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Global 8

Mining Ethics and Sustainability

Papers from the World Mining Congress 2013

Editors Nicolae Irina / Christoph Stückelberger

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INTRODUCTION

Nicolae Irina, Christoph Stückelberger

The mining industry is largely criticised for environmental damages, social exploitation, and unfair or illegal trade practices. But the mining industry, or at least part of it, also undertakes a lot of serious efforts in addressing and overcoming these challenges and implementing concrete solutions. From individual companies to sector codes, state regulations and international conventions, these efforts start to bear fruits even though the media report more the negative news than these positive efforts.

The contributions in this book show the different perspectives of companies, civil society and regulators. This multi-stakeholder dialogue is important for finding common solutions. Canada is not only a leading country for mining companies, but also for such dialogue and solutions.

We thank the Canadian Institute of Mining, Metallurgy and Petroleum CIM for including the programme stream “Mining, Ethics and Sustainability” in the 2013 World Mining Congress. In addition, the cooperation between the Canadian Business Ethics Research Network CBERN who organized this programme stream, and the global ethics network Globethics.net who publishes and promotes the results, shows the need, the potential and the fruits of international cooperation in a globalized world. All authors in this book want to contribute in their different ways to a human, social, sustainable and peaceful life for all.

1

COMMUNITY CAPACITY BUILDING AND A LICENSE TO OPERATE IN THE MINING INDUSTRY

Isabel Buitrago-Franco

Abstract

This paper aims to increase our understanding about existing community capacity-building approaches and their implications for obtaining a social license to operate in the mining industry. The notion of 'capacity building' is gaining increasing currency in the mining sector in developing countries, due to the rapidly increasing globalised nature of mining operations. Building a community's capacity to understand and effectively respond to these transformations is vital for obtaining a social license to operate, as it promotes sustainable and locally relevant development. Accountability mechanisms, such as global norms and international standards, increasingly point to the need to build capacity among stakeholders, particularly among local communities adjacent to mining operations. International frameworks and mining companies have embraced the notion of community capacity-building as a driver to assist corporate social and operational performance. However, this narrow understanding of capacity-building through the prism of corporate social responsibility and 'best practices' is preventing the industry from impacting communities meaningfully, and from forging sustainable communities in the

regions where it operates. The idea of a social license to operate is being widely embedded across multiple industry sectors, as a social and economic reward from mining companies to compensate communities for natural resource extraction and gain social acceptance.

Although both concepts are widely recognised in the minerals industry, insufficient attention has been paid to the implications of applying a top-down or a bottom-up capacity building approach for obtaining a social license to operate, or indeed how these two concepts are linked and applied in practice. At times, communities lack the necessary capacities in the form of education and skills to deal with mining-led livelihood transformations. This is preventing both mining companies and communities from forging sustainable livelihoods and responding to mining-led livelihood transformations, a situation that is creating discontent among communities and reducing the possibilities of obtaining and renewing a social license to operate for the industry. Based on a review of current scholarly debates, accountability mechanisms in the mining industry and fieldwork findings in Colombia, this paper will contribute to understanding the implications of exiting community capacity-building approaches for ensuring a social license to operate.

Keywords: Mining, capacity-building, social license to operate, community, sustainable livelihoods, Colombia, sustainability.

Introduction

The overarching aim of this article is to explore the challenges of existing community capacity-building approaches for obtaining a social license to operate (SLO) in mining regions. The growing demand of minerals and metals is increasing the need for mining operations in remote areas. However, local communities adjacent to mining projects lack capacities and education to benefit from mining, and actively engage with other sectors of the local economy. In addition, informed by the media or local and global NGOs, communities are nowadays more aware of their rights and benefits in compensation for natural resource

extraction. This has altered these communities' demands for their future, and possibilities for forging sustainable livelihoods that last after mine closure. Similarly, communities are aware of the importance of developing skills and knowledge to contribute to locally relevant development.

