concerns about land, traditional practices and livelihoods and c) cultural differences yielding fundamentally different ways of looking at nature, land and resources between modern, industrialized and more rural, traditional societies. |

**Contextual Factors**

1. Ill-Designed or Poorly Implemented Mineral Development Strategies
Developing countries decide to address weak economies and poverty by attracting FDI to develop their mineral resources, but most do not prepare their countries adequately in terms of well-conceived mineral development strategies, engagement of key stakeholders, appropriate policies and institutions and effective distributive economic policy alternatives. The perception and reality of ineffective governance and management of natural resource development by host governments led to broad opposition to mining by host societies and conflict at the sites of operations.

2. Introduction of the Formal Economy Simultaneously With Mining
In developing countries, large-scale extractive sector activity may represent the introduction of the “formal economy” into a region that up until that point has been characterized as largely taking the form of an informal, barter and subsistence economy. As such, the introduction of large-scale extractive sector activity acts as a proxy for transparency and compliance with formal rules and general support for the “rule of law”. These characteristics of the formal economy may be perceived as a threat by all those who have heretofore benefited from an informal economy, and therefore the arrival of large scale mining may be resisted for reasons in addition to stated concerns with environmental and societal impacts.

3. Short-Term Decision-Making Applied to Long-Term Challenges
At systemic level, current democratic processes whereby political representatives have five year horizons can negatively affect legislation and policy making so that it does not fully take into account the long term environmental and social impacts of mining projects. Similarly, corporate decision making also puts an emphasis on short term thinking, so that, for example, mining firms may eschew community relationship-building in favor of more of a transactional mentality to their projects.
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### PRIMARY CONFLICT DETERMINANTS

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<thead>
<tr>
<th>PRIMARY CONFLICT DETERMINANTS</th>
<th>KEY PLAYERS</th>
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</thead>
<tbody>
<tr>
<td>Weak institutional and technical capacity at the national and local levels of government provides fertile ground for local conflict due to corruption, lack of transparency and accountability, leading to distrust of public authorities and negative association of companies with government.</td>
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</tr>
<tr>
<td>5. Legacies of State Repression and Contentious Politics</td>
<td>- Host Governments</td>
</tr>
<tr>
<td>The legacies of armed conflicts and repressive authoritarianism, combine with contentious politics and absence of effective judicial systems, undermining trust in government by local populations and increasing the risk of social conflict. The strategic importance of the extractive sector is sometimes accompanied by intolerance by the government towards social resistance.</td>
<td></td>
</tr>
<tr>
<td>6. Poverty &amp; Marginalization</td>
<td>- Local Communities - Host Governments - Mining Companies</td>
</tr>
<tr>
<td>Poverty is a potent conflict risk enhancer when acting as a catalyst for a) a sense of deprivation relative to perceptions of resource wealth and uneven distribution of risks and benefits, b) in-migration and return-migration around mining operations and c) local artisanal and small-scale mining in close proximity to industrial mining operations.</td>
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<tr>
<td>7. Demands for Greater Share of Benefits</td>
<td>- Host Governments - Host Societies and Communities</td>
</tr>
<tr>
<td>Demands by societies and their governments for a fairer share of mining revenues, or greater control over national resources, often combined with issues of transparency and the effective use, allocation and distribution of resource revenues by national and local governments creates enabling environments for conflict.</td>
<td></td>
</tr>
<tr>
<td>8. Polarization &amp; Politicization of Tensions</td>
<td>- Host Governments - Local Communities</td>
</tr>
<tr>
<td>Conflicts associated with extractive sectors can build from and feed into political and economic legacies and pre-existing political conflicts. Political opposition forces and political entrepreneurs can use tensions over projects to bolster their relative position and legitimacy. Decentralization can be a related factor when it gives rise to an increase in number of parties and political entrepreneurs at the local level and regional levels.</td>
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### Table 1: Primary conflict determinants - Continued

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<thead>
<tr>
<th>PRIMARY CONFLICT DETERMINANTS</th>
<th>KEY PLAYERS</th>
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</thead>
<tbody>
<tr>
<td><strong>1. Characteristics and Perceptions of Mining Projects</strong></td>
<td>• Local Communities</td>
</tr>
<tr>
<td>The relationship between conflict likelihood and technical aspects of the deposit being mined, including a) type and size of company b) deposit location c) extraction method (open pit vs underground), d) processing technique (especially cyanide) and e) commodity type, with particular reference to uranium. The stage of the mining operation is another crucial factor influencing how conflict evolves and manifests, with the construction phase being recognized as particularly conflict sensitive.</td>
<td>• Companies</td>
</tr>
<tr>
<td><strong>2. Shifting Power Dynamics</strong></td>
<td>• Companies</td>
</tr>
<tr>
<td>The arrival of a mining company often represents a potential shift in the power dynamic in a community, with the shift potentially threatening existing power relationships. The existing power relationships in a community that are disrupted upon the arrival of mining projects may not be particularly healthy or constructive (e.g., a single family may be controlling all decision-making in a community, or the gender dynamic may be particularly oppressive, or the informal mining activity might have significant negative environmental and social impacts). Those currently holding power may not react favorably to a new source of power arriving in a community.</td>
<td></td>
</tr>
<tr>
<td><strong>3. Land Rights &amp; Impacts on Environment and Local Livelihoods</strong></td>
<td>• Host Governments</td>
</tr>
<tr>
<td>Land is a critical resource for agrarian and indigenous communities. Environmental and social impacts of mining activities often affect their livelihoods and traditional ways of life, motivating them to react and 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 and in-migration. Customary rights to land may be pitted against mining rights based on new legal regimes. These impacts are often conflict drivers or triggers that can transform grievances into violent conflict, especially in the absence of legitimate and trusted alternatives for adjudicating conflicting claims.</td>
<td>• Local Communities</td>
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<td></td>
<td>• Companies</td>
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<td></td>
<td>• Companies</td>
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Table 1: Primary conflict determinants - Continued

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<thead>
<tr>
<th>PRIMARY CONFLICT DETERMINANTS</th>
<th>KEY PLAYERS</th>
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</thead>
<tbody>
<tr>
<td>4. Lack of Participation or Representation of Local Communities</td>
<td>• Companies</td>
</tr>
<tr>
<td>Nowadays there is an expectation that communities located in proximity to mining operations</td>
<td>• Communities</td>
</tr>
<tr>
<td>be included as formal participants in project governance, decision-making and community</td>
<td>• Governments</td>
</tr>
<tr>
<td>development plans. In some cases communities demand the right to determine whether or not</td>
<td>• NGOs</td>
</tr>
<tr>
<td>the project will actually proceed (free, prior and informed consent). The absence of such</td>
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<tr>
<td>a participatory relationship can result from many factors implicating companies, national</td>
<td></td>
</tr>
<tr>
<td>and local government and sometimes communities. Contextual factors can also contribute</td>
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<tr>
<td>in significant ways, leading to rising tensions and the potential for conflict and also</td>
<td></td>
</tr>
<tr>
<td>directly triggering conflict.</td>
<td></td>
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<tr>
<td>5. Company Social Responsibility Practices</td>
<td>• Companies</td>
</tr>
<tr>
<td>Companies use CSR practices including community engagement, participatory processes,</td>
<td>• Communities</td>
</tr>
<tr>
<td>training, and community development plans to build constructive relationships with host</td>
<td>• Governments</td>
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<tr>
<td>communities and to maintain a social license to operate. Conflict can arise in the absence</td>
<td>• NGOs</td>
</tr>
<tr>
<td>of such programs and in the event that they are poorly designed or poorly implemented.</td>
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<tr>
<td>While CSR practices have contributed to progress in company-community relations, given the</td>
<td></td>
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<tr>
<td>high degree of complexity involved in successfully applying such practices, there are many</td>
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<tr>
<td>pathways leading to unintended consequences and failure. Contextual factors often add</td>
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<tr>
<td>significantly to the complexity. The absence of government presence in the regions where</td>
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<tr>
<td>companies are operating, often accompanied by the absence of rule-of-law, places these</td>
<td></td>
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<tr>
<td>companies at the center of local expectations and acting as proxies for government, thus</td>
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<tr>
<td>increasing the likelihood of company-community conflict. The use of security forces has</td>
<td></td>
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<tr>
<td>been a significant conflict driver and trigger related to company-community relationships.</td>
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<tr>
<td>6. Asymmetry in the Distribution of Economic and Social Benefits and Impacts</td>
<td>• Companies</td>
</tr>
<tr>
<td>Issues associated with the distribution of benefits (jobs, rents, social programs) can</td>
<td>• Communities</td>
</tr>
<tr>
<td>predispose community-company conflict. Community-company conflict and intercommunity</td>
<td>• Governments</td>
</tr>
<tr>
<td>conflict can result from uneven distribution of benefits and impacts among communities</td>
<td>• NGOs</td>
</tr>
<tr>
<td>depending on their location relative to the mine and sometimes preexisting political</td>
<td></td>
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<tr>
<td>boundaries. In some cases uneven distribution of benefits and impacts can renew or</td>
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<tr>
<td>exacerbate preexisting intercommunity tensions. In others, lack of capacity of local</td>
<td></td>
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<tr>
<td>government to manage mining revenues effectively, results in lack of trust of local</td>
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<tr>
<td>government and laying the groundwork for potential conflict. Divisions among communities</td>
<td></td>
</tr>
<tr>
<td>and individual community members can arise from differences in perceptions of mining based</td>
<td></td>
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<tr>
<td>on individual values and vulnerabilities.</td>
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</table>
Chapter 2: Literature Review

Table 1: Primary conflict determinants - Continued

<table>
<thead>
<tr>
<th>PRIMARY CONFLICT DETERMINANTS</th>
<th>KEY PLAYERS</th>
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<tbody>
<tr>
<td>7. Distrust and Breakdown of Constructive Relations Between Parties</td>
<td>• Companies</td>
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<tr>
<td>The establishment and maintenance of trust is an essential element of any relationship</td>
<td>• Governments</td>
</tr>
<tr>
<td>including those involving communities, companies and governments. Trust is based on</td>
<td>• Communities</td>
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<tr>
<td>many factors including respect, inclusivity, transparency and consistency. There are many</td>
<td></td>
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<tr>
<td>circumstances that can lead to the temporary or permanent breakdown of trust among the</td>
<td></td>
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<tr>
<td>players. Studies have demonstrated that a breakdown of trust often precedes the onset of</td>
<td></td>
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<tr>
<td>tensions, which in turn can lead to the outbreak of conflict.</td>
<td></td>
</tr>
<tr>
<td>8. Mobilization and Transmission of Opposition Against Mining Operations</td>
<td>• NGOs</td>
</tr>
<tr>
<td>Extra-local alliances between communities and NGOs, as well as the broader political</td>
<td>• Communities</td>
</tr>
<tr>
<td>network related to extractive projects, manifest at the regional, national and international</td>
<td></td>
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<tr>
<td>levels and contribute to the emergence, escalation and geographical expansion of conflicts.</td>
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<tr>
<td>Facilitated by ease of communications through internet and social media, affected</td>
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<tr>
<td>communities and local activists may realize that their struggle is not simply a local problem</td>
<td></td>
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<tr>
<td>but the result of broader issues. The establishment of alliances and transmission of</td>
<td></td>
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<tr>
<td>information across national and transnational networks enables communities to identify</td>
<td></td>
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<tr>
<td>potential mining impacts, decide on the most effective modes of resistance, raising funds</td>
<td></td>
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<tr>
<td>and mobilizing supporters. This process allows for conflicts to ‘jump scales’.</td>
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</table>
Mechanisms for Conflict Transformation, Prevention and Resolution

Reducing the risk of conflict associated with mining operations depends upon the establishment and maintenance of strong, respectful relationships among the players, based on long-term commitment, resilience and vigilance. This is not an easy task as these relationships are frequently tested by a variety of challenges.

There are now numerous guidelines, toolkits and reports focused on what constitutes best practice and how to establish and maintain good relationships. The majority of these are aimed at extractive sector companies and to a lesser extent governments, as opposed to local communities. Key recommendations that form common themes throughout this aspect of the literature may be summarized as follows:

Table 2: Key Recommendations for Best Practices

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

The last fifteen-year period has seen a very significant growth in such initiatives, including:

- UN Guiding Principles on Business and Human Rights
- OECD Guidelines on Multinational Enterprises
- IFC Performance Standards (e.g. on grievance mechanisms)
- Voluntary Principles on Security and Human Rights
- UN Global Compact, including Business for Peace
- WEF Responsible Mining Development Initiative
- ICMM Sustainable Development Framework and Partnerships for Development
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- Chinese Chamber of Commerce Guidelines for Social Responsibility for Outbound Mining operations
- UN-World Bank Guidelines on Preventing Conflict in Resource Rich Regions
- EU-UN Toolkit and Guidance for Preventing and Managing Land and Natural Resources Conflict – Extractive Industries and Conflict

Reflecting a broader shift from government to multipartite governance, some of these initiatives have sought to more clearly define the relative roles and responsibilities of governments, companies, and local communities, as well as embodying efforts to bring about greater cooperation between different parties. Most of these voluntary multi-stakeholder initiatives have been directed precisely at tackling challenges associated with weak governance in host countries, where in particular companies looked for standards and guidance. As such, there is now a more comprehensive framework for coordinated approaches to conflict risk from a variety of different parties.

If communities are well-informed, 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. Given the relative vulnerability of communities to local elite capture of decision-making processes and benefits, as well as divisions within or between communities, notably those resulting from asymmetrical distribution of impacts and benefits, much attention still needs to be given to local power relations, as well as those between local and national authorities, in order for these mechanisms to be effective, rather than counter-productive.

Participation in Decision Making

Establishing fair and transparent dialogues and negotiation processes early on is widely recognised as the path to positive relationships with communities. Consultation processes, however, have often been focussed on environmental, human rights or health and safety issues, at the expense of the central concern of resource control, including the rights of communities to decide their own development path, employing processes designed by the communities themselves rather than externally driven, and applied at the onset and maintained throughout the life of a project.

The concept of Free, Prior and Informed Consent (FPIC) has been central to this issue. While the International Finance Corporation (IFC) has incorporated FPIC into certain aspects of its performance standards, not all international institutions have followed suit, and some choose to interpret it as ‘free, prior informed consultation’. In most cases governments and companies have had difficulty accepting FPIC at face value, though many large mining companies have now committed to it in one form or another. The International Council on Mining and Metals (ICMM) now encourages its members (the 23 largest mining companies in the world) to seek consent for projects when they are located on lands traditionally owned by, or are under customary use by, Indigenous Peoples. It is important to note that their FPIC Statement obliges members to seek consent, but does not require members to obtain consent.
Significant reasons for inadequate participation include power asymmetry among the parties and lack of commitment to and enabling mechanisms for continuing dialogue. Nowadays, at the development and pre-construction stages of the mining cycle, stakeholder participation is generally mandated by Environment Impact Assessments, and more recently by land title and mining legislation (e.g. new Ontario Mining Act\textsuperscript{12}). However, in most industry best practice guidelines, voluntary initiatives for participatory decision-making and dialogue is now strongly encouraged at the early exploration stage\textsuperscript{13}. Multi-stakeholder alliances with grassroots organizations, NGOs and churches, processes that are inclusive of marginalized and vulnerable groups and third party oversight, are crucial for capacity building for dialogue, negotiation and participation and to empower local communities during participatory processes. Good participatory practices include baseline studies, social mapping, cultural heritage and impact assessments, as well as early dialogue and consensus building platforms. The bottom line is that community members want to feel heard and have their recommendations taken into account.

Agreement Frameworks

The primary objectives of participatory processes include the building of constructive relationships, shared decision-making and eventually trust among the parties. Important tools increasingly being used to help reach these objectives are formal agreements between mining companies and communities and sometimes the state. Such agreements are crucial for conflict prevention (Hilson, 2002\textsuperscript{14}; Kemp et al., 2011\textsuperscript{15}), especially if projects involve resettlement, but equitable and fair agreements must also address long-term development goals. On the other hand, failed agreements can act as powerful conflict drivers and triggers for conflict outbreak. Failed agreements can result from misunderstandings between parties, unilateral decisions to move away from agreement protocols and the perception (and sometimes the reality) by communities that companies have broken their promises. Our field investigations, discussed later in this report, provide examples of this and the literature has recorded some of the reasons for such failures, including disagreements and misunderstandings regarding project location and scale, revenue management, environmental impact mitigation, and community compensation and development initiatives.

Negotiations and mediation have also been found to help resolve disputes and bring agreements between artisanal miners and mining companies (Andrew, 2003\textsuperscript{16}), as well as between artisanal and small-scale mining (ASM) operations and surface landowners. To reduce the risk of conflict, a compromise of ceding or sub-leaseing part of the company’s property can help enable some constructive forms of ‘coexistence’ between ASM and large-scale mining, especially if the company provides technical assistance to ASM and local communities, including exploration and mining efficiency gains. Formal agreements such as Community Development Agreements, Impact and Benefit Agreements (IBAs) and indigenous land-use agreements (ILUAs) are becoming a common feature in the sector.\textsuperscript{17} They are being advocated by many civil society organizations and international donors such as the World Bank and generally increase the chance of government approval of legally required permits.

It is now generally recognized that companies can more effectively prevent and manage conflict escalation by implementing grievance mechanisms and protocols, provided that they are well designed and complement
rather than undermine the legitimate role of governments. While the subject of grievance mechanisms is now supported by a number of reports and guidance documents specifically addressing this topic, the literature suggests that little progress has been made in effective application on the ground.

Revenue Management, Transparency and Accountability

Constructive community-company relationships rest in part on effective revenue management, transparency and accountability. 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 can lead to problems due to weak sub-national institutions, with revenues exacerbating rather than mitigating community-level conflict. 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.

Transparency is also an important aspect of revenue management, providing the means for openness and accountability for both industry and government. Created in 2003, the Extractive Industries Transparency Initiative (EITI) has set international norms and mechanisms requiring third party assessments and the involvement of civil society in an effort to redress the balance of power and moving beyond the voluntary nature of corporate reporting.

Various organizational structures and financial mechanisms are emerging as tools designed to help improve the management of revenues and benefits shared with local governments and communities, including foundations, trusts and funds. Wall & Pelon (2011) have conducted an analysis of these approaches in several countries pointing to three key aspects, a) the complexity of FTFs should be proportional to the level of financing and local level capacity, b) they need to be based on extensive social assessment of the beneficiaries to achieve their objectives and c) 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.

SUMMARY OF KEY OBSERVATIONS

1. The main categories of players involved in conflict associated with mining are generally identified as local communities, mining companies, and host governments (national and local levels). Depending on individual conflict cases, other players include non-governmental organizations (NGOs), political entrepreneurs and political parties, local business elites, religious organizations, unions, security forces and financial institutions.

2. The determinants of conflict are broadly similar across case studies and are discussed in terms of structural factors, contextual factors, conflict drivers and triggers. At the structural level, and drawing in part from the broader literature on social conflicts, the recent decade-long commodity boom was preceded by extensive neo-liberalization reforms and structural adjustment plans that attracted new extractive sector investments, but without the necessary strengthening of regulatory
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frameworks and state capacity. Some of these investments flowed into conflict-prone and under-regulated countries, some with authoritarian regimes, others undertaking democratization processes, frequently characterized by nascent and therefore weak democratic institutions, greater public protests, distrust towards government authorities, rising inequalities, and recurrent state repression.

3. At the contextual level, liberalization reforms that took place in a context of partial democratization often resulted in contentious politics and 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 both expectations of benefits, but also concerns, among host societies, in particular poor and historically marginalized communities and also authorities in the affected regions. Ill-designed or poorly implemented mineral development strategies, in part due to weak government capacity, left authorities in a challenging position when confronted with the expectations and concerns of many communities.

4. Specific conflict drivers may be discussed in four broad categories as follows: a) Threat 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, frustrations with hiring process, or abuses from security forces; b) Issues related to benefit distribution exacerbated by higher commodity prices and expectations for higher corporate standards - especially combined with contextual factors such as fiscal decentralization, weak local government capacities, deep poverty and limited alternative livelihoods; c) Greater exchange of information and greater 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, and d) Violent reactions by governments and companies against public protests and alleged threats of ‘civil order’ often led to an escalation of conflicts resulting in casualties, in some cases the cancellation of projects, but in others the renewal of negotiations.

5. At the proximate level, diverse triggering factors specific to individual cases and often combined with contextual factors and conflict drivers, catalyze a mobilization of communities and their supporters against some of the specific developmental and environmental impacts of mining projects and more-often-than-not, the corporate owners of those projects. While increasing levels of conflict motivated unprecedented efforts in improving 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. This occurred 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.
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6. The literature review shows that there are numerous guidelines, toolkits and reports focused on good practice. The majority of these are aimed at extractive sector companies, less so to governments and rarely to local communities. The result is that while there has been progress in the development and application of best practices with respect to industry, this has take place in the absence of parallel progress with respect to governments and communities. While in more recent times there has been a notable increase in publications directed at host governments on the subject of mineral resource governance and management, on-the-ground progress in this regard has been relatively slow.

7. Three key aspects of conflict risk mitigation are identified across the literature including in the areas of a) participation in decision-making, b) negotiation and agreements and c) transparency and accountability in revenue management and community-led development. Important aspects of participation in decision-making include dialogue and negotiation processes and free, prior and informed consent, all of which underpin the ability of communities to decide on their own development path. Agreements are crucial for conflict prevention and establishment of long-term development goals, however, failed agreements can act as powerful conflict drivers and triggers for conflict outbreak. Negotiation, mediation and grievance mechanisms, if properly designed and implemented, have been found to help resolve disputes and thus reduce the risk of conflict. Effective management, transparency and accountability of resource revenues are crucial underpinnings of good governance and conflict prevention.
3. QUANTITATIVE DATABASE ANALYSIS

In the second part of this study we embark on a global compilation and quantitative analysis of reported conflict incidents associated with mining with the intention of examining their relationships over space and time. The potential benefit of examining conflict from this perspective is that it offers a broad overview of conflicts associated with mining projects based on a relatively large sample, widely dispersed across various regions of the world and occurring over a significant span of time. The Literature Review, the Quantitative Analysis of Conflict Incidents and the Field-Based Case Studies (discussed later on in this report), represent significantly different approaches to the subject, which, in combination, offer the potential for useful insights and improvements in our understanding of the subject.

In recent times, a small number of studies have emerged that have taken a quantitative approach to conflict and mining, focusing on the subnational or local-level in order to evaluate accumulated findings and involving a significant number of case studies. These studies have focused mainly on Latin American countries including Argentina, Brazil, Chile, Mexico and Peru (Haslam and Tanimoune, 2016), a single country—in this case, Peru (Arce, 2014, Arellano-Yanguas, 2012, Ponce and McClintock, 2014), or on a limited number of physically violent events in a global setting (Bond and Kirsch, 2015). ICMM conducted a preliminary desk-top study of conflicts associated with mining covering the period 2002-2013 (ICMM, 2015). The focus of their study was on company-community conflicts with the objective of determining if such conflicts were on the rise, to explore their causes and to “better understand the practical dilemmas faced by companies in relation to community-company conflicts”.

METHODOLOGY

Our objective (and challenge) is to create a global level database of reported mining-related conflict incidents based on local-level, quantitative datasets, from pre-existing, publically available sources of information that are predominantly qualitative in nature and compiled at the country level. As far as we are aware this will be the first attempt at compiling such a database, however, once assembled it will enable us to employ quantitative, statistical analyses to derive potentially useful information and trends on conflict associated with mining over space and time. During the design-stage of this study certain assumptions were made regarding the quality and accessibility of existing datasets, in particular, a recent desktop study conducted by the ICMM (2015) which was not available to us until the commencement of our study. Upon examination of these various datasets we realized that a robust statistical analysis would first require considerable upgrading and alignment of all the contained information, which is for the most part qualitative in nature. Consequently, much of our work in Phase 1 was focused on the necessary upgrading and alignment, with the bulk of the analysis and interpretation scheduled for Phase 2.

As a starting point we used the datasets compiled for the ICMM 2015 study which were based on a variety of sources as set out in the table below.
Chapter 3: Quantitative Database Analysis

Table 3: Data Sources for ICMM Study

<table>
<thead>
<tr>
<th>Source</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td><a href="http://accessfacility.org/">http://accessfacility.org/</a></td>
</tr>
<tr>
<td>Compliance Advisor Ombudsman (CAO) for International Finance Corporation (IFC)</td>
<td><a href="http://www.cao-ombudsman.org/">http://www.cao-ombudsman.org/</a></td>
</tr>
<tr>
<td>Global Policy</td>
<td><a href="http://www.globalpolicy.org/dark-side-of-natural-resources.html">www.globalpolicy.org/dark-side-of-natural-resources.html</a></td>
</tr>
<tr>
<td>Mines and Communities</td>
<td><a href="http://www.minesandcommunities.org">www.minesandcommunities.org</a></td>
</tr>
<tr>
<td>Mining Watch Canada</td>
<td><a href="http://www.miningwatch.ca">www.miningwatch.ca</a></td>
</tr>
<tr>
<td>National Confederation of Peruvian Communities Affected by Mining (CONACAMI)</td>
<td></td>
</tr>
<tr>
<td>Observatorio de Conflictos Mineros en América Latina</td>
<td></td>
</tr>
<tr>
<td>OECD Watch</td>
<td><a href="http://www.oecdwatch.org/">http://www.oecdwatch.org/</a></td>
</tr>
</tbody>
</table>

The dominant source of information employed in the ICMM study was that of the Business and Human Rights Resource Centre (BHRRC), a large, qualitative database comprising of brief narrative descriptions of each conflict incident. Another significant conflict database has been developed in conjunction with the Environmental Justice Organizations Liabilities and Trade project (EJOLT)\(^2\). While this is more quantitative in nature than that of the BHRRC, it has limited accessibility and did not add significantly to the mining related conflict incidents documented elsewhere.

The ICMM compiled data from these sources covering the period 2002-2013, in order to determine the number of conflict incidents year by year and to examine whether their frequency had changed over time. Their raw data comprised of lists of conflict incidents, categorized by date of occurrence, country location, accused party, source(s) of information and internet links to those sources. They confined their search to conflict incidents between communities and companies, defining conflict incidents as “disputes between companies and communities which involved protests and/or use of force as well as legal proceedings against companies related to environmental or social issues”. Incidents where conflict primarily involved the host state were not included in the findings and therefore no details were revealed about the role of government.

ICMM conducted some qualitative analysis on conflict incidents recorded for 2012 and 2013 to explore details about their nature, including the players involved and using ICMM terminology, their potential underlying causes and triggers.
Chapter 3: Quantitative Database Analysis

These were recorded as short case summaries, consisting of a table categorizing the type of concern, the nature of that concern and the implicated parties, along with a brief narrative description of the conflict incident.

Our first step was to concentrate on the more detailed information ICMM assembled for 2012 and 2013 and the task of transforming it into a quantitative, local-level dataset. This involved verifying and filling gaps in the original information, codifying it and ensuring that the coding was consistent across cases. During Phase 2 we plan to conduct a similar upgrading of the balance of the ICMM datasets covering the period 2002-2011. Once completed, this will provide us with enough quantitative information to conduct a robust statistical analysis and derive useful global information on conflict incident patterns over space and time. In the following we present our preliminary observations based on our compilation and analysis of the datasets for 2012 and 2013 alone.

**ANALYSIS**

**The Frequency of Conflict Incidents (2002-2013)**

The ICMM data clearly demonstrates that the frequency of conflict incidents associated with mining operations increased significantly during the period analyzed from 2002 to 2013 (figure 1, left side). Taken at face value, this trend is rather startling and raises serious questions about progress over the past 15-20 years in community engagement practices and approaches to conflict prevention. However, this dramatic rise in conflict has occurred in parallel to an unprecedented increase in mining industry activity of global extent and over the same period of time. In this context it is interesting to note that the upward trend in conflict incidents is interrupted in 2008, followed by a significant recovery in 2009, mirroring a similar trend of reversal and recovery in mining industry activity at that time as a result of the global liquidity crisis (figure 1, below). The implication is that the frequency of conflict incidents is highly sensitive to overall industry activity.

![Comparison of Trends in Mining Sector Activity And Conflict Incidents (2002-2013)](image)

**Figure 1: Comparison of Trends in Conflict Incidents and Mining Exploration Expenditures**

Source: International Council for Mining and Metals (ICMM), 2015

Source: SNL Metals Economics Group, 2014
In order to further examine this relationship, we plot the ratio of conflict frequency, as recorded by the ICMM (using the blue bars indicating the total from all sources), to mining activity, as measured by the annual global exploration data (figure 1), over the period in question. The result is illustrated on figure 2, which shows a generally declining trend in the conflict frequency ratio (conflict frequency per unit of industry activity) from 2002 to 2008, coinciding with a substantial increase in industry activity. This is followed by a dramatic change in direction and steep rise of the conflict frequency ratio from 2008 to 2009, coinciding with a sharp decline in mining activity due to the global liquidity crisis. A reestablishment of a declining trend in the conflict frequency ratio post 2009, coincides with a dramatic recovery of mining activity during this period. Following this there is yet another rise in the conflict frequency ratio commencing around 2011-12, again coinciding with the commencement of a declining trend in industry activity. Thus the conflict frequency ratio demonstrates a consistent inverse relationship with industry activity, suggesting that when the industry is well-financed and expanding there is a declining per-activity conflict count, but when financing is restricted and the industry is contracting, there is an increasing per-activity conflict count. This relationship is particularly noteworthy during the liquidity crises.

This pattern could be explained by a connection between the quality of the relationship between companies and local communities (as a function of company social investment programs) and the financial health of the mining industry (reflecting access to capital). There is strong anecdotal evidence indicating that when access to capital is constrained and industry is suffering from a downturn, company social investment programs are among the first to be downsized or stopped altogether, which in turn can have negative repercussions for company-community relationships. While this hypothesis could provide a reasonable explanation for the relationship noted above, our existing data is insufficient to confirm it and further testing will have to wait for Phase 2 of our study.
This is an important aspect to pursue. The inverse relationship is suggestive of a dependence of communities and local regions on company social investment programs in the absence of government capacity and thus the vulnerability of communities to the inherent risks associated with mining projects and resource industry cycles.

**Analysis of the 2012 and 2013 Conflict Incident Data**

Following a careful review of the ICMM data we identified a total of 163 unique conflict incidents, 72 recorded in 2012 and 91 in 2013. Incidents recorded at the same mining sites but with different triggers and/or participating players were counted as separate incidents. We supplemented the ICMM data through internet searching, compiling information on location (country, province, and city/town), players involved (communities, governments, NGOs, and companies), mineral type, project characteristics (project status, area, and investment), contextual factors (underlying causes) and triggers (primary causes) of conflicts, process of resolution, involvement of the judicial system, intensity of conflicts, impacts of mining operation (environmental, health & safety, and socio-economic impacts), and the ownership type of mining companies (foreign and domestic). Significant information gaps were found to exist in the categories of project characteristics, involvement of judicial system and process of resolution and were not pursued at this stage.

**Geographic Distribution**

The 167 conflict incidents occurred in 44 countries which we have organized into seven supra-regions including Africa, Asia, East Europe, West Europe, Latin America, North America and Pacific Island countries. As illustrated in Table B (Appendix 1), the data indicate that close to half of the conflict incidents reported in 2012 and 2013 occurred in Latin American countries (46%), followed by Africa (24%) and Asia (17%). These three supra-regions comprise more than 87% of all reported conflicts. The relative proportion of these reported conflict incidents correlate well with the level of industry activity recorded for these regions in 2013, with Latin America at 29%, Africa 14% and Asia 9%. The main conflict-prone countries in Latin America were Chile, Guatemala, Mexico, and Peru.

The top five conflict-prone countries globally were South Africa, Mexico, Peru, Chile, and Guatemala, each with more than 10 incidents in the two years examined and accounting for 42% of all conflict incidents. Canada, with 8 recorded incidents is a noteworthy outlier among its developed country counterparts including Australia, Greece, Sweden, and the U.S. We suspect that this is a reflection of the fact that a significant proportion of Canada’s more than 1200 operating mines occur in the northern, remote regions of Canada on traditional Aboriginal lands and in some cases in relative close proximity to Aboriginal communities, giving rise to higher levels of concern about mining activities compared to other developed countries. This interpretation is corroborated by the analysis of conflict causes in the sections below.

The 167 mining related conflict incidents recorded in 2012 and 2013, involved mining companies headquartered in 33 different countries. The top five countries are Canada (30.3%), the U.S. (8.6%), Australia (7.6%), South Africa (7.6%), and the U.K. (7.6%). In 2013, Canadian-based companies accounted for 30% of the total budgeted exploration expenditures for nonferrous metals worldwide (Government of Canada, 2015).
Thus the figure for Canada is not surprising given the long-term, dominant presence of Canadian exploration and mining operations worldwide and the strong relationship between the frequency of conflict incidents and level of company activity discussed above.

Conflict Determinants
The ICMM study discussed the causes of conflicts in terms of primary and underlying issues and concerns, describing primary concerns as those which give rise to either a protest or the use of force and underlying issues as those which help to fuel disputes between companies and communities. They identified 15 factors which could manifest as either primary or underlying causes which we have modified for the purposes of our analysis. However, for consistency we retain the terminology for conflict determinants adopted for this study, including structural and contextual factors (ICMM’s underlying factors) and conflict drivers and triggers (ICMM’s primary concerns). The ICMM study did not identify structural factors nor distinguish between conflict drivers and triggers.

Table 4: Terminology of Conflict Causes

<table>
<thead>
<tr>
<th>TERMINOLOGY (THIS STUDY)</th>
<th>ICMM TERMINOLOGY</th>
<th>ICMM CONFLICT CAUSES (DETERMINANTS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural &amp; Contextual Factors</td>
<td>Underlying Cause</td>
<td>Artisanal &amp; Small Scale Mining (ASM)</td>
</tr>
<tr>
<td>Conflict Drivers and triggers</td>
<td>Primary Cause</td>
<td>Consultation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corporate Power</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corruption</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Economic Issues</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Environmental Issues</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Health &amp; Safety Issues</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Indigenous Issues</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Labor Issues</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Land Issues</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Resettlement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Security</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social Cohesion</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use of Force</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use of Revenue</td>
</tr>
</tbody>
</table>

While the ICMM study confined their analysis to the incidents reported in the BHRRC database, we expanded our analysis to include all available information sources as listed on Table 1.

On a global level, by far the top conflict driver was environmental (28.1%), compared to asymmetry of impacts and benefits (12.2%), consultation and engagement (10.0%), health & safety (9.5%), and land and traditional livelihood issues (7.2%). Evident in both Figures 3 and 4 is a high degree of variance among supra-regions with
regards the number of factors involved, varying from a low of 4 to a high of 15. In general the number and variety of determinants tends to be relatively low for developed countries and higher for developing countries. As Figure 3 indicates, there are interesting differences in the determinants of conflict drivers across supra-regions. Asymmetry of impacts and benefits were dominant in Western Europe (45%) and Eastern Europe (38%), environment was dominant in Latin America (39%) and Indigenous issues were the most frequent conflict driver in North America (26%).

As illustrated on Figure 4, there is no single dominant contextual factor. The top five are 

- Asymmetry of impacts and benefits (12.7%), 
- Laws and policies favoring companies (12.4%), 
- Environmental (10.9%), 
- Health & safety (10.9%), 
- Consultation and engagement (9.7%).

Social disruption (8.2%) occurred most frequently as a contextual factor in Western Europe. It is interesting to note that laws and policies favoring companies emerged as an important contextual factor but was not identified as a frequent conflict driver.
As Figure 4 shows, differences in contextual factors also exist across supra-regions. In North America, Indigenous issues (29%) and environmental issues (28%) stood out as important contextual factors, whereas health and safety was important in the Pacific (22%) and Eastern European (25%) regions. The other supra-regions where characterized more by their diversity as opposed to contextual factors that stood out as dominant.

![Figure 4: Contextual Factors Across Supra-Regions.](See Appendix 1, Table C for definitions of terms)

While asymmetry of impacts and benefits, environmental, health & safety, and consultation and engagement issues were found to be both frequent conflict drivers and contextual factors across most of the supra-regions, more fundamental societal structural issues such as laws and policies favoring companies, social disruption and corruption emerge as important contextual factors. For example, historically poor and discriminated communities react against the encroachment and degradation of environmental resources such as land and water that constitute the basis for their livelihood and heritage (Redclift, 1987; Martinez-Alier, 2002, Haslam). The differences observed across regions are noteworthy, underlining the need for governments to be aware of the contextual environments they are helping to contribute to and mining companies tailoring their approaches and strategies on the basis of due diligence and social impact assessments to reduce the potential for conflict.
Chapter 3: Quantitative Database Analysis

Mining Conflict Incidents and Mineral Type
There are some indications in the literature that mineral type may be correlated with an increase in the likelihood of conflict, as the extraction and processing of some minerals involve higher risk of environmental contamination and health problems than for others. For example Ali (2006), Dougherty (2011), and Mudd (2007) all concluded this to be the case for gold mining. Bond and Kirsch (2015) observe that both gold and copper mines, more than any other mined minerals are linked to conflict associated with violence and conclude that violent conflict is positively correlated with the perceived value of the minerals mined. However, based on a statistical analysis of 640 mining properties in five Latin American countries, Haslam and Tanimoune (2016) argue that not only is there no evidence for a particular association between gold mining and conflict, but that gold mining is actually less associated with conflicts compared to other minerals and metals. The inconsistent findings in the literature most likely reflect the fact that social impacts vary significantly over space (geographic region) and time based on the complex interplay of an array of factors discussed later on in this study.

We examined mining conflict incidents in association with 24 mineral types including aluminum (bauxite), coal, cobalt, coltan, copper, diamond, gold, ilmenite, indium, iron, lead, leucoxene, limonite, manganese, molybdenum, nickel, platinum, rutile, silver, tin, titanium, uranium, zinc, and zircon. We grouped these 24 types of minerals into seven categories (i.e., precious metals, non-ferrous base metals, ferrous metals, industrial minerals, gemstones, energy minerals, and specialty metals) in order to identify any noticeable difference across the mineral categories with respect to the conflict incidents. Since the availability of minerals is to some extent location specific, we compared the incidents by mineral type and by supra-region. Table 5 shows that most conflicts occurred in mines extracting precious metals (49%), thus corroborating the findings of Ali (2006), Dougherty (2011) and Mudd (2007), followed by non-ferrous base metals (26.3%) and energy minerals (8.8%). This result holds for most of the supra-regions with a few differences. In North America the conflicts occurred most frequently in association with energy minerals (the oil sands were likely important here), whereas in Africa the conflicts occurred most frequently in association with specialty metals.
Table 5: Mining conflict incidents (%) by category of minerals and by supra-region

<table>
<thead>
<tr>
<th>SUPRA REGION</th>
<th>TOTAL INCIDENTS (%)</th>
<th>PRECIOUS METALS (%)</th>
<th>NON-FERROUS BASE METALS (%)</th>
<th>FERROUS METALS (%)</th>
<th>INDUSTRIAL METALS (%)</th>
<th>GEM STONES (%)</th>
<th>ENERGY MINERALS (%)</th>
<th>SPECIALTY METALS (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>6.7</td>
<td>10.0</td>
<td>10.0</td>
<td>10.0</td>
<td>0.0</td>
<td>10.0</td>
<td>50.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Latin America</td>
<td>46.0</td>
<td>55.7</td>
<td>29.9</td>
<td>5.2</td>
<td>4.1</td>
<td>0.0</td>
<td>1.0</td>
<td>4.1</td>
</tr>
<tr>
<td>Africa</td>
<td>23.9</td>
<td>46.3</td>
<td>14.6</td>
<td>4.9</td>
<td>4.9</td>
<td>2.4</td>
<td>14.6</td>
<td>12.2</td>
</tr>
<tr>
<td>Asia</td>
<td>17.2</td>
<td>39.4</td>
<td>39.4</td>
<td>3.0</td>
<td>0.0</td>
<td>3.0</td>
<td>12.1</td>
<td>3.0</td>
</tr>
<tr>
<td>East Europe</td>
<td>3.1</td>
<td>100.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>West Europe</td>
<td>1.2</td>
<td>33.3</td>
<td>33.3</td>
<td>33.3</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Pacific Islands</td>
<td>1.8</td>
<td>40.0</td>
<td>20.0</td>
<td>20.0</td>
<td>0.0</td>
<td>0.0</td>
<td>20.0</td>
<td>0.0</td>
</tr>
<tr>
<td>TOTAL (%)</td>
<td>100.0</td>
<td>49.4</td>
<td>26.3</td>
<td>5.7</td>
<td>3.1</td>
<td>1.5</td>
<td>8.8</td>
<td>5.7</td>
</tr>
</tbody>
</table>

Conflict Intensity
For the purposes of our analysis we defined five levels of conflict intensity as follows:

<table>
<thead>
<tr>
<th>CONFLICT INTENSITY</th>
<th>DEFINING CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>No signs of opposition or organized activities involved at the time of reporting</td>
</tr>
<tr>
<td>Latent</td>
<td>Indications of tensions, disagreements and arising issues that are not yet collectively expressed and addressed</td>
</tr>
<tr>
<td>Low</td>
<td>Some local organizing by directly involved parties without expressions of physical violence, at the time of reporting</td>
</tr>
<tr>
<td>Medium</td>
<td>Organized, visible protests involving local people and third parties without expressions of physical violence at the time of reporting</td>
</tr>
<tr>
<td>High</td>
<td>Organized, visible protests accompanied by expressions of physical violence involved at the time of reporting</td>
</tr>
</tbody>
</table>
Table 6 shows the conflict intensity by supra-region. A high level of conflict intensity involving physical violence was involved in about half of all conflicts (46.6%). We found information on 57 events where the number of victims in the conflicts was provided. The average number killed and injured per conflict incident in the physically violent conflicts was 32 for 2012 and 2013, which is very close to the finding of Bond and Kirch (2015) who report 34 killed or injured per conflict incident. It is also important to note that the conflict intensity is significantly low in North America compared to other supra-regions: While only 9.1% of conflict incidents in North America can be classified as high-level, more than 40% of conflicts in Latin America, Africa, and Asia are high-level.