On the other hand, the minerals industry is transforming existing corporate social responsibility approaches to obtaining an SLO and increasing productivity rates. Indeed, traditional corporate rewards for obtaining an SLO, such as donations and infrastructure, still occupy a privileged place in corporate agendas. However, capacity building is more often positioned as a key element of corporate social responsibility, as it has been shown to benefit all stakeholders involved in the mining industry. In theory, capacity building contributes towards forging more sustainable communities, achieving development aspirations, and facilitates the extension and opening of mining projects, due to extra values such as the skill shortage supply in the industry. From a theoretical standpoint, capacity building has been widely recognised, however, its linkages to SLO need to be further explored.

The concept of community capacity-building transcends disciplinary boundaries. The idea of capacity building was first conceived as a tool for the emancipation of the poor. Popular education theories first developed by Freire (1970) posited that capacity building transforms livelihoods and frees poor people from their living conditions. This idea of freedom was further developed in the capability approach later proposed by Amartya Sen (1979). According to Sen, when individuals develop capabilities, they are able to free themselves, and to make decisions determining their life plans. International organizations such as the United Nations embraced Sen's ideas, and adopted the notion of capacity building. As defined by the United Nations Development Program (UNDP), capacity building is a process in which individuals

develop either tangible or intangible skills to achieve goals.[1] This notion is also often linked to concepts such as development and emancipation;[2] however, the connections between capacity building and the SLO have not been widely explored.

The concept of the SLO is defined as a corporate approach intended to gain community acceptance. It is also viewed as an agreement between both mining companies and locals, in compensation for mineral and metal extraction. Very often, these agreements involve financial and physical capital, delivered in the form of donations or infrastructure, whereas education and knowledge transfer initiatives are rarely included or simply neglected. In order to assure the effectiveness of mining operations and help mining companies to align with high environmental and social standards, the minerals industry has recently embraced the idea of capacity building. At the global level, international standards and global principles encourage mining companies to incorporate this notion in corporate accountability mechanisms.[3] Companies operating in Latin America, particularly in the case study areas, are engaging with this approach, now reflected in sustainability reports and social responsibility agendas.

However, these initiatives are hugely insignificant compared to the magnitude of the problem. Despite corporate attempts to deliver capacity building actions, local communities still lack capacities and education, which prevents them from forging sustainable livelihoods and finding gainful employment opportunities. This is not only causing productivity losses for the mining industry, but is also fostering discontent and resentment in mining regions, a situation that threatens future agreements to obtain an SLO. So far, local communities have been compensated by mining revenues and capacity building programs. However, these forms of social investment have not meaningfully

[1] UNDP, 2014
[2] Eade, 1997
[3] ICMM, 2005; OECD, 2008; ISO, 2010; IFC, 2014; RJC, 2011

contributed to achieving development aspirations. Thus, existing capacity building approaches are not sustainable for the local population, as the loss of natural capital has not been adequately compensated. Hence, it is imperative to take capacity building more seriously, so that current development models become more sustainable and corporations can successfully undertake future mining operations. These dilemmas are further examined in the light of two case studies, including Antioquia, Colombia, where local communities have not been adequately compensated despite the implementation of capacity building initiatives, and where corporations face significant challenges to undertake new operations and extend existing projects. Another case in point is Risaralda, Colombia, where communities have benefited meaningfully from existing capacity building approaches.

This chapter is based on ongoing PhD research and qualitative research methodology. Approximately twenty interviews were conducted in each case, and involved stakeholders from the corporate, government and civil society sectors. The chapter begins with a review of the literature of the notions of capacity building and SLO, followed by a discussion of the two case study areas. Some background of the two cases will be provided, as well as a discussion of the main challenges and implications regarding existing community capacity building approaches for obtaining an SLO. These challenges are examined in the light of Risaralda and Antioquia, the case study areas. The chapter concludes by drawing some conclusions and recommendations for stakeholders in the industry.

Literature review

This section contains a review of the notions of capacity building and SLO, and begins with an examination of the notion of capacity building, its trends, evolution and definition, and also discusses the linkages between the notion of capacity building and the minerals

industry. This is followed by an exploration of the concept of the SLO, and its implications for the mining sector globally and in the Colombian context specifically. The review is based on both scholarly and grey literature that deals with the key areas of research. The grey literature reviewed includes, among others, sustainable development agendas and frameworks that guide mining company performance and accountability mechanisms as they operate in Latin American countries. The review is also based on an examination of accountability mechanisms, such as corporate social responsibility agendas, sustainability reports, and web pages from a group of ten mining and exploration companies operating in Latin America.

Capacity building: Historical and current trends in the mining sector

Capacity building is an evolving term that has been subject to multiple definitions. The term was first coined by the United Nations Development Program (UNDP) in 1990 and defined as a 'long-term process by which individuals, organizations, networks, and societies increase their abilities to solve problems and achieve objectives'.[4] Since then it began to be introduced in developing countries as part of technical assistance programs to help communities cope with the changes caused by globalisation and economic restructuring.[5] Although capacity building has applications in several sectors, this particular section focuses on exploring definitions and the characteristics of capacity building in mining communities.

As defined by the United Nations, capacity building is a long-term process that involves the commitment of multiple actors. Veiga et al (2001), for instance, state that 'the first step to community sustainability ... may relate to local capacity-building and local governance'. Similarly, the Institute for Environment and Development (IED) (2001) argues that capacity building needs to be understood as a multi-

[4] UNDP, 1997
[5] Amin & Thrift, 1992

stakeholder collaboration process that lasts before and after mining operations, intended to enhance existing skills in local communities. In addition, Loza (2004) defines capacity building as an ongoing process that improves existing conditions in local communities, and that requires the development of partnerships between corporations and communities. Indeed, capacity building cannot be considered as a reactive response from mining corporations to tackle community problems, but as a long-term process that takes into consideration community aspirations.[6] These characteristics suggest a mutually agreed framework of capacity building implementation; however, there is a lack of understanding about the roles and the interactions of the participants that take part in the implementation of these initiatives in mining regions.

While the idea of capacity building as a long-term process is appealing from a theoretical standpoint, there are major difficulties in its real-life application. Capacity building initiatives, particularly in the Colombian context, lack continuity, due to the absence of long-term commitment, resources, coordination and collaboration amongst stakeholders. This is reflected in the existing conditions of local communities adjacent to mine-sites operating in the north of Colombia. Despite the past implementation of several capacity building initiatives in areas such as training and education programs, mining communities are still experiencing joblessness and a lack of opportunities for forging sustainable livelihoods.[7]

Capacity building: A historical background

To reverse the effects of global economic consequences, such as inadequate compensation for the loss of livelihood options, international organizations promoted a set of technical assistance programs and capacity building initiatives in developing countries.[8] These global

[6] Alizar & Scott, 2009
[7] Cardenas, 2011
[8] UNDP, 1997

initiatives have been the subject of analysis by scholars from various schools of thought, including education, economics, and, more recently, sustainable development and corporate social responsibility. The origins and evolution of capacity building have been influenced by two cross-disciplinary debates since 1970. On the one hand, capacity building has been regarded as a bottom-up approach that is situated at the local level and is intended to emancipate the poor.[9] On the other hand, it is thought of as a top-down process from the global level to build skills and allow individuals and organizations to perform specific tasks. This latter approach has mainly been adopted by mining companies through training programs and knowledge transfer strategies in the local communities in which they operate..

The bottom-up approach of capacity building was first developed by modern educational schools of thought, such as critical pedagogy. Freire (1970), one of the major representatives of this educational approach, argued that education serves as a means to free the poor and the most vulnerable, and (1970), notes that communities need to be provided with meaningful education to meet their development aspirations, envisaging education as a political process that involves the active and critical participation of students, teachers and the society. One of the premises of Freire's work is the notion of freedom, a concept that differs amongst contexts and individuals. This idea was later embraced by Sen (1979), in the capabilities approach to development, which was intended to challenge traditional welfare economic theories. Sen's (1979) contribution also develops the idea of emancipation that Freire (1970) first proposed. Sen (1979) argues that human beings are free to choose their life plans. However, this notion of freedom comes from the capabilities that the person develops. In other words, more developed capabilities equals more freedom, and more freedom equals more possibilities to choose the life plan that responds to one's expectations.