<table>
<thead>
<tr>
<th>SUPRA-REGION</th>
<th>CONFLICT INTENSITY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None</td>
</tr>
<tr>
<td>North America</td>
<td>0.0</td>
</tr>
<tr>
<td>Latin America</td>
<td>1.4</td>
</tr>
<tr>
<td>Africa</td>
<td>0.0</td>
</tr>
<tr>
<td>Asia</td>
<td>0.0</td>
</tr>
<tr>
<td>East Europe</td>
<td>0.0</td>
</tr>
<tr>
<td>West Europe</td>
<td>0.0</td>
</tr>
<tr>
<td>Pacific Islands</td>
<td>33.3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1.2</td>
</tr>
</tbody>
</table>

We found that courts were involved in the process of resolution in at least 73% of mining conflicts in North America, suggesting that the strong legal systems in Canada and the U.S. provide the option of formal resolution processes, thereby reducing the potential of escalation to physically violent activities as a means of resolution.

Table 7 shows the conflict intensity by mineral type. Conflict intensity was slightly higher in mines extracting precious metals and non-ferrous base metals and slightly lower in mines extracting energy minerals and gemstones. However, when we excluded mining conflict incidents in North America, where mining conflicts had low-levels of conflict intensity, this distinction disappeared. The results therefore imply that levels of conflict intensity do not simply depend on the type of minerals extracted, which contrasts with the findings of Bond and Kirsch (2015) and the several case studies focusing on gold mines as mentioned above. Mining method is also likely associated with conflict intensity, however, given that the required information is incomplete in our existing dataset, examination of this aspect will be included in Phase 2 of our study.
Chapter 3: Quantitative Database Analysis

Table 7: Conflict intensity by type of minerals

<table>
<thead>
<tr>
<th>MINERAL TYPE</th>
<th>CONFLICT INTENSITY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None</td>
</tr>
<tr>
<td>Precious metals</td>
<td>1.1</td>
</tr>
<tr>
<td>Non-ferrous base metals</td>
<td>2.0</td>
</tr>
<tr>
<td>Ferrous metals</td>
<td>9.1</td>
</tr>
<tr>
<td>Industrial minerals</td>
<td>0.0</td>
</tr>
<tr>
<td>Gemstones</td>
<td>0.0</td>
</tr>
<tr>
<td>Energy minerals</td>
<td>0.0</td>
</tr>
<tr>
<td>Specialty metals</td>
<td>0.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1.9</td>
</tr>
</tbody>
</table>

Note. Total incidents are different from those in Table 3 because some mining sites extract multiple types of minerals.

Impacts of Mining Operations

Mining activities can result in environmental, health & safety and socio-economic impacts. We defined the degree of each of these types of impact in terms of three categories as follows:

<table>
<thead>
<tr>
<th>MINING IMPACT EXTENT</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>No potential or visible impacts</td>
</tr>
<tr>
<td>Potential</td>
<td>Not visible at the time reported, but potential to have an impact later</td>
</tr>
<tr>
<td>Visible</td>
<td>Reported impacts at the time reported or before</td>
</tr>
</tbody>
</table>

Examples of potential environmental impacts are water contamination, water supply reduction, biodiversity degradation and air pollution; potential health & safety impacts include human accidents and injuries, diseases, property damages and birth defects; and potential socio-economic impacts are loss of livelihood, food production degradation, human rights violations, community break-down, and cultural heritage degradation.
Table 8a shows the environmental, health & safety, and socio-economic impacts by supra-region. More than 75% of mining conflict cases report visible socio-economic impacts and 45% report visible environmental impacts. Less than 30% of mining conflicts report visible health & safety impacts. This relative frequency among the three impact categories is reasonable in the context of the history of public priorities which started many decades ago with health & safety standards, followed by the establishment of environmental standards (1980s, 90s), and most recently, the focus on social issues (late 1990s on). The relative values also reflect the nature of the three impact categories in that health & safety and environment standards are relatively predictable and amenable to regulatory control, whereas social issues are more fluid, less predictable and less amenable to prescriptive regulations. Compared to other supra-regions were mining is a significant part of the economy (Latin America, Africa, and Asia), the data indicate that mining operations in North America had a significantly lower frequency of visible impacts. Again, this is a reasonable observation given the high level of adherence to the rule of law and the robust regulatory regimes which characterize this supra-region. Table 8a also shows a broad correlation between environmental impact (visual) and socio-economic impact (visual); in general, the higher the level of environmental impact the higher the level of socio-economic impact, a relationship that would be expected.

Table 8a: Impacts of mining activities by supra-region: potential and visible impacts

<table>
<thead>
<tr>
<th>SUPRA-REGION</th>
<th>ENVIRONMENTAL IMPACTS</th>
<th>HEALTH &amp; SAFETY IMPACT</th>
<th>SOCIO-ECONOMIC IMPACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>None (%)</td>
<td>Potential (%)</td>
<td>Visual (%)</td>
</tr>
<tr>
<td>North America</td>
<td>36.4</td>
<td>27.3</td>
<td>36.4</td>
</tr>
<tr>
<td>Latin America</td>
<td>13.0</td>
<td>34.8</td>
<td>52.2</td>
</tr>
<tr>
<td>Africa</td>
<td>52.8</td>
<td>11.1</td>
<td>36.1</td>
</tr>
<tr>
<td>Asia</td>
<td>14.3</td>
<td>32.1</td>
<td>53.6</td>
</tr>
<tr>
<td>East Europe</td>
<td>25.0</td>
<td>75.0</td>
<td>0.0</td>
</tr>
<tr>
<td>West Europe</td>
<td>0.0</td>
<td>100.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Pacific Islands</td>
<td>33.3</td>
<td>33.3</td>
<td>33.3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>24.8</td>
<td>30.1</td>
<td>45.1</td>
</tr>
</tbody>
</table>
For the purpose of comparative analysis we calculated mining impact scores by assigning points to the three categories (none=0, potential=1 and visible=2). Table 8b shows average impact scores by supra-region. Total impact score is the sum of scores in all three categories.

**Table 8b: Impacts of mining operations – impact score**

<table>
<thead>
<tr>
<th>SUPRA-REGION</th>
<th>ENVIRONMENTAL IMPACT SCORE</th>
<th>HEALTH &amp; SAFETY IMPACT SCORE</th>
<th>SOCIO-ECONOMIC IMPACT SCORE</th>
<th>TOTAL IMPACT SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>1.00</td>
<td>0.64</td>
<td>1.55</td>
<td>3.18</td>
</tr>
<tr>
<td>Latin America</td>
<td>1.39</td>
<td>1.10</td>
<td>1.78</td>
<td>4.28</td>
</tr>
<tr>
<td>Africa</td>
<td>0.83</td>
<td>1.14</td>
<td>1.69</td>
<td>3.67</td>
</tr>
<tr>
<td>Asia</td>
<td>1.39</td>
<td>0.89</td>
<td>1.71</td>
<td>4.00</td>
</tr>
<tr>
<td>East Europe</td>
<td>0.75</td>
<td>0.50</td>
<td>1.25</td>
<td>2.50</td>
</tr>
<tr>
<td>West Europe</td>
<td>1.00</td>
<td>0.50</td>
<td>1.50</td>
<td>3.00</td>
</tr>
<tr>
<td>Pacific Islands</td>
<td>1.00</td>
<td>0.67</td>
<td>1.33</td>
<td>3.00</td>
</tr>
<tr>
<td>TOTAL</td>
<td><strong>1.20</strong></td>
<td><strong>1.01</strong></td>
<td><strong>1.71</strong></td>
<td><strong>3.92</strong></td>
</tr>
</tbody>
</table>

Table 8b provides some interesting findings. First, the low total score of North America is driven by the low score in health & safety and in environment, which is likely a reflection of the stringent industrial and environmental regulatory regime as well as strong stakeholder pressures present in both Canada and the U.S. Second, Africa has a lower score in environmental impact than most other supra-regions, the reason for which is not readily evident from the data available at this time.
Table 9 shows total impact scores for environmental, health & safety and socio-economic impacts compared to mineral class. The industrial mineral class has a significantly higher total impact score than all the others. In particular, industrial minerals had significantly higher environmental and health & safety impacts than did other types of minerals. The non-ferrous base metals class displays the second highest total impact score, with the second highest values in all three impact categories. The values for precious metals are unremarkable and in the middle of the pack, showing no evidence for high levels of impact reported for gold mining as suggested in the literature described above. Gemstones (mainly diamonds) scored the lowest total impact score, however, given that there were only three conflict incidents reported for gemstones, it is difficult to generalize about the significance of this.

### Table 9: Impacts of mining operations by type of minerals – impact score

<table>
<thead>
<tr>
<th>MINERAL CLASS</th>
<th>ENVIRONMENTAL IMPACT SCORE</th>
<th>HEALTH &amp; SAFETY IMPACT SCORE</th>
<th>SOCIO-ECONOMIC IMPACT SCORE</th>
<th>TOTAL IMPACT SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precious metals</td>
<td>1.09</td>
<td>0.94</td>
<td>1.59</td>
<td>3.62</td>
</tr>
<tr>
<td>Non-ferrous base metals</td>
<td>1.22</td>
<td>1.04</td>
<td>1.69</td>
<td>3.94</td>
</tr>
<tr>
<td>Ferrous metals</td>
<td>0.91</td>
<td>0.73</td>
<td>1.64</td>
<td>3.27</td>
</tr>
<tr>
<td>Industrial minerals</td>
<td>1.50</td>
<td>1.33</td>
<td>1.50</td>
<td>4.33</td>
</tr>
<tr>
<td>Gemstones</td>
<td>1.00</td>
<td>0.67</td>
<td>1.00</td>
<td>2.67</td>
</tr>
<tr>
<td>Energy minerals</td>
<td>1.18</td>
<td>0.82</td>
<td>1.59</td>
<td>3.59</td>
</tr>
<tr>
<td>Specialty metals</td>
<td>1.00</td>
<td>0.91</td>
<td>1.73</td>
<td>3.64</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1.13</td>
<td>0.95</td>
<td>1.61</td>
<td>3.69</td>
</tr>
</tbody>
</table>

Note. Total scores are different from those in Table 5 because some mining sites extract multiple types of minerals.
Chapter 3: Quantitative Database Analysis

On Table 10 we have compared the three types of impacts of mining operations against conflict drivers. In general, the relationships displayed on this table pass the test of general reasonableness. For example, as one would expect the scores for environmental impact are highest for environmental determinants, those for health & safety impact are highest for health & safety determinants and the scores for socio-economic impact are highest for resettlement and indigenous determinants. Conflicts directly driven by health & safety, environmental, laws and polices favoring companies, and indigenous issues display the highest scores for total impact. Health & safety and indigenous issues are also related to high levels of environmental impact. Conflicts driven by labor issues display the lowest scores for environmental and socio-economic impacts and a surprisingly low score for health & safety impacts, giving rise to the lowest total impact score. This may be a function of the nature of labor-related conflict, which is often driven by other types of issues not examined here including employment contracts, benefits and union agendas.

Table 10: Impacts of mining operations by conflict drivers and triggers

<table>
<thead>
<tr>
<th>CONFLICT DRIVERS AND TRIGGERS</th>
<th>ENVIRONMENTAL IMPACT SCORE</th>
<th>HEALTH &amp; SAFETY IMPACT SCORE</th>
<th>SOCIO-ECONOMIC IMPACT SCORE</th>
<th>TOTAL IMPACT SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td>1.58</td>
<td>1.13</td>
<td>1.69</td>
<td>4.40</td>
</tr>
<tr>
<td>Health and safety</td>
<td>1.38</td>
<td>1.67</td>
<td>1.52</td>
<td>4.57</td>
</tr>
<tr>
<td>Asymmetry of impacts and benefits</td>
<td>0.89</td>
<td>0.96</td>
<td>1.70</td>
<td>3.56</td>
</tr>
<tr>
<td>Labour issues</td>
<td>0.33</td>
<td>0.83</td>
<td>1.25</td>
<td>2.42</td>
</tr>
<tr>
<td>Suppression of social resistance</td>
<td>0.90</td>
<td>1.10</td>
<td>1.70</td>
<td>3.70</td>
</tr>
<tr>
<td>Resettlement</td>
<td>1.17</td>
<td>0.83</td>
<td>1.83</td>
<td>3.83</td>
</tr>
<tr>
<td>Land and livelihood issues</td>
<td>1.25</td>
<td>0.75</td>
<td>1.56</td>
<td>3.56</td>
</tr>
<tr>
<td>Laws and policies favoring companies</td>
<td>1.43</td>
<td>1.14</td>
<td>1.71</td>
<td>4.29</td>
</tr>
<tr>
<td>Indigenous issues</td>
<td>1.40</td>
<td>1.07</td>
<td>1.80</td>
<td>4.27</td>
</tr>
<tr>
<td>Consultation and engagement</td>
<td>1.18</td>
<td>1.00</td>
<td>1.41</td>
<td>3.59</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1.25</strong></td>
<td><strong>1.08</strong></td>
<td><strong>1.63</strong></td>
<td><strong>3.96</strong></td>
</tr>
</tbody>
</table>

NB: we only included the top 10 frequent conflict drivers and triggers because some were very rare and therefore the findings in those cases are not generalizable.
When we examine the impacts of mining operations with respect to contextual factors (Table 11), we see that asymmetry of impacts and benefits, laws and policies favoring companies, corruption and environment display the highest total impact scores, indicating their significance as underlying enablers of conflict associated with mining. In the ICMM (2015) study, conflict incidents primarily involving the host state or government were excluded, however, it is significant that government and regulatory agencies are implicated in all four of these factors as defined by ICMM (Table C, Appendix 1). The significance of the role of government and state agencies in contextual factors that enable the environment for conflict is also evident in the Literature Review (see Table 1).

Table 11: Impacts of mining operations by contextual conflict factors (top 10 frequent causes)

<table>
<thead>
<tr>
<th>CONFLICT DRIVERS AND TRIGGERS</th>
<th>ENVIRONMENTAL IMPACT SCORE</th>
<th>HEALTH &amp; SAFETY IMPACT SCORE</th>
<th>SOCIO-ECONOMIC IMPACT SCORE</th>
<th>TOTAL IMPACT SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental</td>
<td>1.44</td>
<td>1.14</td>
<td>1.56</td>
<td>4.14</td>
</tr>
<tr>
<td>Health and safety</td>
<td>1.19</td>
<td>1.19</td>
<td>1.53</td>
<td>3.92</td>
</tr>
<tr>
<td>Asymmetry of impacts and benefits</td>
<td>1.50</td>
<td>1.14</td>
<td>1.67</td>
<td>4.31</td>
</tr>
<tr>
<td>Labour issues</td>
<td>1.30</td>
<td>1.20</td>
<td>1.70</td>
<td>4.20</td>
</tr>
<tr>
<td>Suppression of social resistance</td>
<td>0.57</td>
<td>0.93</td>
<td>1.79</td>
<td>3.29</td>
</tr>
<tr>
<td>Resettlement</td>
<td>1.41</td>
<td>0.95</td>
<td>1.59</td>
<td>3.95</td>
</tr>
<tr>
<td>Land and livelihood issues</td>
<td>1.15</td>
<td>1.04</td>
<td>1.59</td>
<td>3.78</td>
</tr>
<tr>
<td>Laws and policies favoring companies</td>
<td>1.32</td>
<td>1.10</td>
<td>1.80</td>
<td>4.22</td>
</tr>
<tr>
<td>Indigenous issues</td>
<td>1.27</td>
<td>0.87</td>
<td>1.53</td>
<td>3.67</td>
</tr>
<tr>
<td>Consultation and engagement</td>
<td>1.09</td>
<td>0.91</td>
<td>1.63</td>
<td>3.63</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1.27</td>
<td>1.07</td>
<td>1.64</td>
<td>3.98</td>
</tr>
</tbody>
</table>

In Table 11, asymmetry of impacts and benefits contextual factors are characterized by the highest environmental impact score and high health & safety and socio-economic impact scores. This relationship supports the well documented observation that weak economies are often characterized by weak regulatory regimes, environmental degradation, poverty and social injustice (The Brundtland Commission, 1987). Laws and policies favoring companies as a contextual factor is characterized in Table 11 by the highest socio-economic impact score. In many countries there is a deep and long-standing mistrust of government and by association, industries and companies perceived to be supported by government at the expense of local people.
Corruption as a contextual factor is characterized by the highest health & safety impact score and a high socio-economic impact score. Corruption and health & safety is not an obvious relationship, but we wonder whether this is a reflection of corporate impunity with regards health & safety standards in the context of weak regulatory regimes. Again, labor issues, this time as a contextual factor, shows the lowest score for total impact, with the lowest score for environmental impact, a low score for health and safety but the second highest score for socio-economic impact. As stated above, we suspect that labor-driven conflict derives from causes other than the ones we are examining here.

Although consultation and engagement issues were identified previously as persistent contributors to conflict (see Figures 3 and 4 above), it is characterized by low impact scores on Tables 10 and 11. This maybe due to the fact that while poor consultation is often implicated as a precursor to conflict, the conflict itself is expressed in more immediate drivers and triggers as illustrated on Figures 3 and 4. It is noteworthy that laws and policies favoring companies was among the top three in total impact score both as a conflict driver (Table 10) and as a contextual factor (Table 11).

The Relationship Between Impacts of Mining and Company Characteristics
We were able to identify the ownership information of mining companies in 157 of the 163 conflict incidents in our dataset covering the period 2012 and 2013. First, we classified ownership type based on the nationality of the company: domestic versus foreign. Communities may have different expectations for domestic versus foreign firms. Coumans (2010) noted that foreign firms are more likely to be targeted by activists compared to their local counterparts. This is certainly the case in some countries where for instance, local ASM operators are favored over foreign large-scale mining companies, by local populations (Steven Agpo, personal communication; Bulyanhulu Field Case Study, this report). In contrast, Bebbington (2012) suggests that activists are more likely to develop sound relationships with foreign rather than local firms, and thus foreign firms are less likely to be targeted.