[9] Eade, 1997

Sen's work later influenced the current global understanding of capacity building. The World Bank (2011) and the United Nations[10] view capacity building as a process that allows individuals and organizations to build abilities to perform functions, achieve goals, and solve problems. This global understanding of capacity building neglects the notion of freedom initially proposed by Freire (1970) and Sen (1979). Bypassing the notion of freedom in the capabilities approach has been challenged by a segment of development practitioners. In the development literature, capacity building is defined as a bottom-up approach to development to help the poor to free themselves and to improve their living conditions.[11] These tensions between the bottom-up and top-down approaches of capacity building keep influencing current understandings of capacity building in several sectors, including the mining sector.

Capacity building in the mining sector

Given the fact that this paper concentrates on mining communities, it is important to provide an overview of the scholarly and grey literature debates about the role of capacity building issues in the minerals industry. The inclusion of capacity building in this sector started with the discourses on corporate social responsibility[12] and sustainable development.[13] Scholarly debates about community development[14] and business[15] have also contributed to this notion in the mining sector.

The mining sector has developed a strong emphasis on capacity building in recent years. In fact, voluntary global norms that guide the

[10] UNDP, 1997
[11] Eade, 1997
[12] Cornelius et al., 2008; Jenkins, 2004; Tracey et al., 2005
[13] United Nations Division for Sustainable Development, 2009a, 2009b
[14] Alizar & Scott, 2009; Hilson, 2006; Veiga, et al., 2001
[15] Loza, 2004

corporate mining sector[16] and mining companies operating in Latin America[17] have employed the notion of capacity building in their corporate rhetoric. However, at the global and the corporate levels, their concept of capacity building is clearly a top-down rather than a bottom-up approach.

The Guidance on Social Responsibility, ISO 26000 (2010), defines capacity building as a process that assists communities to achieve social and economic development standards. In addition, it is stated that capacity building is one of the most sustainable legacies that mining companies can deliver to local communities.[18] This notion is also regarded as a valuable legacy that fosters community development[19] and engagement,[20] and forges sustainable communities.[21] These interpretations of capacity building position mining companies as the major providers of capacity building initiatives, and neglect the participation of other stakeholders in the implementation of these initiatives. This top-down approach may in fact prevent the mining sector from impacting communities meaningfully.[22]

Capacity building initiatives have the potential to foster community resilience, and therefore increase the possibilities for mining companies to gain and maintain an SLO in the expansion of mining operations.[23] These initiatives can also provide sustainable outcomes for communities, mining companies and other stakeholders involved. Therefore, it is important that mining companies, communities, national and local governments, educational institutions and other relevant

[16] ICMM, 2005; IFC, 2014; International Organization for Standarization, 2010; OECD, 2008; Prospectors and Developers Association of Canada, 2014; Responsible Jewellery Council, 2009, 2013
[17] AngloAmerican Chile, 2008; Barrick, 2014; BHP Billiton, 2009
[18] ICMM, 2005
[19] Rio Tinto, 2011
[20] BHP Billiton, 2009
[21] Barrick Peru, 2008
[22] Mate, 2001
[23] Warhust, 2001

stakeholders in the mining sector take part in their implementation so that they can create shared value, hopefully for all parties. Certainly, capacity building involves important challenges in its implementation, since multiple interactions amongst stakeholders might foster or hinder this implementation. However, in spite of the difficulties that capacity building might experience in practice, empirical research has shown the potential of such approaches in Latin American contexts for creating value for communities, mining companies, local governments and other role-players in mining contexts.[24]

Whilst global norms and mining corporations posit a top-down approach to capacity building, other approaches to corporate social responsibility and sustainable development position capacity building as a bottom-up approach to assist mining communities to improve their living conditions.[25] Most importantly, capacity building is considered a sustainable legacy for mining communities.[26] In the literature, it is also stated that the implementation of capacity building initiatives involves the participation of several actors, and that it cannot rely on communities alone, since they often lack education and capacities to communicate their aspirations and become active participants in their development.[27] In those cases in which the underdeveloped conditions of local communities prevent the employment of a capacity building approach, government participation might overcome these obstacles. Hence, capacity building initiatives should not bypass the participation of other stakeholders such as governments.[28] In this sense, it is important to explore the collaboration of stakeholders in the mining sector, and the way in which their expertise and resources can become the drivers to achieve capacity building that is meaningful for all parties.

[24] Institute for Environment and Development, 2001
[25] Alizar & Scott, 2009; Loza, 2004
[26] Lahiri-Dutt et al., 2009; Veiga, et al., 2001
[27] Bridge, 1999; Lanzi, 2007; Mate, 2001
[28] Institute for Environment and Development, 2001

Although the subject of capacity building has been well covered in the scholarly literature, there are few scholars that deal with its implementation, particularly with the roles, interactions and responsibilities of stakeholders in capacity building implementation in mining contexts.[29] This research gap needs further exploration, specifically in developing contexts such as Colombia, where capacity building approaches for sustainable communities are essential in the face of the escalating mining boom, and in obtaining an SLO.

SLO: Implications of global mining locally

There is a general agreement in the academic literature that the tensions between local and global forces have contributed to the widening of economic disparities, leading to an escalation of discontent, particularly in natural resource-rich regions of developing countries.[30] Existing discontent and lack of compensation for natural resource extraction challenge companies' possibilities for obtaining an SLO, and therefore threaten corporate reputation and productivity. Increasing global trade following deregulation has generated escalating demand coming from the newly emerging economies or BRIC countries (Brazil, Russia India and China) for natural resources such as metals and minerals. Global decision-making on natural resource extraction is raising tensions at the local level, as poor and local communities often feel that they are not being adequately compensated for their loss of livelihood options.[31] Although some scholars highlight the difficulties in measuring such compensation, as well as the impacts derived from the extractive industry over the poor[32], empirical research in the Colombian case shows that lack of capacity building, in the form of education and

[29] Cornelius et al., 2008; Jenkins, 2004; Tracey et al., 2005
[30] Cook, 2006; Haan & Maxwell, 1998; Harrison, 2006; Kabeer, 2000; Shankar & Shah, 2003
[31] Surborg, 2012
[32] Davis & Vásquez Cordano, 2013

gainful employment opportunities to work for either a mining company or a related local industry, further escalate poverty-related issues.[33]

The separation between employment generation at the local level and global industrial production has been mainly caused by the geographical dispersal of production and distribution nodes.[34] Business networks, such as joint ventures and other types of strategic business alliances, tend to look for cheap labour to support the growing accumulation of capital. However, some scholars argue that human capital is becoming more important than other assets such as natural resources,[35] arguing that regions with a skilled and educated workforce compete more successfully over physical and natural resource rich areas. However, this is not likely to happen in the mining sector, as increased demand in commodities has led the sector to expand operations in regions often rich in reserves of minerals and metals, but starved of skilled human capital.

The shortfall in skilled human capital in active mining areas has consequently increased population mobility across the globe, including international migration, preventing local unskilled human capital from competing against these global pressures. These circumstances are causing local tensions that very often threaten corporate investment. Local mining communities are becoming more aware of the marginal compensation that they get from natural resource extraction against the large corporate profits.[36] This situation has led communities adjacent to mining operations to deny multinational mining corporations an SLO in regions rich in natural resources.

The SLO is a term mainly used by the minerals industry, and is perceived as an agreement between the mining company and the mining communities in which '[companies] need to demonstrate positive benefit

[33] Escobar & Baena, 2010
[34] Amin & Thrift, 1992
[35] Shankar & Shah, 2003
[36] Hilson, 2006; Mate, 2001

and engage directly in corporate social investment to ensure that host communities, particularly those directly or indirectly affected by mining operations, receive immediate benefit rather than wait for a possible "trickle down" effect from governments from the receipts of taxes and royalties'.[37] As a principle, the concept of the SLO varies amongst mining companies seeking community consent to start or expand operations. Given its informality, it is not subject to global or local regulations, and therefore can be easily neglected by companies. In 2011, in Santander, Colombia, a region rich in gold, the Canadian mining company Greystar was denied the SLO by the local communities of California and Vetas, causing significant financial losses for this mining corporation.[38] However, Greystar is determined to continue with the project.

Global actors aware of this situation are encouraging mining companies to become more accountable to local communities.[39] In response, mining companies feel pressured to increase such accountability, resulting in a proliferation of response mechanisms, such as corporate social responsibility (CSR) agendas, sustainability reports, use of the Internet and social media, social audits, consultation, and other accountability mechanisms and processes.