In our dataset of 157 cases, domestic and foreign companies were involved in 65 and 92 conflict incidents respectively. In cases of joint ventures (JVs) where the company in a JV was a domestic firm, we treated the JV as a domestic firm. Table 12a shows the relationship of mining impact with the nationality of the mining company. Although foreign firms show slightly higher environmental and socio-economic impacts compared to domestic firms, we found no strong evidence that foreign mining firms have higher impacts as a general rule. It is likely that the relationship between a mining company and local communities, depends for the most part on the quality of the relationship in each case, regardless of whether the ownership is foreign or domestic.
Table 12a: Impacts of mining operations by nationality of mining company

<table>
<thead>
<tr>
<th>COMPANY TYPE</th>
<th>ENVIRONMENTAL IMPACT SCORE</th>
<th>HEALTH &amp; SAFETY IMPACT SCORE</th>
<th>SOCIO-ECONOMIC IMPACT SCORE</th>
<th>TOTAL IMPACT SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>1.11</td>
<td>0.98</td>
<td>1.55</td>
<td>3.65</td>
</tr>
<tr>
<td>Foreign</td>
<td>1.14</td>
<td>0.95</td>
<td>1.65</td>
<td>3.74</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1.13</td>
<td>0.96</td>
<td>1.61</td>
<td>3.70</td>
</tr>
</tbody>
</table>

Table 12b: Impacts of mining operations by public vs. private firms

<table>
<thead>
<tr>
<th>COMPANY TYPE</th>
<th>ENVIRONMENTAL IMPACT SCORE</th>
<th>HEALTH &amp; SAFETY IMPACT SCORE</th>
<th>SOCIO-ECONOMIC IMPACT SCORE</th>
<th>TOTAL IMPACT SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>1.12</td>
<td>0.94</td>
<td>1.59</td>
<td>3.65</td>
</tr>
<tr>
<td>Private</td>
<td>1.15</td>
<td>1.03</td>
<td>1.67</td>
<td>3.85</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1.13</td>
<td>0.96</td>
<td>1.61</td>
<td>3.70</td>
</tr>
</tbody>
</table>

Table 12c: Impacts of mining operations with state-ownership

<table>
<thead>
<tr>
<th>COMPANY TYPE</th>
<th>ENVIRONMENTAL IMPACT SCORE</th>
<th>HEALTH &amp; SAFETY IMPACT SCORE</th>
<th>SOCIO-ECONOMIC IMPACT SCORE</th>
<th>TOTAL IMPACT SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Ownership</td>
<td>1.20</td>
<td>1.20</td>
<td>1.60</td>
<td>4.00</td>
</tr>
<tr>
<td>Non-state ownership</td>
<td>1.12</td>
<td>0.95</td>
<td>1.61</td>
<td>3.68</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1.13</td>
<td>0.96</td>
<td>1.61</td>
<td>3.70</td>
</tr>
</tbody>
</table>
In Table 12b, we divided ownership type into public-owned and privately-owned companies. A public-owned company is defined as one that has issued shares, is listed on a stock exchange and publicly traded. A public company is subject to disclosure rules of capital markets and securities regulators, which require that anything that may have material impact on the company’s financial situation must be communicated to shareholders and the public, including relevant environmental and social issues. In contrast, private companies, not being publicly owned or listed on capital markets are not subject to such disclosure rules. Thus public companies are under higher levels of pressure and scrutiny from shareholders and stakeholders as compared to private companies.

In our sample of 157 cases, public and private companies were involved in 118 and 39 conflict incidents respectively. The predominance of conflict incidents related to public companies more than likely reflects the predominance of public companies operating in the mining sector. In Figure 12b there is a suggestion that public firms may have slightly lower environmental, health & safety, and socio-economic impacts than private firms. This will be explored further as we expand the dataset in terms of the number of conflict incidents and time duration.

In Table 12c, we examined conflict impact with state ownership and non-state ownership of companies. When a company in a joint venture was a state-owned enterprise, we treated the JV as a state-owned firm. Some might expect that state ownership would increase local acceptance and legitimacy in a mining project (Collins, 2009), leading to lower levels of conflict intensity. However, it is difficult to assume this as a general case due to other mitigating factors such as lack of trust in government (and therefore state-owned companies) by local populations in some countries and government oppression of populations in others. In some cases low conflict intensity may coexist with high levels of environmental, health & safety, and socio-economic impacts because of the ability of state-owned firms to ignore opposing views of stakeholders and to act with impunity. In the sample we analyzed, state-owned firms were involved in 10 conflict incidents, while non-state-owned enterprises were involved in 147 incidents, again reflecting the significant predominance of non-state (publically-owned) companies. Table 12c shows that state-owned firms have had stronger environmental and health & safety impacts compared to their non-state-owned counterparts but similar levels of socio-economic impacts.

In Table 13, we examine the conflict intensity with respect to ownership type discussed above. Although domestic and foreign firms did not differ significantly in regard to the impacts of their activities (see Table 12a), conflict intensity was higher for foreign companies than for domestic ones (Table 13a). This lends credence to the view that foreign companies are considered less legitimate by local stakeholders and more vulnerable to international pressure since the majority of them are publically owned, resulting in their experiencing higher levels of conflict intensity (e.g., Oetzel and Getz, 2012).

Finally, Table 13c does not reveal significant differences in conflict intensity between state-owned and non-state owned companies, in spite of the indication of significantly higher environmental and health and safety impacts of state-owned versus non-state owned companies.
### Table 13a: Conflict intensity by nationality of mining company

<table>
<thead>
<tr>
<th>COMPANY TYPE</th>
<th>NONE (%)</th>
<th>LATENT (%)</th>
<th>LOW (%)</th>
<th>MEDIUM (%)</th>
<th>HIGH (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>1.5</td>
<td>7.6</td>
<td>24.2</td>
<td>30.3</td>
<td>36.4</td>
</tr>
<tr>
<td>Foreign</td>
<td>1.1</td>
<td>3.3</td>
<td>15.6</td>
<td>27.8</td>
<td>52.2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1.3</td>
<td>5.1</td>
<td>19.2</td>
<td>28.8</td>
<td>45.5</td>
</tr>
</tbody>
</table>

### Table 13b: Conflict intensity by public vs. private mining companies

<table>
<thead>
<tr>
<th>COMPANY TYPE</th>
<th>NONE (%)</th>
<th>LATENT (%)</th>
<th>LOW (%)</th>
<th>MEDIUM (%)</th>
<th>HIGH (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>0.8</td>
<td>4.2</td>
<td>21.2</td>
<td>25.4</td>
<td>48.3</td>
</tr>
<tr>
<td>Private</td>
<td>2.6</td>
<td>7.9</td>
<td>13.2</td>
<td>39.5</td>
<td>36.8</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1.3</td>
<td>5.1</td>
<td>19.2</td>
<td>28.8</td>
<td>45.5</td>
</tr>
</tbody>
</table>

### Table 13c: Conflict intensity by state-ownership of companies

<table>
<thead>
<tr>
<th>COMPANY TYPE</th>
<th>NONE (%)</th>
<th>LATENT (%)</th>
<th>LOW (%)</th>
<th>MEDIUM (%)</th>
<th>HIGH (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>State-ownership</td>
<td>0.0</td>
<td>0.0</td>
<td>10.0</td>
<td>50.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Non-state ownership</td>
<td>1.4</td>
<td>5.5</td>
<td>19.9</td>
<td>27.4</td>
<td>45.9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1.3</td>
<td>5.1</td>
<td>19.2</td>
<td>28.8</td>
<td>45.5</td>
</tr>
</tbody>
</table>
Chapter 3: Quantitative Database Analysis

Limitations on Information Sources and Data Analysis

Cautions to note regarding the sources of information used in this report and limitations to the analysis are summarized as follows:

a) The information on conflict incidents recorded in the datasets we used were derived from publicly available sources and not corroborated by the parties involved or by third parties, which can impact their reliability. As well, the information can be biased toward the concerns and interests of reporting parties such as news media, government and non-government organizations.

b) These sources did not provide information on determinants such as company size, company age, company type (owner vs. operator), local experience, and mining methodology (e.g. underground vs open pit), which limited the extent of our analysis. This information is available from other sources and will be compiled for more detailed analysis in Phase 2 of this study.

c) It is likely that some conflicts in some small-scale mining sites and remote communities have never been reported. It is also likely that conflicts in controlled economies such as China, Cuba, and North Korea, where mining is a significant part of their national economy, are largely missing in publicly available sources due to media censorship. Therefore, the number of actual mining conflicts is undoubtedly higher than recorded in the available databases.

d) The limited number of observations in the 2012 and 2013 datasets did not allow for robust statistical analysis. For example, we cannot eliminate the possibility that the relationships between conflict intensity and impact of mining activity are due to the existence of reverse causalities. These limitations will be mitigated by the addition of data covering the period 2002-2011, scheduled for Phase 2 of this project. Extending the dataset as planned in Phase 2 will allow us to verify relationships and enable significant further analysis of (i) the evolution of mining conflict over time (ii) conflict across different stages of mining operations and (iii) the impact of global and national level causes such as commodity prices (Bond and Kirsch, 2015), technological advances (Prior et al., 2012), and changes in political paradigms (Bland and Chirinos, 2014) and public priorities (Martínez-Alier, 2002).
Chapter 3: Quantitative Database Analysis

SUMMARY OF KEY OBSERVATIONS

1. The ICMM data clearly demonstrates that the number of conflict incidents associated with mining projects worldwide increased significantly in the period 2002-2013, in parallel with an unprecedented rise in global mining activity. However, when we compare the conflict frequency with industry activity as a ratio (conflict frequency per unit of industry activity) and plotted against time, a consistent inverse relationship emerges, such that a rise in industry activity coincides with a decline in the conflict frequency ratio and vice versa. This apparent relationship brings to mind the common tendency for company commitments to communities to be downsized or brought to a close as a result of a decline in access to capital experienced by the company or the industry as a whole. This suggested relationship between community dependency and the changing fortunes of companies is potentially significant and warrants further investigation.

2. Of the 167 conflict incidents recorded in 2012 and 2013, the majority occurred in Latin American countries (46%), followed by Africa (24%) and Asia (17%). These three supra-regions comprise 87% of all reported conflict incidents and their relative proportions correlate with the level of industry activity recorded for these regions. The top conflict prone countries in the world were South Africa, Mexico, Peru, Chile and Guatemala comprising 42% of all conflict incidents.

3. Canada is a significant outlier among its developed country counterparts with 8 recorded conflict incidents in 2012 and 2013. We suspect that this is due primarily to high levels of concern from Aboriginal Peoples regarding exploration and mining activities on their traditional lands and in proximity to their communities, an interpretation supported by our finding that indigenous issues were important as both contextual factors and conflict drivers in North America. This raises the question as to why Canada would exhibit a higher conflict incident frequency compared to Australia, when the two countries are broadly comparable with respect to indigenous populations and domestic mining activity, a topic that will be explored further during Phase 2 of this study.

4. On a global level the most frequent conflict driver was environmental (28.1%), followed by economic (12.2%), consultation (10.0%), health & safety (9.5%) and land issues (7.6%). The top contextual factors were economic (12.7%), corporate power (12.4%), environment (10.9%) and health & safety (10.9%).

5. Conflict determinants differed across supra-regions. Some supra-regions displayed a dominant driver or contextual factor and others were characterized by multiple factors. In general the number and variety of determinants tends to be relatively low for developed countries and higher for developing countries. The relationships are summarized as follows:
An examination of the relationships between mining conflict incidents and mineral type reveals that conflicts occur most frequently in association with precious metal mining (49%). This held true for most supra-regions with the exception of North America where conflicts occur most frequently with energy minerals and Africa where most incidents occur in association with specialty minerals.

The highest level of conflict intensity (i.e. physical violence involved at the time of reporting) occurred in close to half of all conflict incidents (46.6%). More than 40% of conflicts in Latin America, Africa and Asia are classified at this level. Conflict intensity is comparatively low in North America compared to other supra-regions. The courts were involved in 73% of mining conflicts in North America, implying that a strong justice system provides an effective option for physical violence.

Our analysis did not reveal any significant relationship between conflict intensity and mineral type, in contrast with some suggestions in the literature that physical violence is particularly associated with gold mining. While precious metal mining showed the highest frequency of conflict incidents (see Point 6), there is no significant correlation between precious metals and conflict intensity or between precious metals and mining impact (health & safety, environment and socio-economic).

When we examined conflict incidents in relationship to the impacts of mining operations, including socio-economic, environment and health & safety impacts ('visible' indicating the highest impact), more than 75% record visible socio-economic impacts, 45% show visible environmental impacts and less than 30% show visible health & safety impacts. North America had a significantly lower frequency of visible impacts compared to other supra-regions.
10. Examination of mining impact scores (the sum of scores for socio-economic, environment and health & safety impacts) with mineral type, reveals that the industrial mineral class had a significantly higher total impact score than all of the others, along with high scores for environment and health and safety impact. There is no evidence of any special relationship between mining impact scores and precious metals.

11. Our analysis of mining impacts with conflict drivers, suggest that those conflicts driven by health & safety, environmental, corporate power and indigenous issues display the highest scores for total mining impact. Conflict driven by labor issues display low scores for all three types of mining impact, suggesting that labor-related conflict is driven by other causes (employment contracts, benefits, etc.) not examined in this study.

12. Contextual factors associated with economic, corporate power, corruption and environmental causes display the highest total scores for mining impact. Government agencies are potentially implicated in all of these contextual factors, a relationship which also emerged from the Literature Review.

13. An examination of the environmental, health & safety and socio-economic impacts of mining with company ownership, revealed no evidence of a systematic relationship between the impacts of mining operations and a) domestic versus foreign ownership, b) private versus public ownership and c) state versus non-state ownership. Data interpretation was complicated by the significant dominance of public, non-state owned companies in the mining sector.

14. Analysis of mining ownership with conflict intensity revealed a higher conflict intensity related to foreign mining companies as compared to their domestic counterparts. This is likely a function of the fact that most foreign-owned companies are publicly owned and therefore more susceptible to domestic and international pressure.
4. FIELD CASE STUDY INVESTIGATIONS

While the literature review and quantitative analysis of conflict incidents provide an opportunity to analyze the topic of mining and conflict from a broad, high-level perspective involving a relatively large number of incidents, the on-site, field-based investigations allow for a deeper, more penetrating analysis; a field-truthing, based on a carefully selected sampling of existing and recent conflict cases.

We focus on Latin America and Africa for our field case studies because these two regions have attracted the majority of exploration and mining investment and activities over the past 20 years and there is now a rich inventory of conflict cases available which has yet to be harvested in a collective, systematic manner. These two regions represent significantly different political, cultural, historical, geographic environments and they are in different stages of maturity with respect to the governance and development of their mineral resources.

Four of the 18 planned field-based case studies were conducted in Phase 1 of this study and a compilation and summary of observations are presented below. Detailed field reports on each of these case studies are included in Appendix 3. The initial four field case studies were designed not only to assemble preliminary field observations but also to validate the field approach, gauge access to information and refine methodology.

METHODOLOGY

We assembled an inventory of known conflicts associated with exploration and mining operations, which have occurred over the past 20 years or so in Latin America and Africa. These were then examined against a hierarchy of criteria designed to evaluate each case in terms of practical considerations and learning potential. Our objective is to select the 18 case studies such that they collectively deliver a representative sample of conflict associated with exploration and mining operations in terms of the major variables involved, including conflict type (positive, neutral and negative outcomes), conflict context (geographic, social and political), project stage (exploration, development, construction, operation), commodities mined and company type.

Our field team consisted of experienced, social practitioners (see Introduction, p.11) who have spent much of their professional careers conducting field work on conflict and social issues associated with mining projects in Latin American and African countries. Before commencing field programs, cooperation was established with the mining companies involved and permission to conduct the studies was acquired from the host country governments. Our field team applied well-tested methodologies to acquire information, based on initial desk-top research, followed by on-site interviews with relevant parties including community members, local authorities, representatives of local, regional and central government, company personnel, local institutions and civil society organizations. Interviewing a broad spectrum of people and institutions was key to obtaining a wide spectrum of perspectives and achieving objectivity with the study conclusions. A total of 89 working-days were spent in the field accumulating observations and data on the 4 case studies.

The techniques employed for the field studies mimic the rapid, inductive methods used by social performance consultants to help companies identify salient issues in a given situation; to begin understanding the full range of stakeholder perspectives; and, where necessary, to guide more thorough analysis. One key advantage to...
this approach is that it quickly provides a broad-spectrum view of how local stakeholders perceive their circumstances. Unlike more deductive research methods, it does not aim to test any particular hypothesis. Instead, the general objective, and the objective for these studies is to let hypotheses emerge from collecting and comparing the accounts of the actors involved in or affected by conflict associated with mining.

For this approach to work well, the research and subsequent reports must strive to let the various stakeholder accounts speak for themselves, using the available ‘voices’ to convey how the issues are perceived through different lenses. The reader is cautioned, therefore, against taking any of the voices out of context or as the definitive truth on a particular point. This report attempts to convey the full range of available perspectives. However, there were inevitably instances during the field investigations where a certain version of the facts could not be counterbalanced with other versions. Rather than exclude these potentially important perceptions, they have been included while attempting not to overstate their factual accuracy or level of influence.

Frequency of Conflicts in Latin America and Africa

During the development of our inventory of known conflict cases, it became quickly apparent that organized expressions of opposition to mining by local communities were much more prevalent in South America compared to Africa. This observation is supported qualitatively by the literature review and quantitatively in our quantitative database analysis, the latter indicating that the highest proportion of the conflict incidents recorded in 2012 and 2013 occurred in Latin American countries (46%) as compared to African countries (24%).

When we consider the fact that we were not able to identify more than 10 ‘company-community’ conflicts associated with mining in Africa that would provide valuable learning opportunities for field investigations, the implication is that a relatively low proportion of conflict incidents in Africa evolve to sustained processes of collective action and expressions of violence as compared to those in Latin America. In fact, other than a handful of well-known cases occurring in Tanzania (the North Mara Project), the Democratic Republic of the Congo (mostly involving armed militia) and South Africa (more labor-related than community-related), it seems that such expressions of conflict have been relatively rare in African countries.

Our initial field investigations reveal some important insights in this respect as discussed later on. However, on a more general level, we suspect that a significantly lower frequency of conflict incidents and organized opposition to mining in Africa compared to Latin America may be a reflection of broad structural factors characterizing the history and social structures of the two regions, including:

a) Significant differences in the experiences of colonization, which happened earlier in Latin America (1492-1810) and somewhat later in Africa (1881-1924) and led by different European countries, Spain and Portugal in the case of Latin America and dominated by England and France in the case of Africa;

b) The impact of neo-liberalism in Latin America commencing in the 1980s leading to both increasing...
frustration by society and in particular remote communities, accompanied by a rapid change from oppression to freedom of expression (as described in more detail in the literature review);

c) The tribal system historically prevalent in most African nations and remaining as an important influence in many areas up until today, acting to inhibit the emergence of local political entrepreneurs and organized action, that appear to have been an important contributor to conflict in Latin American countries and

d) The deep ethnic conflicts that characterize most African countries.

A deeper understanding of the broad structural factors that influence how conflict expresses itself in both regions will emerge from the more extensive quantitative analysis and substantial addition of field case studies planned for Phase 2.

Selection of Initial Four Field Case Studies

The four initial case studies were selected from a short list of some twenty conflict cases in Africa and Latin America that had known characteristics thought to be valuable for the initiation of our field studies. Common to all four of the case studies are that the mines involved are located in areas of significant, historical poverty commonly encountered in rural areas of developing countries. Our preliminary assessment indicated that they exhibited a suitable combination of project characteristics and conflict attributes as summarized in the following table and the short descriptions below.

Table 15: Summary Descriptions of Selected Case Studies

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>PROJECT NAME</th>
<th>COMPANY (NATIONALITY)</th>
<th>COMMODITY</th>
<th>PROJECT STAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madagascar</td>
<td>Ambatovy</td>
<td>Sherritt International (Canadian)</td>
<td>Nickel</td>
<td>Operating mine (4 years)</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Bulyanhulu</td>
<td>Acacia (UK)*</td>
<td>Gold</td>
<td>Operating mine (20 years)</td>
</tr>
<tr>
<td>Peru</td>
<td>Haquira</td>
<td>First Quantum (Canadian)</td>
<td>Copper</td>
<td>Advanced exploration</td>
</tr>
<tr>
<td>Las Bambas</td>
<td></td>
<td>MMG (Chinese)</td>
<td>Copper</td>
<td>Mine construction</td>
</tr>
<tr>
<td>Bolivia</td>
<td>San Cristobal</td>
<td>Sumitomo (Japanese)</td>
<td>Silver, lead, zinc</td>
<td>Operating mine (9 years)</td>
</tr>
</tbody>
</table>

*Formerly known as African Barrick Gold, Acacia Minerals was formed in 2010 and is listed on the London Stock Exchange. Barrick Gold, a Canadian mining company is the majority shareholder of Acacia. Barrick Gold originally acquired the Bulyanhulu property from Sutton Resources in 1999, constructed the mine and commenced production in 2001.
Chapter 4: Field Case Study Investigations

Ambatovy
Situated in eastern Madagascar and built at a cost of approximately USD$8 billion, the Ambatovy nickel mine represents a very large investment flowing into a conflicted political climate and into an economic environment where people are desperate for resources. Furthermore, final commissioning occurred in 2012 and commercial production began in 2014, providing a timely opportunity to learn about conflict during distinct project stages and the transition between them. Notably, Ambatovy has a broad geographic footprint that involves mining as well as complex processing and transport facilities making it possible to draw on the experiences of diverse groups dealing with different types of impacts. Finally, senior management from Ambatovy and Sherritt International (the operator and majority owner) support the CIRDI project objectives and helped to ensure that key staff would be available to participate in the study.

Bulyanhulu
The Bulyanhulu Gold Mine, located in western Tanzania, is not generally thought of as being mired in conflict. Bulyanhulu did have a very conflicted beginning in the mid-1990s, and there have been troubles since then, but what made it interesting for the CIRDI project was its apparent ability to avoid escalating conflict. Events that might have been expected to spark a firestorm instead seemed to have resulted in stable and perhaps even positive outcomes. This suggested the potential to learn lessons about how the various actors in a mining context can keep conflict from degenerating and, ideally, how conflict can be made beneficial for all involved.

Haquira-Las Bambas
The original intention had been to examine the situation at and around the Las Bambas project, a copper deposit in the advanced construction phase, located in the Andean Highlands of central Peru, where there had been an episode of violent community conflict in 2015, after several years of alternating stability and simmering tensions. However, the field study team was advised not to work on Las Bambas due to continuing tensions in the area. Fortunately, management of the Haquira Project, an advanced exploration project situated less than 10 km south of Las Bambas, gave permission to study the social dynamics of this project. In the event, the close proximity of Haquira to Las Bambas and common involvement of numerous communities, groups and individuals facilitated an understanding of conflict dynamics affecting both projects.

San Cristobal
The San Cristobal silver, zinc, lead mine, located in the southern Altiplano of Bolivia, was selected because of evidence that the company and community had been able to restore high quality company-community relations following several episodes of conflict during its nine years of operation. It was anticipated that the field study at San Cristobal would throw light on how and why conflict could be transformed into positive outcomes for all parties.

CASE STUDY ANALYSIS
In the table below we compare each of the host countries in terms of key global indices of poverty, human development, governance effectiveness, political stability, rule of law and control of corruption.
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Comparison of Global Indices

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>POVERTY</th>
<th>HUMAN DEVELOPMENT</th>
<th>GOVERNANCE EFFECTIVENESS</th>
<th>POLITICAL STABILITY</th>
<th>RULE OF LAW</th>
<th>CORRUPTION CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bolivia</td>
<td>7.7</td>
<td>119</td>
<td>29.81</td>
<td>31.55</td>
<td>12.5</td>
<td>29.81</td>
</tr>
<tr>
<td>Peru</td>
<td>3.7</td>
<td>84</td>
<td>43.75</td>
<td>27.67</td>
<td>33.17</td>
<td>32.69</td>
</tr>
<tr>
<td>Madagascar</td>
<td>81.76</td>
<td>154</td>
<td>9.13</td>
<td>26.7</td>
<td>25.0</td>
<td>22.12</td>
</tr>
<tr>
<td>Tanzania</td>
<td>46.60</td>
<td>151</td>
<td>26.92</td>
<td>27.18</td>
<td>39.42</td>
<td>22.60</td>
</tr>
</tbody>
</table>

Poverty: Poverty head count ratio of $1.90/day (2011PPP) (% population); World Bank, 2014
Human Development: Ranking out of 188 countries, UNDP, 2014
Governance Effectiveness, Political Stability, Rule of Law, Corruption Control: Percentile Score out of 100, World Bank, 2014

In general, the indices are more favorable for the Latin American countries compared to the African countries, with the exception of political stability where the percentile scores fall into a fairly tight range. Bolivia exhibits the lowest percentile score in the area of rule of law. Madagascar is notable for its very high poverty levels and very low score for governance effectiveness. Madagascar and Tanzania exhibit comparable low scores for human development and corruption control. It is noteworthy that most of the indices for Madagascar have experienced a marked decline in the 10-year period from 2004-2014, reflecting, as noted previously, a significant deterioration in the political, economic and social conditions in the country, especially following the military coup in 2009.

The findings from the case studies are discussed below in terms of structural and contextual factors, conflict drivers and triggers along with the principle players involved. It is important to note that contextual factors and conflict drivers are interchangeable from one conflict case to another as already observed from the literature review and the quantitative analysis. Also, while the identified determinants are often broadly similar, they differ in detail as to how they are expressed in each individual case, in particular with respect to the specific behaviors of the players involved. These are key factors in developing an understanding of how and why conflict is unique in each individual case.

Structural Factors

Colonialism and Authoritarian Rule

All four case studies occur in developing countries that have been strongly impacted by a history of colonialism. While the specific experience of colonialism differed in each case, in particular in African versus Latin American countries, the common thread for the host societies was oppression, exploitation, subservience and varying degrees of loss of identity. The post-colonial era of these countries has been characterized by significant periods of political turmoil, authoritarian central governments, dysfunctional governance, weak economies, deep poverty, widespread corruption, ethnic rivalries and distrust of government, the realities and consequences of which still persist to this day. The political and social instability, needs and resentments that arise from these structural factors create a broad enabling environment for conflict and represent a complicated and challenging environment for resource development to occur.
It is noteworthy that the Apurimac region of Peru, in which the Haquira and Las Bambas projects are located, suffered from intense violence associated with Shining Path and conflict between this terrorist group and the army between 1987 and 1997. The legacy of this conflict for the communities has been a deep mistrust for outsiders, community fragmentation, displacements, and a tendency for violent actions in order to defend themselves against perceived threats.\(^{47}\)

**Neoliberalism and Democratization**
A broad but important distinction exists between the African and Latin American cases in terms of the extent to which neo-liberalism and democratization has taken root in government and society, which, at this point in time appear to be much more in evidence in Latin America as compared to Africa. This is not to suggest that it has always had a stabilizing effect in Latin American countries, in fact, in many cases the opposite appears to be true as discussed in more detail in our literature review. However, we suggest that it has had an important impact in enabling the politicization of concerns and their expression through organized protest, opposition and the use of conflict, particularly in rural areas where the benefits of increasing quality of governance and emerging democracy have been the weakest.

**Broad Behavioral Patterns Resulting from Fear and Oppression**
In the African cases of Ambatovy and Bulyanhulu, we observe broad patterns of passivity, fear of forceful repression from the police and/or the central government and limited experience and/or a reluctance for expressing feelings or politicizing needs in the form of organized opposition. In contrast, in the Latin American cases (Haquira-Las Bambas and San Cristobal), politicizing needs and expressing feelings through organized opposition are viewed by remote communities as a legitimate form of negotiation and gaining attention from authorities. Corruption adds a layer of complexity and confusion to already complicated situations and impacts all of the actors involved. In particular, it confounds transparency removing the clarity needed that would allow communities to make an objective assessment of whether or not they are being treated fairly. In that sense, corruption feeds resentments that in turn tend to fuel conflict.

**Contextual Factors**
In the following we describe specific contextual factors, all of which fall under the role of government and organized thematically for comparative purpose.

**Weak Governance and Economies**
All four countries are characterized by relatively weak economies and lack the capacity to provide adequate social services and infrastructure to most rural areas, including in the locations of the mining operations. Thus there is a deep dependency on the mining companies to provide for the social needs and welfare of local populations, accompanied by high expectations and high sensitivities to any interruption of those services and/or the sense that commitments are not being lived up to.

**Lack of Effective Strategies for Mineral Development**
In all three cases of Ambatovy, Bulyanhulu and Haquiea-Las Bambas, central governments made decisions to move towards economic development, focused on attracting foreign direct investment (FDI) and the
large-scale mining industry, but in the absence of (i) well-designed mineral development strategies, (ii) the administrative capacity and regulatory infrastructure to effectively govern and manage mineral development and (iii) adequate preparation of their societies for the impacts and benefits of FDI and the arrival of the large-scale mining industry. The same cannot be said for Bolivia where the mining industry has been a dominant feature of the economy since 1557, including in the department of Potosi, where the San Cristobal mine is located. Today the mining industry in Bolivia is a combination of state-owned companies, privately-owned companies and cooperatives, the latter comprising informal, small scale miners and miners laid-off from the state-owned COMIBOL mining company in 1985. Bolivian miners have played a critical role in the country’s organized labor movement and the cooperatives, with nearly 80,000 members represent a politically influential organization in the country today.

Decentralization
There have been moves to decentralize governance in all four cases, but with different approaches, varying degrees of success and with different consequences for the mining projects in each case. To briefly summarize; (i) in Madagascar (Ambatovy), decentralization is underway but proceeding slowly and as yet incomplete, (ii) in Tanzania (Bulyanhulu), decentralization commenced in 1999, as a 15 year plan to move political, financial and administrative functions to local government. This coincided with the construction and operation of the Bulyanhulu mine. For the most part and until recently, decentralization has manifested as a strengthening of central government control within the regions, with regional and local officials appointed by and reporting to the central government, (iii) in Peru (Haquira-Las Bambas) the central government transferred administrative and political powers to the subnational and local authorities but without appropriate resource allocations and capacity building at the subnational level, leading to dysfunctional governance and decision-making at the local level and the continuation of strong central government influence and decision-making at the local level, and (iv) in Bolivia, decentralization began in the 1950s, but really became effective in the early 1990s. By all accounts, the decentralization reform which took place at that time was impressive, resulting in a high degree of autonomy to municipalities, significant increases in investments into local regions, decrease in poverty and for the most part effective local governance with systems in place designed to reduce and prevent corruption. The San Cristobal operation benefited from the fact that decentralized government was functional. Mining royalties in the Department of Potosi were effectively employed for the provision of social infrastructure and services in the region.

Policy or Practices that Favour Resource Development
These create resentment in communities that can lead to conflict as at Bulyanhulu in the form of the forced displacement of artisanal miners, imposition of policy from the central government that precludes any discretion by local administrators, and a willingness in the past to use the police to restrain the local population from confronting the mine. Similarly, at Ambatovy the imposition of the will of those in power at the central government level has inhibited empowerment of local communities, who are left feeling that they are not getting what they expected and that almost no-one is on their side to help them engage with the company. At Haquira - Las Bambas, policy is imposed directly from the center over a weak regional and local government. More recently, local communities have been restrained from organizing rallies, marches, demonstrations
or blockades to promote their position on issues due to a 2015 law that renders these actions effectively illegal. Community leaders appear willing to defy the law, risking lengthy prison sentences. In the case of San Cristobal, the central government administered compliance with the regulatory regime governing mining, but it was the community, working with the company and local authorities, that decided whether or not to have mining, shared key decisions on how mining would be conducted and the specific conditions of a necessary community relocation.

**Severed Title**

In all four of the countries where the field case studies are located, legal title to ownership or access the land surface and sub-surface mineral resources are subject to separate, different legal regimes. As a result, the people who own, occupy or use the land surface do not ‘own’ the mineral resources beneath. At Bulyanhulu, severed title was one of the factors that provided the central government with a rationale for evicting local artisanal miners from the land (in which they had no legal title), when the company arrived to start exploration. The forced displacement was and is seen by the miners as unfair and unjust. This sentiment is sustained by the reality that other artisanal miners continue to exploit gold resources at nearby locations while the displaced miners are unable to access their former work sites. The separation of subsurface and surface title also formed part of the legal framework that allowed the Peruvian government to permit changes to the Las Bambas project without reference to the local population living in the area.

A reality of separate or severed title is that the mining company holding title to mineral resources is obliged to engage the surface land owners to gain access for exploration, development and operation of a mine. Conversely, the owners of land surface rights are in a position to require compensation and other benefits from the mining company in return for access to ‘their’ land. The risk of conflict increases whenever the parties fail to relate to each other in a manner perceived to be mutually beneficial.

**Low Levels of Trust**

A low level of trust in government can result from a number of factors as discussed previously, including a history of oppression and/or a lack of effective presence of government including the absence of the rule of law. A low level of trust in government to represent the interests of local populations noted at Haquira-Las Bambas, Ambatovy and Bulyanhulu, causes communities to address the companies directly to satisfy expectations, demands and grievances that are not necessarily the responsibility of the relevant company. When the company response does not meet the expectations of the communities, which is often viewed by communities as unfulfilled commitments, community frustration increases and tensions rise with tendency towards conflict as a means of resolving issues. In marked contrast to this, when conflict erupted at San Cristobal in 2011, the community and the company invited the central government to intervene. The central government organized a dialogue table and facilitated a resolution to the conflict and the signing of a new agreement between the communities and the company.
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Conflict Drivers

Companies as Conflict Drivers

Company policies, actions and inaction of note linked to conflict manifest as follows:

Non-compliance with commitments:
As described above, low levels of trust in government leads to high dependency and expectations by communities on local mining operations and thus highly reactive response to the perception and/or reality that company commitments have been broken. As is evidenced by the initial phase of the conflict at San Cristobal in 2011, a failure to deliver on commitments made to the community led rapidly and directly to open conflict. Similarly, at Las Bambas, what was seen as an arbitrary change in the agreement between the company and local communities was a key precursor to the 2015 conflict that escalated to violence with fatal consequences. At Ambatovy, a community was relocated to make way for the tailings facility but has not received title to the lands they have been resettled on due to the presence of competing title claims, creating an atmosphere of uncertainty and insecurity. At the same time, those holding prior title documents have taken their claim to court, channeling conflict through the legal system. In addition, the resettled complain that the company has not kept promises made on the construction of infrastructure, quality of land for cultivation and also houses. There is animosity towards the company; tensions (latent conflict) are evident. At Bulyanhulu, mine managers that made commitments to the community, but did not deliver on these commitments, were seen as acting in bad faith and correspondingly disliked, justifying the ongoing passive-aggressive, non-cooperation by community members.

Managing expectations:
Tensions rise and conditions become openly conflictive when community expectations are not well managed by the mining company. At Ambatovy, the communities are not getting what they expected, and want to know why. At Bulyanhulu, there is a general feeling of ‘you owe us’ towards the company and an expectation that the company will look after them. However, with the passage of time and mine closure now on people’s minds, tensions are rising as these expectations have not yet been met and a sense of ‘not being listened to’ adds to the frustration. At Haquira – Las Bambas, communities have high expectations of gaining agreements with the companies that deliver benefits equal to, but preferably better than, those already in place with the Las Bambas Mine. Moreover, these communities are prepared to use conflict as a means of bringing pressure on the companies to deliver.

High risk at the construction phase:
At Ambatovy, relationships with the communities were heavily influenced by the lead contractor during construction. The management approach employed at that time was transactional in nature and characterized by providing temporary benefits aimed at deferring problems in the short term with little or no focus on finding lasting solutions. The contractor’s presence quickly faded when the mine was handed over to the owner/operator, who now struggles to establish a sustainable basis for relationships. Similarly, resolving grievances concerning compensation to families and individuals impacted negatively by pipeline construction was initially conceded to a third party. The net result is to create a distance between the owner/operator of the mine and the affected population creating confusion, which is amplified when the owner/operator introduces policies and procedures that are different from the contractor. At San Cristobal, a new
management team was installed to supervise construction of the mine, different from the one that had built a trustful relationship and negotiated agreements with the local communities. The project was shut down by community conflict twice due to the company a) failing to honor commitments, and b) actively breaching a commitment to stay within the agreed upon construction area. In this case the conflict was resolved and following construction a new team was introduced to operate the mine, reestablishing stability and positive relations with the communities.

Area of impact and distribution of benefits:
Often times an area of impact is established around a mine in order to provide a rationale for the distribution of benefits. As in the case of Haquira-Las Bambas, the resulting asymmetry of benefit distribution can be experienced by communities as unfair, creating an environment of fragmentation and competition among them and contributing to an increase in the risk of conflict. This was also an issue that arose during construction of the mine at San Cristobal, focused on employment. However, the communities involved negotiated an approach to prioritizing employment with the company that was accepted by all the parties involved. The company later made arrangements with regional organizations that facilitated community development programs in communities up to 100 km from the mine.

Transactional relationship with communities:
Ambatovy, Bulyanhulu and Haquira are all characterized by episodes (of varying duration) when the relationship with host communities is essentially transactional. Under these circumstances, the company provides benefits that serve short term objectives, often set by the demands of the community. Very largely, this is reactive to circumstances and seeks to contain the community within the status quo. There is a tendency, however, as seen at Haquira, for this to lead to escalating demands and the use of conflict as a tool in negotiating a ‘better deal’. The lesson that emerges from the San Cristobal case is that while transactional negotiations with communities are at times necessary, their potential negative effects can be significantly diminished if they are conducted in the context of a positive, trustful relationship.

Role of companies versus role of government:
There is evidence that at Haquira – Las Bambas, mining companies have addressed the most direct, short term issues and leave the government to deal with the underlying fundamental issues; tensions persist because these deeper issues remain unresolved. At Bulyanhulu, the company appears to accept the historical government policies of facilitating forced displacement of artisanal miners and of local government officials and the police maintaining close control over the community. Similarly, at Las Bambas the company has apparently welcomed the use of the police to confront the communities and with the 2015 law introduced by government that effectively makes any open community activity that challenges a mining company as illegal and subject to severe penal consequences. At San Cristobal the roles of the central and municipal governments, the company and the communities were relatively clear and generally adhered to, and thus contributed to stability as opposed to contributing to conflict.

Policy of containment:
The apparent policy of containment – giving people enough to keep them happy – employed at Bulyanhulu, and Ambotavy, is workable in the short term, but does not remove the root causes of tensions that have a high
potential to lead to confrontational conflict in the future. In contrast, at San Cristobal, the communities were empowered by the company and shared in decision-making, and the respectful relationship was facilitated by the excellent work of the company community relations team. In this case the communities looked at their relationship with the company as a marriage and the mine was their baby. In this way they expected occasional conflict as a natural part of the relationship but were committed to maintaining the relationship and working through any such conflict.

**Forced displacement:**
While 20 years ago government authorized and directed the forced displacement of artisanal miners at Bulyanhulu, community animosity is directed firmly at the company (‘you stole our gold’) to which is added resentment that the company ‘does not listen to our concerns’. A similar situation is found at Ambatovy where the company has enabled more effective implementation of environmental policies for conservation and biodiversity protection, thus forcing communities around the mine to cease traditional practices on ‘their’ land. The resulting loss of cultural identity and perceived link to the death of an individual has created deep resentments towards the company that foster a conflictive, albeit passive-aggressive, posture among community members.

**Inconsistent management:**
At Bulyanhulu, the Mine Manager has considerable autonomy to develop community relations policy and practice at the local level. Frequent changes in Manager, each bringing different policy and practice, has contributed to the conflictive environment at the mine. While one manager is remembered as being clear, consistent and perceived as fair by the community, others are spoken of as promising much and delivering little or nothing. At Ambatovy and San Cristobal there was a change in management and approach to community relations at the construction stage as described above, resulting in discontinuity of programs and confusion of the local communities, which has contributed in both cases to rising tensions and in the case of San Cristobal, conflict outbreak.

**Local hiring:**
Foreign companies working in developing countries are encouraged to employ as many local people as possible in their operations. However, there are potential challenges associated with hiring people from local communities into positions where they need to engage with other members of these communities since this can result in an escalation of conflict as opposed to diminishing it. Problems can arise from pre-existing ethnic rivalries, conflict among families, social structures within communities and jealousies. Manifestations of this were observed at Ambatovy and Bulyanhulu. At Ambatovy, locals complain about Malagasy mine staff being egotistical and condescending. At both Ambatovy and Bulyanhulu there have been accusations of favoritism in the hiring practices of locals who work in the human resource departments of the mines.

**Communities and Government Agencies as Conflict Drivers**
Communities and government agencies are also implicated in the generation of conflict drivers including in the areas of:
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**Land:**
We find that land issues involve government, companies and communities in the case studies we examined. Land issues are implicated in active conflict at Ambatovy where people have been prevented from pursuing traditional practices in specific areas defined by the company for the purposes of forest regeneration and biodiversity conservation. Land is also at issue where soil erosion resulting from pipeline construction caused widespread rice field damage. And ownership is a source of conflict at Ambatovy where a community has been resettled on land that others claim they own and the matter has now been taken to court for resolution. Access to land for artisanal mining was central to the initial conflict at Bulyanhulu and led to the forced displacement of the miners. It is the forced displacement and associated resentments that have become a lingering legacy issue in company-community relations. At Haquira – Las Bambas, unsettled land ownership and boundary issues persist as a continuing background frustration, contributing to inter-community conflict and being used by some communities to improve their position with respect to the distribution of company benefits. At San Cristobal, the local population largely welcomed mining and the key issue is the form and scale of compensation for land rather than any intrinsic aspects of the land itself. For example, the company recognized a communal usufruct right to the land required for the mine and associated infrastructure and negotiated compensation with the community on that basis.