Existing accountability mechanisms state explicit corporate commitment to local community sustainability and sustainable livelihood opportunities. Global mining companies argue that corporate initiatives are intended to raise a community's quality of life,[40] diversify local economies, foster community development[41] and engagement,[42]

[37] Warhust, 2001, p. 59
[38] Dinero, 2011
[39] ICMM, 2005; IFC, 2014; International Organization for Standarization, 2010; OECD, 2008; Prospectors and Developers Association of Canada, 2014; Responsible Jewellery Council, 2009, 2013
[40] AngloAmerican Chile, 2008
[41] Rio Tinto, 2011
[42] BHP Billiton, 2009

and build more sustainable communities.[43] Pegg,[44] Alizar and Scott[45] agree that companies are becoming more accountable to communities, and that actions undertaken in compensation for the extraction of natural resources are reducing poverty and fostering employment in local populations. However, Hamann et al[46] and Hilson[47] disagree with these arguments, stating that corporations undertake these actions in pursuit of their own interests and benefits, rather than achieving community-sustainable development aspirations.

The argument that corporate accountability mechanisms are effective to achieve community sustainability is also contested in the development and environmental literature. In the scholarly literature, corporate acknowledgement of global norms and the execution of corporate initiatives in local communities do not guarantee benefits for local communities. Instead, these are seen as 'green-wash' actions that legitimise corporate practices and increase reputation and profits.[48] This argument is reinforced in global norms statements that show that when corporations abide by global norms, they favour corporate interests in terms of workforce recruitment and retention[49], brand image, and better relationships between companies, employees and communities.[50] Likewise, business scholars agree that social investment undertaken by global mining companies is profitable for companies, as these actions accelerate local markets and strengthen corporate goodwill.[51]

However, a number of scholars situated in the business ethics field are concerned about this corporate approach. They feel that the legacies

[43] Barrick Peru, 2008
[44] 2006, p. 383
[45] 2009, p. 24
[46] 2004, p. 85
[47] 2006, p. 46
[48] Bebbington et al., 2008, p. 900; Hamann & Kapelus, 2004, p. 85; Hilson, 2006, p. 44; Jenkins & Yakovleva, 2006, p. 272
[49] Prospectors and Developers Association of Canada, n.d., p. 20
[50] Responsible Jewellery Council, 2009, 2013
[51] Nwankwo et al., 2007, p. 91; Tracey et al., 2005, p. 342

delivered by global mining companies to local communities are not long-term processes intended to sustain communities, but tools to fix community issues and improve a company's reputation so as to favour corporate interests.[52] This limited approach makes explicit the narrow understanding by global mining companies of community expectations.[53] To date, this matter has not been exhaustively examined.

However, despite the potential social veto over mining corporations' activities by local communities, the need to access resources and capital has increased, along with the escalation of struggles in the local contexts wherein global companies operate. These operations more often represent a threat to traditional means of community livelihood, and are also seen as drivers of poverty, unsustainable communities, loss of land, internal conflict, and rights violations. These effects have crossed local boundaries, emerging in large-scale issues such as climate change and greenhouse gas emissions.[54] The large number of adverse impacts caused by global mining corporations have been widely explored in the literature,[55] however, the potential for mining companies to contribute to the eradication of those issues, particularly to forge build sustainable community capacity, has not yet been well documented.

Some scholars agree that the cause of these global-local struggles has to do with the inexistence of a mandatory legal framework at the global, national and local levels, and the weak institutional capacity of local governments in areas where the largest mining projects take place.[56] Global frameworks that regulate corporate performance in the minerals industry are voluntary.[57] This means that mining company

[52] Jenkins, 2004, p. 25; Tracey et al., 2005, p. 331
[53] Cornelius et al., 2008, p. 363
[54] Evans, Goodman, & Lansbury, 2002
[55] Arellano-Yanguas, 2011; Escobar, 1989; Evans, et al., 2002; Mate, 2001
[56] Hilson, 2006
[57] ICMM, 2005; IFC, 2014; International Organization for Standarization, 2010; OECD, 2008; Prospectors and Developers Association of Canada,2014; Responsible Jewellery Council, 2009, 2013

accountability and compensation for natural resource extraction are not mandatory. This failure is caused by the poor institutional capacity of governments,[58] and weak legal mining frameworks in developing countries. These issues often result in unequal negotiations between mining companies and local governments, regarding, for example, labour laws and environmental regulations, and an imbalance of power. This can lead to unexpected scenarios in which, despite harmful incidents caused by mining operations within communities, global mining companies continue to run projects, without any regulatory framework.