**Precedents:**
At Haquira, community aspirations are strongly influenced by the benefits gained by other communities elsewhere in Peru and in the district, notably those with agreements with Las Bambas. These represent minimum demands of the company and the community is willing to use conflict as a tool to force the company to deliver. Other communities, outside the area of influence of Las Bambas and Haquira as defined by the companies, want a direct share of the benefits from mining and are prepared to use conflict as a means of advancing their interests. Interestingly, the companies involved in these two projects have not collaborated in their community engagement and development strategies even though the projects are less than 10 km apart and involved the same communities.

**Community agreements:**
Community agreements are clearly useful in creating a structured relationship between company and community that favors stability (San Cristobal, Las Bambas). There are, however, circumstances where community agreements can be the source of conflict, for example:

- When the company fails to comply with written commitments, as at San Cristobal and Ambatovy;
- When the community employs conflict as a tactic to advance its position when negotiating an agreement with the company, as at the Haquira and Las Bambas mining projects.

At Bulyanhulu and Ambatovy the companies signed agreements with the central government but not the community. The community does not know what that agreement requires the company to do and there is considerable confusion and misinformation about which community projects are obligatory versus voluntary.

**Community capacity:**
Limited community capacity renders the community weak and frustrated leading to a passive/aggressive
form of non-cooperation that leads in-turn to persistent low-level conflict. Capacity deficiencies include:

- Functional capacity (leadership, organization) as at Ambatovy and to some extent Bulyanhulu;
- Technical capacity (knowledge of mining) as at Ambatovy.

Such frustration cannot be contained indefinitely. There is a high risk that a ‘tipping-point’ will be reached at some time when conflict suddenly erupts as people seek to release their pent up frustration. On the other hand, it is the high level of both functional and technical capacity at Haquira-Las Bambas and San Cristobal that enables the communities to organize and use conflict as a tool before or during negotiations to advance their interests.

Cultural characteristics:
Two contrasting cultural characteristics linked to conflict are found in the case histories:

- An aversion to controversy and deference to authority reported at Ambatovy and Bulyanhulu, which restrains the population from openly confronting the negative aspects of the situation they find themselves in. However, there are limits to this passivity; local informants at Ambatovy expect that confrontational conflict will emerge at some point. A vocal minority around Bulyanhulu threaten that they are on the verge of resorting to violence in pursuit of their demands.
- A predisposition to use conflict as a tool in negotiations, as seen at Haquira-Las Bambas. Such predisposition may be a combination of cultural factors and recent political developments in the country including open conflict between Shining Path and the army in the region, and neo-liberalism and nascent democracy which have opened the doors to freedom of expression.

Ethnic tensions:
Such tensions are reported at Ambatovy where the autochthonous population resents the presence of members of other Malagasy tribes seen as having been given the ‘best’ jobs. Similarly, the arrival of large numbers of in-migrants at Toamasina, where the population has more than doubled since the start of construction of the processing plant, has created a potentially confrontational ‘us and them’ situation. At Bulyanhulu, the ‘us and them’ attitude of the local population is due in part to resentment that the mine, owned by foreigners, is taking away what the local population consider to be ‘our Tanzanian gold’.

Triggers
Conflict needs a ‘trigger’ or tipping point to precipitate a shift from latent to active confrontation. There are a large variety of circumstances and events that can act as triggers for conflict outbreak once the structural and contextual factors and the conflict drivers have all combined to form an environment conducive to escalating tensions and unresolved issues. Once such an environment has been created, the circumstances or events that can trigger an outbreak of conflict are highly variable, emotional, often unpredictable, but in some cases premeditated. In the present study these are shown to be either:

- Emotional, which can be a very rapid, spontaneous response to a specific event, or the exhaustion of tolerance towards an ongoing situation; or
b. Political, which is a conscious, planned response to the situation and can include a proactive approach as in the use of conflict as a tool for gaining the attention of and precipitating negotiations with government and/or the company. For the most part these types of triggers are linked to local political agendas.

At Las Bambas in 2015, a protest march was organized allegedly because some of the terms of the Environmental Impact Assessment (EIA) had been changed by agreement between the government and the company, but without sharing it with the communities (changes to the EIA did not require consultation with the community unless they implied a certain level of impact). Others interviewed about the event say that the protest march was not really about the EIA but due to dissatisfaction about employment levels. The protest got out of control (some say sparked by participants intent on violence), provoking an altercation between police and protesters and resulting in 3 deaths and 15 injuries. The trigger is not clearly identified in this case, however, the tensions that had escalated over time in the area made an outbreak of violence almost inevitable.

At San Cristobal in 2000, there had been delays to construction of the mine due to a global downturn in metal prices. The delays together with a perceived lack of compliance by the company with a negotiated agreement led to local protests and blockades by community members. Similarly, in 2011, tensions rose because the communities again felt that the company was guilty of a lack of compliance with a negotiated agreement, including the provision of improved health facilities. The escalation into conflict was triggered by the death of a well-respected senior community leader and mine worker whose request to use the company’s ambulance to take his ill child to the nearest hospital was denied. Instead, he was provided with a driver and an old car. On the way to the hospital with his child, the community leader died as a result of a car accident. The feeling of betrayal and the loss of one of the most respected community leaders created an enormous emotional impact, resulting in an 11 day strike, blockade and mine shutdown.

In 2007 at Bulyanhulu, 2000 miners went on strike, supported by community protestors. In this case the strike was a premeditated act by the union, which perceived that it was losing power under new management of the mine. Community protestors felt that the benefits and community development projects were diminishing. The mine was shut down for a week, strikebreakers were beaten and their families were threatened. In the end, more than 1,000 people were fired for not returning to their jobs and the union went into a long-term decline.

Secondary Players
In all four case studies, the main players in conflict associated with mining were government agencies, companies and communities. However, key points of interest regarding other players may be summarized as follows.

a) Civil society is considered generally weak in Madagascar and has not effectively filled the role of representing the concerns of society. There is a workers union associated with the Ambatovy operations, but it has only a small membership and lacks credibility at this time. The Catholic Church, with the Catholic Bishop of Moramanga as its main spokesperson, has assumed a lead role in holding
the company accountable for any harm done and protecting the rights of the people. According to some observers, the fact that the Catholic Church has taken the lead in holding the company accountable seems to have diminished the opportunity for the company-community relationship to become more resilient to conflict.

b) As in Madagascar, civil society is weak in Tanzania and has not been an influential factor in the history of Bulyanhulu. As previously described, the operation began with a generally positive relationship between the company and the union and there was a period of genuine shared decision-making between the workers and the company. However, following the strike of 2007, the union lost much of its power and influence.

c) In Peru, civil society is generally well-organized and influential as they are in the region of Haquira-Las Bambas. These organizations used to take the lead in representing the rights of the local people. However, in recent times local people have formed their own local ‘civil society groups’ and taken this role into their own hands. Their priorities are achieving fair distribution of benefits among communities inside and outside of the area of direct influence of the projects and to ensure protection of the environment. The traditional civil society organizations are supporting these local groups.

d) In Bolivia, civil society has a presence but not as strong and influential as that in Peru. At San Cristobal, local communities have been empowered by the company and the agreement negotiated with the company. The deep commitment to that relationship and the agreement is primary and local communities have discouraged the intervention of civil society organizations into local affairs. One result of the 2011 conflict and its resolution was the rise in power of the workers union at San Cristobal. The community members feel that the union has positioned itself in between the communities and the company and diminished the close relationship that existed previously. The company looks on the emergence of the union as a positive development that balances the relationship with the community.

SUMMARY OF KEY OBSERVATIONS
1. The host countries of all of the case studies experienced the impacts of colonialism, followed by a history or authoritarian, oppressive governments, creating a broad enabling environment for weak governance, political instability, corruption, lack of trust of government, ethnic rivalries and dependency. The history of colonialism is much more recent in African countries compared to Latin American countries. Also neo-liberalism and the transition towards democracy have been more prevalent in Latin American countries. The explanation for an apparent paucity of incidents of prolonged, organized opposition to, and collective action against mining in African countries as compared to Latin America, most likely reside within these broad structural factors.

2. The two Latin American case studies explore situations that are positioned towards the two ends of the conflict spectrum and present a very interesting comparison. Haquira-Las Bambas is situated at the pole characterized by organized protest and violence whereas San Cristobal is situated at
the other pole characterized by a strong, positive relationship, resilient enough to transcend the occasional conflict outbreak and maintain stability. The two African case studies (Ambatovy and Bulyanhulu) are positioned somewhere in between these two extremes and present conflict which has been contained, at least for the time being, and is expressed in a latent or passive aggressive manner. It has the potential to either erupt in a negative and possibly violent manner or transform into a more positive situation, depending on the behaviors of the players.

3. The presentation and discussion of conflict determinants in the form of structural factors, contextual factors, conflict drivers and triggers provides a useful, systematic approach to analyzing and understanding the conflict processes and the involvement of the main players implicated in the four individual case studies.

4. Contextual factors attributable to governments, primarily central governments, but also regional and local government agencies, fall under the following categories:
   a) Lack of Effective Strategies for Mineral Development: including poor preparation of society for FDI and the impacts of the large-scale mining industry, accompanied by a lack of governance capacity. The exception to this is the San Cristobal mine in Bolivia located in the department of Potosí, which has experienced a long history of mining.
   b) Decentralization programs: that have been largely unsuccessful and have failed to resource regional and local governments adequately. Again, the exception to this is Bolivia, which has experienced a successful decentralization process, with the San Cristobal project as a beneficiary.
   c) Policies and Practices Favoring Resource Development: at the expense of local populations, causing resentment against host governments and foreign mining companies and exacerbating lack of trust in government. A case in point occurring in all four field investigations is the severed title of the surface of the land from the sub-surface (including mineral resources) and the potential for conflict between those who own or occupy surface rights and those who have been granted rights to the mineral resources.
   d) Low Levels of Trust in Government: combined with a lack of effective, constructive presence of government, causing an increased focus and dependency on companies, companies attempting to fulfill the role of government and increasing the pressure and associated risk on the company-community relationship.

5. The four case studies confirm the observations from the literature survey that structural and contextual factors are primarily the role of government and while the government’s role extends into the areas of conflict drivers and triggers, conflict drivers and triggers are mostly the purview of companies and communities. Conflict drivers observed in the four case studies fall under the categories of:
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a) Non-Compliance With Commitments: whereby the perception and/or the reality of communities is that companies have failed to comply with agreements.

b) Managing Expectations: whereby high expectations by communities combined with high dependency focused on mining companies, leads to heightened risk of frustrations and conflict outbreak.

c) High Risk at the Construction Phase: arising from the combination at this stage of a peak in expectations from communities (especially with regards employment), the focus by companies on meeting construction budgets and deadlines, the insertion of special management teams during the construction phase and a tendency for construction contractors to adopt transactional approaches to social responsibility.

d) Area of Impact and Distribution of Benefits: involving asymmetry of benefits distribution among communities located within and outside of the ‘area of direct impact’ of the mining operation, and promoting competition and fragmentation among communities.

e) Role of Companies Versus Role of Government: involving lack of clear resolution of the roles of government versus companies combined with lack of effective fulfillment of those roles.

f) Policy of Containment: in which the social investment programs of companies are designed to placate local people but not to transform the relationship into one of trust and peace-building.

g) Forced Displacement: whereby the objectives of the company are placed ahead of those of the community without proper consideration of the consequences and impacts on the community.

h) Inconsistent Management: manifests as frequent turnover in management or insertion of special management teams at key points in the mining cycle (e.g. at the construction phase) causing discontinuity of social responsibility programs and issues with community expectations and commitments.

i) Local Hiring: hiring of locals into key positions, which provide avenues for the expression of pre-existing ethnic tensions and rivalries in the form of competition, favoritism and resentments.

j) Land Issues: land is a fundamental asset for local people with respect to their place of residence, their means of livelihood and often embodying spiritual values. Conflict arises as a result of relocation, environmental damage to land and water and unsettled land ownership and boundary issues.

k) Precedents: in which agreements, especially those involving benefits, form a precedent for other communities to either achieve or improve upon, creating an escalating problem for companies and/or exacerbating asymmetry of benefits distribution among communities.
I) Community Agreements: useful for institutionalizing roles and responsibilities between companies and communities, agreements can also be a catalyst for conflict, when, for example, a community decides to use conflict as a negotiating tactic and in circumstances where a company is perceived to have failed to meet its commitments.

m) Community Capacity: limited community capacity renders the community weak and frustrated leading to passive/aggressive forms of non-cooperation that lead in-turn to persistent low-level conflict.

n) Cultural Characteristics: two contrasting cultural characteristics give rise to different manifestations of conflict. In the two African cases an aversion to controversy and deference to authority leads to passive aggressive expressions of conflict, whereas in the Latin American cases, a predisposition to conflict leads to outward manifestations of conflict including organized protests and in some cases expressions of violence.

A NORMATIVE MODEL FOR MINING-RELATED CONFLICT
The intention here is to focus our analysis on the dynamic between community and company, acknowledging that their actions and behaviors are strongly influenced by the structural and contextual factors and the resulting conflict drivers that define their environment. For the purpose of the present analysis, normative components of the conflicts encountered in the four field studies are defined as those common dependent variables expressed as behaviors that become avoidable with changes in relevant independent variables identified above.

In all of the case studies, conflict arises as either an emotional or political response to temporal conditions experienced by the local populations. For example, at San Cristobal, open conflict erupted initially as an emotional response to a death perceived to be the consequence of non-compliance with commitments made by the company. Subsequently, community leaders took the political decision to expand the rationale for conflict by invoking other complaints against the company. Similarly, at Haquira-Las Bambas and the surrounding communities, community leaders are prepared to take the political decision to escalate conflict as a means of advancing their negotiating position with the mining companies: effectively negotiation through confrontation. At both Ambatovy and Bulyanhulu, the deep frustration felt by local populations at the situation they find themselves in is manifest in passive/aggressive non-cooperation with the company: an emotional response. At San Cristobal and Haquira - Las Bambas, the local populations clearly see conflict as having the potential to force change in the posture of the companies, either directly or through intervention by government, and gain a better outcome for themselves. In contrast, at Ambatovy and Bulyanhulu the local populations feel a reluctance and inability to exert sufficient influence on either the company or government to effect the changes that could lead to an improvement in the present situation. These observations can be reframed in terms of two normative components for mining related conflict, as observed at the four field studies, which are comparable to findings reported by Lyra et al (2014) as:
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a) The extent to which the local communities believe that their interests are respected or protected. In other words, the extent to which they feel that they have what they need or deserve from the mining operation.

b) The degree to which the local communities believe that they can influence outcomes through conflict within the evolving context of relations with, and reactions from, the company and government authorities. In other words, that through conflict they can gain what they want or need from the presence of a mining operation.

The two normative components identified above can be portrayed graphically as orthogonal axes along which the relative intensity of belief that interests are protected/respected on the X axis and ability to influence outcomes on the Y axis; both with ranges from low to high, as shown in Figure 5. The resultant model has four quadrants (Q1 – Q4 in Figure 1) with distinct dynamics that can be related to different expressions of conflict and non-conflict. These are:

i) Q1 – Low protection and low ability to influence: communities in this quadrant experience frustration and may be, at least temporarily, resigned to the situation. Conflict arises in the form of passive/aggressive non-cooperation. However, there is a high potential for explosive confrontation as tolerance is exhausted and frustration boils over into conflict. Emotion drives conflict.

ii) Q2 – Low protection and high ability to influence. This is the domain of activism and also the application of conflict as a tool to provoke change. While some conflicts in this quadrant are driven by emotion, there is also a high potential for politically driven conflict.

iii) Q3 – High protection and low ability to influence. Passive acceptance and tolerance will be the dominant posture for communities experiencing this combination of circumstances. Emotions are held under control; there is no space for political action.

iv) Q4 – High protection and high ability to influence. The optimum situation from a community point of view and highly favorable for long term constructive relationships with mining companies. This is the domain of dialog and cooperation between community and company to resolve issues in ways that are mutually satisfactory.
Further working interpretations can be drawn from the model. These include:

- The left hand side of the diagram in Figure 5 is also the domain where there is an absence of common goals shared by company and community. Wherever communities believe that their interests are not protected/respected they will resist and, whenever possible, seek to make changes: conflict is one avenue to achieve these ends.

- The right hand side of the diagram is also the domain where there is evidence that mining company and community share common goals and of coexistence between mining projects and host communities. The nature of this co-existence varies from passive acceptance (Q3) to active collaboration (Q4), with the latter situation most desired by communities.

- The lower half of the diagram is the domain where the policy of active containment prevails and decisions as to social investments and other benefits for the community tend to be made unilaterally by the company and/or government.

- In the upper half of the diagram, the communities are engaged with the mining company and/or government in various ways (from open conflict to active dialog and collaboration) and are potentially able to exert significant influence on outcomes that affect them.
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Application of the Model

The development of this model is preliminary at this stage but it is instructive to explore its relevance and application, employing the four case studies, as set out below.

Ambatovy

At Ambatovy, the various communities directly involved with mining operation are dispersed over a large area and have endured a variety of negative experiences; they are not getting what they expected. They ‘feel’ a power differential that renders them weak in relation to the company, which, coupled with a cultural deference to authority places them clearly in Q1 of the model. The company recognizes the problems created earlier in the life of the project, notably during construction, but is finding it difficult to effect change and move from a reactive to proactive posture. For the present, the situation is contained. It is to be hoped that the company will be successful in moving the communities to the right into Q3, where they would start to share objectives, and over time into Q4. Alternatively, frustration could continue to build until tolerance is exhausted, at which point there could be a sudden emergence of active, possibly violent, conflict.

Bulyanhulu

The Bulyanhulu Mine is burdened by legacy issues created early in the life of the project. The forced displacement of artisanal miners and resultant lingering emotion that the mine ‘stole our gold’ is a dominant factor in a relationship that has never been genuinely stable or positive for an extended period of time. This, together with knowledge that the central government has in the past used force to support the mine against the community and an aversion to conflict, places the community in the lower half of the model. The company, for its part, has implemented a (unwritten) policy of containment by providing the community with enough benefits to keep the population ‘quiet’. Of significance is the response of the population to changes in senior management at the mine and perceptions of fairness in the way individual managers have handled relations with the community.
Overall, Bulyanhulu sits on the dividing line between Q1 and Q3 sliding to the right and left depending on the actions of the mine manager. Recent changes in government policy involving decentralization of power to the regions have provided the opportunity for: a) constructive initiatives by local authorities that could lead to improved company-community relationships; and, b) created the potential for local political opportunism that could have a destabilizing influence. The ultimate outcome may well depend on whether or not the company is willing to take the initiative in improving relations with the community. In the absence of an active initiative by the company the situation could rumble on indefinitely, although tolerance is not infinite and conflict could erupt in response to an action (or inaction) of a mine manager perceived as ‘unfair’ by the community.

**Figure 7: Normative Plot for Bulyanhulu**

**Haquira-Las Bambas**

The situation at Haquira – Las Bambas is complex because of the multiple projects and players involved. Overall, however, it is possible to use the model to explain much of the dynamic observed in the field study. At Haquira, the project is presently on hold and the four host communities are without a contract with the company. Looking forward, despite resentment towards the position of government, the population wants a contract and has high expectations based on the benefits obtained by communities impacted by the Las Bambas mine. Moreover, some community leaders have given notice that they are prepared to employ conflict as a tool in negotiations with the company, as they have done in the past, placing Haquira in Q2.

At Las Bambas, the seven host communities and company had been in violent conflict in September, 2015, two months prior to the site visit, following a multi-year history of alternating relative calm and escalating tensions expressed as protests, blockades and kidnappings. The conflict outbreak in September had become complex with multiple aspects, but could be traced back to the reaction of the local population to what were perceived to be arbitrary and unsympathetic actions by the company and government that disadvantaged their situation. Given the ‘successful’ relocation\(^{10}\) of Fuerabamba and history of negotiation (albeit at times through confrontation) and relative stability created by formal agreements, it appears that Las Bambas was
previously situated in Q4 close to the boundary with Q2 and subsequently moved deep into Q2 pending resolution of the conflict. The long-term history of Las Bambas may be described as a back and forth movement between Q2 to Q4.

The twenty-two communities situated outside the area of influence presently defined by the companies are feeling the negative effects of mine development and want secure access to benefits through their own signed agreements with the companies. To date the companies have refused to entertain these communities, as has the government. Tensions are building and the threat of open conflict rising. These communities appear to be sited in Q2, close to the boundary with Q1.

The situation is further complicated by the law passed by government in 2015, which effectively renders participation in a demonstration, blockade or protest a criminal offence. As a consequence all of the communities feel deprived of access to remedy the situation and victimized by their own government. Frustration is evident as is a willingness to break the law in order to advance their cause. Open confrontation with at least some of the twenty-two communities outside the present negotiating envelope appears to be inevitable under the present circumstances, with arrests and injuries (potentially deaths, as has occurred in the past) leading to further anger, frustration and polarization.

Figure 8: Normative Plot for Haquira-Las Bambas

San Cristobal

From the initiation of exploration, the company and community have considered each other as relative equals and successfully negotiated contracts that form the basis of the long-term relationship. Conflict occurred initially in response to an emotional trauma that was linked, in the collective mind of the community, with non-compliance with written commitments made by the company. Escalation of the conflict and counter action by the company led to a stand-off followed by a negotiated settlement and a return to a changed, but stable
relationship based on mutual respect. The position of San Cristobal is firmly in Q4.

The future looks positive for company and community, disagreements (even conflict) could occur in the future, but provided both parties maintain a respectful dialog they will be able to resolve their differences through direct negotiation.

The available information provides evidence for two normative characteristics of community-mining company conflict, common to all four of the field case studies:

a) The perception by the community of the degree to which their interests are protected/respected (i.e.; they get what they want/need from the mining project); and,

b) The perception by the community of the degree to which they can influence the behavior of the company and/or government (i.e.; get what they want/need from the mining project).

This can be presented graphically as a model that comfortably explains the features of community-mining company dynamics such as resistance, coexistence, containment and engagement reported in all four of the case studies. The model potentially provides a tool for analyzing community-mining company conflict and planning how to avoid or resolve a conflict. Further testing in other conflict situations is required to establish the validity and utility of this model.

In contrast, San Cristobal provides evidence that it is possible to reduce the risk of conflict and render the community-mining company relationship resilient; able to recover from conflict. Starting early, building a relationship based on respect around a negotiated agreement with a capable, empowered community created a sense of partnership in the mining project. When conflict occurred there was mutual willingness to seek a resolution that would sustain positive coexistence between the parties. Whilst there were winners and losers, all wanted to find a solution to the conflict.

![Figure 9: Normative Plot for San Cristobal](image)
Chapter 5: Study Observations and Conclusions

5. STUDY OBSERVATIONS AND CONCLUSIONS

As set out in the introduction of this report, the purpose of this research project is to delve beneath the surface manifestations of conflict related to mining activities in order to develop a deeper understanding of their nature and uncover their root causes, systems and pathways. We believe that a more systematic understanding of conflict will help those involved to apply more effective preventive rather than reactive measures and to further improve approaches to management, mitigation, resolution and transformation.

This report is preliminary in nature and describes the observations resulting from Phase 1 of our study, including a literature review, the initial findings of a global, quantitative analysis of reported conflict incidents and the completion of 4 out of a planned 18 field-based case study investigations. The key observations set out below are suggestive rather than conclusive at this point in time. Expansion and verification will require the additional research and deeper analysis planned for Phase 2.

In the introduction to this report we posed a series of questions that helped to frame our research objectives. We believe the answers to these questions are fundamental to understanding conflict associated with mining. In the following we have documented our preliminary findings following the major themes embedded in these questions.

KEY OBSERVATIONS

Broad Patterns

1. There has been a significant increase in conflict incidents associated with mining operations around the world during the period from around 2000 – 2013. This trend appears to correlate with 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 and communication, grievances against rising inequalities and disaffection towards established political elites.

2. The documented rise in conflict incidents associated with mining over the period 2002-2013 coincides with:
   a) an unprecedented increase in the demand for and prices of minerals and metals resulting in a five-fold increase in global investment activity in exploration and mining and
   b) a general increase in the number of conflict incidents associated with environment and land issues, with an estimate of 150 of a total of 908 deaths attributable to extractive sector conflicts (mining and oil and gas).

3. Analyzing the conflict incident data against global mining activity (employing annual global exploration expenditures) suggests the possibility of an inverse relationship between conflict...
frequency and expansion or contraction of the industry during the period in question. As access to capital and industry activity levels rise, conflict incident frequency per unity of industry activity declines and vice versa. It is commonly observed that as a company’s fortunes (usually determined by access to capital) rise and fall, so do the quality and the survivability of their commitments to local communities. However, establishing this as a factor in the relationship between conflict incident frequency and industry activity described above will require further analysis. This is an important aspect to pursue since these trends are suggestive of a general dependency by local communities on company financial and social programs in the absence of government and thus the vulnerability of communities to the inherent risks associated with mining projects and resource industry cycles.

4. A compilation and analysis of 167 conflict incidents documented in 2012 and 2013 indicate that the majority of conflicts incidents occurred in Latin America (46%) followed by Africa (24%) and then Asia (17%). These relative proportions correlate with the level of industry activity reported for these regions in 2013, with Latin America at 29%, Africa 14% and Asia 9%. The most conflict prone countries were South Africa, Mexico, Peru, Chile, and Guatemala.

5. Our collective observations suggest that escalation of tensions into organized opposition to mining along with expressions of violence are rare in African countries compared to Latin American countries. The explanation for these differences will require further research planned for Phase 2 of this study, however, we suspect that they are related to broad structural factors characterizing the history and social structures of the two regions including their experiences with colonialism, the rise of neoliberalism in Latin America and the tribal systems that characterize most African nations.

6. The 167 mining related conflict incidents recorded in 2012 and 2013, involved mining companies headquartered in 33 different countries. The top country by a significant margin is Canada (30.3%), followed by the U.S. (8.6%), Australia (7.6%), South Africa (7.6%), and the U.K. (7.6%). The figure for Canada is not surprising given the long-term, dominant presence of Canadian mining companies worldwide.

A SYSTEMATIC APPROACH TO UNDERSTANDING THE CONFLICT PROCESS

7. We have adopted a broad definition of conflict as ‘the interaction of two or more parties with perceived incompatible goals, who engage each other through a range of practices including dialogue, persuasion, negotiation, arbitration, legal action, protest, intimidation and physical violence’. We recognize conflict is a normal dynamic in human relationships and behavior, which, depending on how it is managed can have negative or positive outcomes for the parties involved. Likewise, and given the nature of mining and its inherent impacts, the potential for conflict always exists and should be considered a normal aspect of the relationship between mining companies and their stakeholders.
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8. As outlined previously, it is an important premise in this study that while conflicts inevitably manifest at the company-community interface, this does not mean that the conflict is sensu stricto a community-company conflict, as many previous studies have described. Our study has confirmed the premise that in most cases the conflicts that manifest around the sites of operations are rarely the first chapter in the process, but usually arrive significantly later in the sequence of things and prefaced by a previous history of what may appear to be unrelated events, and the random decisions and actions of various institutions, organizations and individuals. A closer examination reveals a close connectivity among all the players and their decisions.

9. In this study we discuss the complex interaction of events, actions and decisions of the various players in terms of structural factors, contextual factors, conflict drivers and triggers (see definitions on p.16 in the Introduction). This terminology is useful not only for the purpose of defining the various causes of conflict and distinguishing among them, but also because it enables consideration of the conflict process in a systematic way, opening the possibility of unraveling the complexities and providing insights into the interrelationships and interconnectivity among the various players and their behaviors and actions. A generalized representation of this conceptual framework is illustrated in Figure 10.

10. As we progress down through the hierarchy illustrated on Figure 10, from structural factors through to triggers, the dimensions of space (geographic extent) and time (duration) progressively narrow. For example, structural factors tend to be international to national in scope and long-term (e.g. colonialism, ethnic rivalry), whereas triggers are highly localized to the sites of individual
conflicts and occur over a relatively short period of time (e.g. an accident, a murder, a planned protest). In general there is interconnectivity and sequential causation from one layer to the next, proceeding from structural factors through contextual factors, conflict drivers and triggers. The hierarchy is not a one-way-street but the dominant flow is from top to bottom. Some causes are interchangeable between layers, in particular it seems between contextual factors and conflict drivers, as also illustrated in our quantitative database analysis. There is an increasing number and variety of potential determinants proceeding from top to bottom, giving rise to the existence of a relatively small number of structural factors compared to a large number and variety of possible triggers.

11. On Figure 11 we show the causes and their interrelationships as a dynamic ‘process’, which evolves as a function of time. The structural and contextual factors lay down the groundwork for the existence of long-term tensions and the breeding ground for the emergence of conflict drivers. The persistence of structural and contextual factors produce an enabling environment for conflict drivers to expand to the point where conflict erupts, precipitated by trigger events characterized by a relatively high degree of variability and unpredictability. Differences in the structural and contextual factors, lead to case specific conflict drivers. The conflict drivers and triggers, combined with historical and cultural features characteristic of the locale, give rise to the reactions and behaviors of the players involved and to the variability of conflict manifestation at the company-community interface.

![Conceptual Conflict Continuum](image)

Figure 11: Conceptual Conflict Continuum

The Roles and Responsibilities of Key Players

12. As indicated throughout our study, there are many individuals and organizations that play a role in the build-up towards conflict, its outbreak and continuation. Our literature review and initial field
investigations are aligned in the observation that the most influential players are governments, companies and communities, with government implicated at the central, regional and local (municipal) levels. The participation of companies and communities is well known and the grey literature is replete with studies focused on trying to understand the dynamics of this relationship. The role of government has long been assumed, however, it has not been given the attention it deserves given the profound influence that it can have.

13. Referring to Figures 9 and 10, we find that government agencies at the central, regional and local levels are implicated across the complete conflict continuum, but with a definite focus on the left side and with a singular role in the field of contextual factors and the creation of the enabling environment. Whereas central government agencies can display a persistent role right down to the local level, regional and local government agencies tend to prevail towards the right hand side of the continuum, occupying the fields of conflict drivers and triggers and active at the regional and local levels. Not surprisingly, the roles of companies and communities congregate towards the right hand side of the continuum in the fields of conflict drivers and triggers and most active in relative close proximity to the sites of mining operations. However, major companies and industry associations can also play a role on the national and international stage, shaping structural and contextual factors.

The Case Studies Considered through our Conceptual Model
We can now consider the information we derived from our 4 case studies in a systematic way using the conceptual framework developed above. To facilitate this exercise we have developed ‘conflict maps’ which summarize the key determinants and their interrelationships, for each of the field case studies as presented in Figures 12 to 15.

The Case of the Bulyanhulu Project
The eviction of artisanal miners from the property by the Regional Commissioner, presumably following orders from the central government, was done to allow the mining company to develop the property and was an expression of the central government’s decision to attract FDI and the large-scale mining industry. The firm belief by the local communities that more than 50 artisanal miners were buried alive during the bulldozing of the artisanal mine workings and the suspected complicity of the company in this act, defined the relationship between the company and the communities from that point on, fueling a simmering resentment, an ‘us versus them’ attitude and a constant feeling that a debt was owed by the company to the community.

If the central government had taken the decision to approach the development of its mineral resources in a more strategic way and with proper preparation of society for its impacts and benefits, in particular local communities where the potential for mining was high, the result might have been very different. A strategic approach would have required a consideration of how the large population of artisanal miners in the country and large-scale mining industry where going to co-exist. This in turn could have led to a negotiation with the artisanal miners at Bulyanhulu rather than a forced eviction.
During the initial stages of development, construction and operation, the company made an effort to establish good relations with the workers and local communities and the response was positive, including shared decision-making between the company and the workers through their union. If this relationship had been nurtured and strengthened over the long-term and given the mild, non-confrontational nature of the local people, the damage caused by the forced eviction of artisanal miners might have been mitigated and the relationship transformed into a constructive one. However, due to an inconsistent approach by the company to the relationship over the longer term, driven by a frequent turnover of mine managers, the absence of a coherent, corporate-level approach to social responsibility programs and evolving ownership and corporate business priorities, all combined to prevent this from happening.

The result instead has been an approach by the company and the government which can be best described as ‘containment’; a risk management-crisis prevention strategy rather than one of conflict prevention and peace-building, whereby just enough is done by the company to pacify the workers and the communities and avoid a crisis, but the underlying current of resentment and contained conflict continues, manifesting in a variety of ways including non-cooperation, subversion and criminal acts against the company. These various forms of passive resistance to the mine are costly but hard to measure and do not create a sense of urgency for the mine operators or the company.

There is hope for the future though, with the new government promising to address corruption, increase autonomy and capacity to local authorities and with the police and local officials doing more to ensure a balanced approach to problem-solving. For the company, there is a business rationale for doing more. The mine’s long-term resiliency and efficiency will correlate with how much support the company provides for...
broader, more holistic efforts to go beyond containment towards transformation.

The Case of the Ambatovy Project

The structural and contextual environment which define Madagascar and the Ambatovy project are similar in a number of respects to that of Tanzania and the Bulyanhulu project, only a lot worse.

The extent of political turmoil, corruption, poverty and dependency in Madagascar make for a very challenging context to build and operate a large mining and refining project such as Ambatovy, a roughly $8.0B investment including mine facilities, a large sophisticated, state-of-the art processing plant, a 220 km pipeline connecting the mine to the plant and a significant expansion and upgrading of the port facility. The government has been not only conspicuous by its absence in what should have been its role as adjudicator of the rule of law and administrator of justice, leader and coordinator of economic development for the country as a whole and provider of constructive input and assistance. Instead it has been impaired by repeated events of political turmoil, corruption, ethnic rivalry and deep mistrust by the Malagasy society. The extent of government dysfunction means that the Ambatovy project is seen as the leading solution to poverty and lack of opportunity, which in turn translates to a high degree of expectations and dependency.

The commencement of construction of the mine and the plant in 2009 coincided with a military coup and
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downfall of the central government, which gave rise to yet another round of political uncertainty, economic upheaval and social turmoil for the country and abandonment by the international community. It is in this context of deep uncertainty, high risk and lack of support that the mine, plant, pipeline construction and port upgrading was accomplished. As is often the case, construction was overseen by a new management team, largely driven by the contractor and with the priority of keeping to schedule and maintaining budget control. The relationship with the local communities became transactional in nature, with benefits driven, short-term solutions applied to long-term problems, conditioning expectations of the local communities. Ambatovy community relations staff describe their construction-stage role as keeping the project on track by appeasing people, whereas a more sustainable but painstaking approach would have been to forfeit precious time to fully understand and address local people’s core concerns.

This strategy of ‘containment’ effectively bought the company time while they completed a large and complex build and it is noteworthy and perhaps even praiseworthy that this was accomplished without serious conflict emerging from the situation. However, there may be a longer-term price to pay in terms of local stakeholders who now have an entrenched belief that Ambatovy is willing to make costly concessions to avoid disruptive forms of conflict.

Despite some signs of inter-ethnic tensions, and grievances about land claims and resettlement, it would be easy to assume that the Malagasies are passive in nature and therefore unlikely to escalate conflict around Ambatovy. However, this probably misreads the culture and fails to account for the stifling effect of fear about the consequences of acting out. A significant number of individuals interviewed for this study warned not to mistake inaction among Malagasies for passivity. Instead, they say, Malagasies tend to let their frustrations simmer unnoticed until the moment when they boil over. The potential for conflict outbreaks, in other words, should probably not be easily dismissed.

The conflict status quo around Ambatovy might be described as a race against the clock. Fortunately, the political situation seems to have stabilized and Ambatovy’s new operations team is remarkably well attuned to the need to achieve a more sustainable social operating environment. In terms of the current reality on the ground, this translates into highly experienced managers who are committed to operating the company in ways that account for and try to address local interests. One challenge will be resetting the tone in relationships with local stakeholders before disappointed expectations fuel a damaging increase in conflict. Another challenge will be the constant focus of attention and dependency on the company, while government slowly builds the capacity to play a constructive, contributory role.

The Case of the Haquira-Las Bambas Project

The issues at Las Bambas-Haquira in Peru are likely emblematic of the natural resource development challenges which have manifested in many areas across the country and these focus in large part on high levels of poverty and expanding inequality, resource governance issues which for the most part fall at the feet of the central government and unresolved conflict in local communities over land ownership and municipal boundaries which predated the mining operations but were exacerbated upon their arrival.
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Following many years of colonialism and oppressive, authoritarian rule, the country experienced a political transformation commencing in the 1970s, moving towards neo-liberalism in the 1990s and the gradual establishment of democracy, which is still ongoing today. The Apurimac region where the mining operations are now located were also part of the epicenter of the brutal guerilla war between Shining Path and the military during the 1980s.

A decade later, the Peruvian government was focused on economic development and, in particular, natural resource development based on FDI and the large-scale mining industry. As in the case of the Ambatovy and Bulyanhulu operations, these macro-economic decisions were not supported by the existence or effective deployment of a mineral development strategy for the country, the capacity for governing and managing mineral development and adequate preparation of society for its impacts and benefits, particularly in remote regions of the Andes, where mineral potential for mining was and remains the highest.

Laws were introduced to facilitate resource development that were widely viewed by local communities as protecting the national investment strategy and the mining projects at the expense of the people, underpinning a distrust by local communities in government that already existed. Adding to this, the benefits of economic development have resulted in little change in the rural areas of the country, leading to widening inequalities between urban and rural populations and increasing frustration.

However, it is in the area of governance that has had the most influence with respect to conflict associated with mining in Peru and which has manifested around the Haquira and Las Bambas projects, as follows:

Figure 14: Haquira-Las Bambas Conflict Map
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a) A key determinant was a decision by the central government to decentralize authority and responsibilities to the regional and local governments, which has largely failed, due to the fact that this decentralization was not accompanied by the capacity building and resource allocations that were necessary to make it work.

b) As a result of the failure of decentralization, the central government continues to make decisions affecting local regions without a great deal of success.

c) The central government, in its efforts to gain control over increasing incidents of conflict associated with mining has created a number of government institutions with roles and responsibilities related to conflict prevention, which for the most part are overlapping and lack coordination, which seriously limits their effectiveness.

d) There is an absence of land-use planning in the country and unresolved issues of land ownership and this is a particular issue in the areas around Las Bambas and Haquira.

e) The Canon Minero, devised by the central government as a rational way of distributing mining revenues, has increased frustrations and jealousy among regional and local governments, largely due to capacity issues.

Communities in the Apurimac region were already in dispute over land issues, but once the mining projects commenced, the land disputes escalated due to the fact that the distribution of mine benefits are a function of the location of the community relative to the mine site and the perceived area of direct impact. A tradition of collective decision-making among communities has now been replaced by a highly fragmented environment in which communities make decisions independent of each other and compete for benefits from the mine.

The companies and the communities are both trying to coexist in an environment characterized by confusing and dysfunctional governance, unresolved issues around the distribution of jobs and benefits and in general, a situation that was already conflictive before the mining companies arrived. There had been a prolonged period of rising tensions around the Las Bambas project involving occasional kidnappings, an environment that only required a spark in the tinder box to ignite the communities into an organized protest. In this case the spark was attributed to a variety of causes depending on who was being interviewed. The protest get out of control, most likely with the instigation of some who drove it towards violence, with the result that three people lost their lives and 15 were injured.

The Las Bambas and Haquira projects are less than 10 km apart and share the same stakeholders and communities in the areas of direct and indirect impact. The effect of the outbreak of violence on the communities around the Haquira project is one of fear that the same situation could happen to them. However, Las Bambas has become the point of reference for social, economic and environmental matters for the community members around the Haquira project. According to local community members and authorities, the Haquira project has not experienced an escalated conflict situation because the project has not reached the construction and operation phase, when expectations and demands are usually at their highest.
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The Case of the San Cristobal Project

The San Cristobal case confirms our original premise that the analysis of successful relationships can be equally as instructive as the analysis of challenged and failed ones. There are a number of factors that have contributed to the success at San Cristobal but the key determinant has been that the government, the communities and the company each contributed to the construction of a solid basis for a constructive relationship that withstood the test of conflicts that were inevitably going to occur.