In June of 2002, in Peru, the local government from the municipality of Cajamarca, where Newmont (the world's largest gold mining company) operates, came out second best during negotiations with the global mining company after a mercury spill threatened community health. This incident demonstrated that the government could not effectively deal with this and other related environmental hazards, requiring the intervention of civil society actors such as the CBO Generacion de Capacidades and the Canadian NGO CoDevelopment to assist the local government in this regard.[59] Likewise, research conducted by the World Bank and the Colombian Planning Department (intended to examine the institutional capacity of Colombian municipalities) provided evidence that local governments did not have leadership capacities,[60] preventing local administrations from effectively dealing with adverse impacts of global mining operations. These governance dynamics have increased scholars' concerns, and consequently highlighted the need to extensively explore governance issues in mining regions where global mining companies operate,[61]

[58] Fiszbein, 1997; Gibson, 2001
[59] Institute for Environment and Development, 2001
[60] Fiszbein, 1997
[61] Alizar & Scott, 2009; Bridge, 1999; Lahiri-Dutt et al., 2009; Mate, 2001

These examples illustrate the point that there are serious tensions between the global demand for minerals and metals, and obtaining an SLO. Such tensions have not only amplified the need to foster economic sectors such as mining, and exposed the difficulties of delivering more sustainable legacies to local communities and accessing skilled human capital to expand mining operations, but, more importantly, these tensions have also shown the challenges to adequately compensating natural extraction with the substitution of other forms of capital, such as human capital, as well as providing communities with capacity-building initiatives to forge sustainable communities.

Discussion

This section aims to discuss the way in which capacity building and the SLO are linked and applied in practice, and the implications of such as connections for stakeholders in mining regions. The discussion begins by presenting the implementation of both, a top-down and a bottom-up capacity building approach, and the challenges that must be met in order to obtain an SLO. This section also discusses capacity building initiatives that often do not meet community's expectations, nor tackle social issues. Some background of the case study areas, namely Antioquia and Risaralda, is also provided, as both regions differ substantially, not only geographically and politically, but also in terms of the complexities around capacity building, and the current implications for obtaining an SLO.

There are major challenges that need to be identified and further examined in order to improve existing capacity building approaches, and facilitate future SLO processes. Despite the mining industry's contributions to the communities adjacent to mining operations, there are still mixed feelings amongst locals, particularly in the Antioquia case. The compensation for natural resources in other forms of capital, such as capacity building local human capital though training and

education, has not meaningfully achieved mining communities' development aspirations. This is a situation that threatens the concept of the SLO, and the expansion of future mining projects: 'There are regions with a long-term mining history experiencing high levels of poverty, lack of development opportunities and where traditional livelihoods are threatened due to the increasing in mining operations'.[62] However, in Risaralda, the situation differs substantially, as mining and exploration companies play a stronger role in forging sustainable livelihoods in local communities.

Antioquia Case Study Area

The State of Antioquia is located on the north Pacific Coast of Colombia. The region is going through a mining boom that has increased the complexities around mining community capacity building and the SLO. Antioquia has an active mining industry, as it holds the largest reserves of gold, silver, coal, platinum and construction materials in Colombia. Mining projects currently operated by domestic and South African multi-national companies have significant implications for local communities.[63]

Antioquia is also one of the largest regions in Colombia, and hosts a diverse population, inhabiting urban and non-urban areas. Antioquia's population has participated in capacity building initiatives at all levels. Data from the current census register shows that Antioquia had an urban population of 4,340,744 inhabitants, and 1,260,763 people inhabiting non-urban areas, and out of the total population, 51.7% were female and 48.3% male. Antioquia also hosted a total of 1,458,193 households in the same year. In addition, the illiteracy level in Antioquia was 7.5% for that segment of the population older than fifteen years. However, in the same year, a considerable percentage of the population had enrolled at