As already noted above, Bolivia has had a long history of mining and its people, in particular those communities where mining has been going on for centuries, as is the case in the Province of Potosi where the San Cristobal mine is located, are very familiar with the impacts and benefits of mining. This is the case whether it is from state-owned companies, foreign-owned private companies or the cooperatives, all three of which make up the mining sector in Bolivia as they have done for decades. Aside from this important structural factor there are a number of contextual factors and conflict inhibitors which have acted to protect the San Cristobal project from the negative consequences of sustained conflict, as summarized below:

1. The central government focuses attention on the administration of national laws associated with mining and compliance with those laws and does not normally intervene in local matters.

2. A remarkably successful decentralization process initiated by the central government in 1994, devolving autonomy, authority and administrative powers to municipal governments. The municipal government of Potosi successfully deployed mining revenues from San Cristobal to provide basic social infrastructure and services to communities in the region.

3. At the request of the local communities and the company during a conflict crisis in 2011, the central government played a constructive role in facilitating a resolution to the conflict based on dialogue, which led to a new agreement between the company and the communities and the re-establishment of a stable relationship.

4. The community of San Cristobal had been informed by folklore about the discovery of wealth beneath their feet and welcomed the opportunity of a mining operation. However, the community members deliberated for some time before agreeing to the impacts and benefits that the mine would bring, including a relocation of their community.
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5. The senior management of the mining company respected the culture and traditions of the local communities and was committed to a respectful and mutually beneficial relationship.

6. The company community-relations team, some of whom spoke the local language of Quechua, were exceptional and developed a trustful relationship with the local communities. They positioned themselves as a bridge between the company and the community and as a result the community was empowered and participated in shared-decision making with the company.

7. The relationship between the company and communities in the direct sphere of influence of the mine where anchored in an agreement setting out the commitments and the roles and responsibilities of the parties.

8. The communities have strong institutions of collective decision-making and systems of accountability and discipline for community members and authorities.

9. An agreement was developed among the communities in the direct sphere of influence of the mine, those outside of the direct sphere of influence and the company, on a formula for the distribution of mine benefits as a function of distance from the mine. All communities in the department of Potosi receive benefits from the mine in one form or another.

10. The deeply respectful and empowered relationship between the communities and the company and the commitment of both parties to maintaining that relationship, provided them with the resilience

Figure 15: San Cristobal Conflict Map
to survive multiple occurrences of conflict. Each conflict was a learning opportunity which resulted in new insights, creative solutions to problems and an evolved and newly engineered relationship.

PRELIMINARY CONCLUSIONS

The combination of a literature review, the initiation of a global quantitative analysis of reported conflict incidents and field investigations of four case studies indicate the following:

- Conflict associated with mining can be understood on the basis of a conceptual model that enables the conflict determinants, the players involved and their interrelationships to be analyzed and understood in a systematic way and for multiple conflict cases to be examined on a comparative basis.

- The conceptual model (Figure 16) is based on a systematic ordering of conflict determinants expressed in terms of a hierarchy of time and space, from long term-structural factors at the international and national levels, medium-to long-term contextual factors at the national and sub-national levels, through medium term conflict drivers at the regional and local levels, to short-term conflict triggers at the local, community-company interface.

- The conflict hierarchy is not a one-way street, however, the dominant flow is from the top to the bottom. Structural and contextual factors influence and give rise to conflict drivers, which in turn affect the nature of conflict at the community-company interface, the behavioral patterns of the players involved and the triggers that lead to conflict outbreak.

Figure 16: Conceptual Model Summary Illustrating the Main Categories of Conflict Determinants and Key Players Involved At Each Stage
Chapter 5: Study Observations and Conclusions

- The normative model presented in this study illuminates the nature of conflict at the community-company interface and is predictive in suggesting how the conflict may evolve organically for better or for worse or how it can be transformed through constructive intervention.

- Government agencies at the central, regional and local levels are implicated throughout the whole conflict continuum, from structural factors to triggers, but are of singular importance at the contextual level. Contextual factors are fundamental in the development of the enabling environment for conflict creation or mitigation. Communities and companies are dominant in their contributions at the local level to conflict drivers and triggers.

- Over the past 20 years much attention has been focused on improving practices of exploration and mining companies at the sites of their operations, in order to prevent and manage conflict with local stakeholders. Much less attention has been given to assisting companies to understand the structural and contextual environment in which they are trying to operate, how such factors influence the behavior of stakeholders and how best to manage and survive within this context. Equally important, not enough attention has been given to enhancing the ability of host governments, at all levels, to prepare their societies for the impacts and benefits of FDI and the arrival of the large-scale mining industry and building their capacity to govern and manage the development of their resources in a sustainable manner.

- Although Bolivia has had its share of conflict associated with mining projects and San Cristobal might very well exist as an exceptional situation, this case history is a useful example of one pathway to success. We believe that much of what we have observed in the four case studies provides lessons for governments, companies and communities on the identification of key conflict determinants, their interrelationships, where they might be leading and if necessary, the steps that might be taken to redirect the process towards more positive outcomes.

While the four case studies are not enough to make conclusive statements that may be generalized to all mining-related conflicts, individually and collectively they have revealed a wealth of information regarding conflict creation or mitigation in the particular circumstances which have defined each one of them. The reader is encouraged to review the individual case study reports to appreciate the full detail of information, the key observations and lessons learned presented in each one. Collectively, the interrelated conflict determinants that stand out as highly significant in the four case studies are:

**Structural Factors**

a) A history of colonialism and authoritarian rule affecting all four countries resulting in policial turmoil, dysfunctional government, weak economies, deep poverty, social instability and corruption.

b) Significant movements of neoliberalism and democratization in Latin American countries versus widespread passivity and fear of repression in African countries resulting in higher degrees of freedom in the former enabling organized expression and politicization of needs and feelings as
compared to those in African countries.

c) The benefits of neoliberalism and democratization effect urban areas but do not reach rural areas remote regions of Latin American countries resulting in widening disparities and increasing frustration in rural communities.

Contextual Factors

a) Lack of strategic approach by governments to mineral development and lack of preparation of their societies for the arrival of FDI and the large scale mining industry.

b) Laws and policies designed to promote investment and development but perceived and experienced as being implemented at the expense of local people.

c) Low levels of trust of government by local people combined with inadequate capacity of government, leading to a high dependency on companies.

d) Unsuccessful and/or ineffective approaches by central governments for decentralization of authority, resources and capacity to regional and local governments.

e) Unresolved land-ownership and land-use issues and related traditional livelihood concerns, exacerbated by severed title to surface and subsurface resources.

Conflict Drivers and Triggers

f) Company policy of containment in the two African cases, linked to a history of authoritarian governments and aggressive suppression of society.

g) Asymmetry of benefits distribution, especially employment opportunities (inside versus outside the area of direct impact).

h) Failure of companies to fulfill commitments, both perceived and real.

i) Insertion of special management teams, particularly at the construction phase, resulting in discontinuity of relationships with and expectations of communities, and exacerbated by transactional approaches to solving social issues.

j) Inconsistent company management approaches to community relations.

k) Local hiring practices that aggravate pre-existing rivalries and tension between community members.

- There is a wealth of evidence to show that no one actor, be it government or companies or communities can 'go it alone' to resolve this complex array of issues and challenges. In an increasing number of
developing countries, there are examples of voluntary, collaborative, multi-stakeholder initiatives that have been effectively applied to tackling challenges that have become evident by gaps in governance. Furthering our current line of research into Phase 2 will create opportunities to provide guidance for this kind of collaboration to work more effectively in addressing gaps in governance and avoiding conflict.

PHASE 2 OF THE STUDY
The observations and conclusions emerging from Phase 1 of this study are preliminary. However, they clearly demonstrate the potential of this line of research regarding the nature of conflicts associated with mining. In Phase 2 we plan to build upon the base we have now established to focus on a) achieving the original study objectives and b) pursuing various lines of potential investigation that have emerged from our Phase 1 work, as summarized in the following:

Quantitative Database Analysis
The literature review and quantitative database analysis components of our study fulfill the purpose of providing a broad scale, global view of conflict associated with mining, based on the consideration of a relatively large number of case studies and conflict incidents. In Phase 1, our quantitative analysis was limited to 2012 and 2013, thus we have only skimmed the surface of what this area of research could potentially offer. A priority of Phase 2 will be to pursue the realization of this potential based on the completion of a global database of conflict incidents, employing localized, quantitative data and extending the period covered to 2002-2013. The information is already in our possession and requires completion of an upgrading and checking process, followed by quantitative analysis and interpretation. The trends and relationships suggested by the 2012-13 data presented in this report can then be tested through rigorous statistical methods and extended over the time frame that coincides with the unprecedented increase in metals prices and industry activity that occurred over the past 15 years.

The analysis in Phase 2 will enable us to examine other macro-economic factors determining the conflict incidents and levels of conflict intensity and to develop a conflict typology based on a variety of parameters including geographic location, history and culture, key players involved, political environment, key global indices (governance, human development, poverty and corruption), company type, stage of mining project, commodities mined, mining method, structural and contextual factors and conflict drivers.

Field Case Study Investigations
The initial 4 field case studies have served the multiple objectives of providing preliminary information on the conflict process, confirming the potential of our conceptual model, testing our field methodology and providing directions for its refinement. While highly informative about the conflict process, they are too few in number to make general conclusions and recommendations about conflict associated with mining at this stage. Completion of the planned 18 field case-study investigations will allow for:

• Analysis of a more global, representative sample of conflict situations associated with mining,
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yielding a more diverse set of conflict determinants and a basis on which to explore trends and typologies;

- A more detailed ground-truthing of the observations emerging from the literature review and the completed quantitative database analysis;

- Further solidifying our understanding of the contributions of various players to the conflict process, in particular with respect to the roles and responsibilities of government, which is the player possibly least understood at this time;

- In combination with the completed quantitative database analysis, a contribution to the knowledge base that will enable all players to better understand the conflict process and the development of specific, practical recommendations to improve policies and practices for conflict management, mitigation and prevention.
Notes

1 Including The Business and Human Rights Resource Centre (BHRRC), EJOLT (http://www.ejolt.org), various Peruvian sources including the Defensoria del Pueblo (http://www.defensoria.gov.co) and a recent compilation by the International Council of Mining and Metals (ICMM), 2015.


4 World Exploration Trends 2015, A Special Report for the PDAC International Convention, SNL Metals and Mining.

5 Global Witness (2016) On Dangerous Ground. London. NB: These numbers are likely to be underestimated.

6 K. Webb “Symptoms, Root Causes, CSR, and Mining Controversies: Looking Below the Surface” (forthcoming).

7 Ibid

8 Most studies have used the term ‘proximate’ to include what we describe as conflict drivers and triggers and do not define these terms independently.

9 Ibid

10 For more detailed discussion of these topics and comprehensive referencing please refer to the full Literature Review report in Appendix 2


18 Handling and resolving local level concerns and grievances, ICMM (2009); Policy on Social & Environmental Sustainability, IFC (2012).


22 http://www.ejolt.org. EJOLT is an FP7 (7th Framework Programme for Research and Technological Development) project supported by the European Commission.

23 The cessation or downsizing of CSR programs that include community engagement strategies, dialogue, community development programs, shared decision-making and grievance mechanisms, and the lack of ability of companies to deliver on commitments or live up to expectations due to funding issues, can have significant negative results on the community-company relationship, as described later in the section covering our field case study investigations.


26 The 15 ICMM causes are single determinants in some cases and grouped determinants in others. For the purpose of our analysis we applied new labels to some of them in order to increase resolution (see Appendix 1, Table C).

countries. Journal of Cleaner Production, 14: 455-462; Dougherty, M.L. 2011. The global gold mining
industry, junior firms, and civil society resistance in Guatemala. Bulletin of Latin American Research, 30(4):
403-418; Mudd, G.M. 2007. Global trends in gold mining: toward quantifying environmental and resource

29 Ibid.

30 ibid.

31 Precious metals (gold, silver, and platinum), non-ferrous base metals (aluminum, copper, lead, nickel, and
zinc), ferrous metals (iron and manganese), industrial minerals (rutile and zircon), gemstones (diamonds),
energy minerals (coal and uranium), and specialty metals (cobalt, coltan, ilmenite, indium, leucoxene, limonite,
molybdenum, tin, and titanium).

32 ibid.

33 ibid.

34 ibid.

35 Our Common Future, World Commission on Environment and Development, Oxford University Press,
1987.

36 Coumans, C. 2010. Alternative accountability mechanism and mining: The problem of effective impunity,

37 Ibid.


International Business Studies, 43: 166-186.

40 ibid.

41 Prior, T., Giurco, D., Mudd, G., Mason, L., and Behrisch, J. 2012. Resource depletion, peak minerals, and the

Ibid.

The reader is strongly encouraged to review the field case study reports which present detailed, systematic analyses of each of the conflict situations including the country, regional and local contexts, the history, anatomy and trajectory of the conflicts, the players involved, along with their influences and relationships and contributions to the conflict process.

Out of a total of 167 conflicts incidents recorded in 2012 and 2013, 77 occurred in Latin America and 40 occurred in Africa.


Javier Caravedo, personal communication, 2016


There is still debate as to how successful the relocation was in terms of conflict transformation, local development and long-term social management.


Note: In reality the fields defining the structural and contextual factors do not remain smooth or flat but vary over time in response to changing economic, political and regulatory conditions and company practices.

The role of other important players including NGOs, faith-based organizations, unions, political parties, politicians, national and international institutions have not been particularly significant in the four field case studies we investigated and so are not emphasized in our Phase 1 report. There is some information about their roles discussed in the individual field case study reports in Appendix 3 and briefly summarized on p.82. Further examination of the roles of these players will be given more emphasis in Phase 2.

The impact of this experience left the communities with a deep mistrust for outsiders, experiencing fragmentation and displacements, and prone to violent actions in order to defend themselves from perceived
threats (Javier Caravedo, ProDialogo, Lima, Peru)

55 In spite of this proximity and shared communities, there is no evidence that the two companies coordinate strategies and activities.
# APPENDIX 1

Table A: External Review Group Members

<table>
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<th>MEMBER</th>
<th>SECTOR BACKGROUND</th>
<th>GEOGRAPHIC FOCUS</th>
<th>AFFILIATION</th>
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<tr>
<td>Steven Agbo, Ghana</td>
<td>Government</td>
<td>Ghana</td>
<td>Senior Social Scientist, Minerals Commission of Ghana</td>
</tr>
<tr>
<td>Javier Caravedo, Peru</td>
<td>Civil Society</td>
<td>Peru, Latin America</td>
<td>Director Ejecutivo, ProDialogo</td>
</tr>
<tr>
<td>Rolando Luque, Peru</td>
<td>Government</td>
<td>Peru</td>
<td>Deputy for Prevention of Social Conflicts and Governance</td>
</tr>
<tr>
<td>Kathryn McPhail, Singapore</td>
<td>Mining Industry, Institutions</td>
<td>Global, Africa, LA, SE Asia</td>
<td>Recently with BG Group, and formerly ICMM</td>
</tr>
<tr>
<td>Glenn Nolan, Canada</td>
<td>Communities, Mining industry</td>
<td>Canada, Latin America</td>
<td>VP Government Relations, Noront Resources, Former Chief, Missanabie First Nation, Ontario</td>
</tr>
<tr>
<td>Margaret Wachenfeld, London</td>
<td>Institutions, Civil Society</td>
<td>Global</td>
<td>Director of Research and Legal Affairs, Institute for Human Rights and Business</td>
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<tr>
<td>Kernaghan Webb, Canada</td>
<td>Academia, Government</td>
<td>Canada, Global</td>
<td>Associate Professor &amp; Director of the Institute for the Study of Corporate Social Responsibility, Dept of Law &amp; Business, Ryerson University, Toronto</td>
</tr>
<tr>
<td>Luc Zandvliet, Canada</td>
<td>Social Responsibility Consulting</td>
<td>Global</td>
<td>Founder and Director, Triple R Alliance, Consulting Group</td>
</tr>
<tr>
<td>Emmanuel D. Tehindrazanarivelvo, Madagascar</td>
<td>Community, Academia</td>
<td>Madagascar</td>
<td>Chair, Department of Ethics and Systematic Theology, Ambatonakanga Faculty of Theology</td>
</tr>
</tbody>
</table>
Table B: The location of mining conflicts in 2012-2013

<table>
<thead>
<tr>
<th>SUPRA-REGION</th>
<th>INCIDENTS (% OF TOTAL)</th>
<th>COUNTRY</th>
<th>INCIDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>39</td>
<td>Burkina Faso</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(23.9%)</td>
<td>Democratic Republic of Congo (DRC)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ghana</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Guinea</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Liberia</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Malawi</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mozambique</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sierra Leone</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>South Africa</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tanzania</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Zambia</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Zimbabwe</td>
<td>2</td>
</tr>
<tr>
<td>Asia</td>
<td>28</td>
<td>Bangladesh</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(17.2%)</td>
<td>Burma</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>China (including Tibet)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>India</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Indonesia</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mongolia</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Myanmar</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Philippines</td>
<td>9</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>5</td>
<td>Bulgaria</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(3.1%)</td>
<td>Kyrgyzstan</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Romania</td>
<td>2</td>
</tr>
<tr>
<td>Latin America</td>
<td>75</td>
<td>Argentina</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>(46.0%)</td>
<td>Bolivia</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brazil</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chile</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Colombia</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Costa Rica</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dominican Republic</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ecuador</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>El Salvador</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Guatemala</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Honduras</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mexico</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nicaragua</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Panamá</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Peru</td>
<td>15</td>
</tr>
<tr>
<td>North America</td>
<td>11</td>
<td>Canada</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>(6.7%)</td>
<td>USA</td>
<td>3</td>
</tr>
<tr>
<td>Pacific Island countries</td>
<td>3</td>
<td>Australia</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>(1.8%)</td>
<td>Papua New Guinea</td>
<td>1</td>
</tr>
</tbody>
</table>
Table C: Definitions of Conflict Causes (ICMM, 2015)

<table>
<thead>
<tr>
<th>CAUSE</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASM (artisanal and small scale mining)</td>
<td>Interests/position of traditional/artisanal or small-scale miners alleged to be undermined.</td>
</tr>
<tr>
<td>Consultation</td>
<td>Perceived insufficient inclusiveness, access to decision makers, transparency, timing, respect of customs and authority structures, clear reporting.</td>
</tr>
<tr>
<td>Corporate power Laws &amp; Policies favoring companies</td>
<td>Perceived undue political influence on company, including both (a) revenues and existence of company as investor allegedly helping to legitimize human rights abusing regime or (b) government allegedly bending to wishes of company.</td>
</tr>
<tr>
<td>Corruption</td>
<td>Alleged corruption or lack of fiscal transparency on part of company or government.</td>
</tr>
<tr>
<td>Economic Asymmetry of impacts &amp; benefits</td>
<td>Perceived inequitable distribution of benefits across state/regional/local/ethnic/family groups and insufficient impact on local employment, local business spend, training, local inflation on food and housing prices.</td>
</tr>
<tr>
<td>Environmental</td>
<td>Perceived or demonstrated negative impact on air (dust), water (groundwater, river, ocean) pollution, noise, government capacity to monitor and regulate.</td>
</tr>
<tr>
<td>Health and safety</td>
<td>Alleged/feared health and safety failures.</td>
</tr>
<tr>
<td>Indigenous issues</td>
<td>Indigenous sovereignty – including Free Prior and Informed Consent (FPIC) and rights of Indigenous Peoples alleged to be infringed (ie group identified as 'indigenous' being allegedly harmed).</td>
</tr>
<tr>
<td>Labor</td>
<td>Alleged labor abuses, including forced labor, child labor, lack of freedom of association or union representation, racial or sexual discrimination, harassment or abuse.</td>
</tr>
<tr>
<td>Land issues Land &amp; traditional livelihoods</td>
<td>Access to land (for farming, cultural heritage, forest resources) denied/insufficiently negotiated; traditional land rights have been overseen.</td>
</tr>
<tr>
<td>Resettlement</td>
<td>Resettlement alleged to have been undertaken unfairly/ perceived inadequate compensation for land/property.</td>
</tr>
<tr>
<td>Social cohesion</td>
<td>Perceived disturbance of social order through migration and growth or decline of towns, substance abuse, prostitution, community cohesion.</td>
</tr>
<tr>
<td>Use of force Suppression of social resistance</td>
<td>Community members/activists getting killed/injured by company’s personnel/contractor/government.</td>
</tr>
<tr>
<td>Use of revenues</td>
<td>Revenues, payments, or other support from company allegedly used by government/state entity/rebel group to fuel conflict, or conflict between different groups over distribution of revenues.</td>
</tr>
</tbody>
</table>

* ICMM causes that have been relabeled for the purposes of this study
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