[62] Senior government representative, interview, 16 January 2013
[63] *Camara de Comercio de Medellin para Antioquia*, 2010, p. 14; *Sistema de Informacion Minero Energetico Colombiano*, 2010, pp. 16-17

least in one level of education: elementary school (37.4%), followed by secondary (33.3%), undergraduate and postgraduate (11.3%) and vocational education (3.6%).[64] Although capacity building initiatives are in place, the outcomes have not positively impacted on communities, diminishing the ability of local inhabitants to forge sustainable livelihoods and overcome existing social challenges.

Risaralda Case Study Area

Risaralda is a region located in the Colombian Andes mountain range. This geographical area is one of the most active producers of minerals and metals. With the escalation of mining operations, stakeholders in Risaralda have engaged to maximise social benefits in the mining boom. Governments, the private sector and civil society have joined efforts to develop a capacity building approach that tackles the most latent community issues. This approach is characterised by active community engagement. Mining is part of Risaralda's cultural heritage; however, the recent escalation of mining operations, undertaken mainly by international companies, has not prevented communities from forging alternative livelihoods and benefiting from existing capacity building approaches to development.

Mining and exploration projects operated in Risaralda impact on local communities in both urban and non-urban areas. According to the current census register, Risaralda hosted a population of 859,666 people by 2005. Out of the total population 665,104 people inhabited urban areas, whereas 194,562 were located in peri-urban and rural areas. 51.3% of the population was female and 48.7% male. A high percentage of Risaralda's population have participated in capacity building initiatives. The illiteracy rate of people older than fifteen years old was 6.8% in 2005, a lower percentage compared to the Antioquia case. By 2005, most of the population had enrolled at least at one educational

[64] *Departamento Administrativo Nacional de Estadisticas,* 2010

level: elementary school (40.3%), followed by enrolments in secondary education (32.8%), undergraduate and postgraduate (9.8%) and vocational education (3.9%).[65] Locals have meaningfully benefited from capacity building initiatives, as they have been able to forge alternative livelihoods such as business, dress-making, jewellery and coffee production, and agriculture. Further details about the factors that have made these initiatives result in positive outcomes for communities will be provided in the following sections.

From a Top-down to a Bottom-up Community Capacity Building Approach: Implications for an SLO

Bottom-up capacity building agendas implemented by multinational mining corporations in Colombia can become one of the main drivers for local development and sustainable livelihood aspirations. Developing bottom-up rather than top-down capacity building approaches for development has meaningful impacts on local communities. The mining industry in the case study areas has been driven by Canadian and South African corporations; however, despite the fact that these multinational companies have embarked on social responsibility agendas focused on capacity building, at times they tend to bypass communities' expectations. This is an issue that threatens companies' possibilities of obtaining an SLO. Although companies operating in Risaralda have somehow overcome this barrier, the existing inadequacies of top-down corporate social responsibility approaches is one of the major challenges that Antioquia's minerals industry faces.

A preliminary analysis of the situation in Antioquia shows that existing corporate approaches are unsustainable, as they do not meet community's expectations. Some corporations operating in the region have not developed community-based social responsibility agendas to effectively implement capacity building initiatives, tackle livelihood-

[65] DANE, 2005

related issues and respond to adverse mining impacts. However, when these accountability mechanisms are in place, they seem to bypass civil society's voice. According to senior government representatives at the national level, 'global corporations invest on projects that are convenient for their business such as infrastructure and facilities for mine's workers rather than on more sustainable legacies for communities adjacent to their operations. This corporate approach is preventing local communities from achieving development aspirations which questions the notion of sustainable mining in the region'.[66]

Despite existing corporate engagement in the Antioquia case, mining companies still continue to develop their social responsibility agendas on the basis of three premises: taxes, royalties and infrastructure. 'Social Responsibility does not go beyond some little help for infrastructure, royalties and taxes'.[67] Although other initiatives, such as capacity building, more often become part of such agendas, in most cases those tend to favour corporate interest rather than responding to a community's expectations and forging sustainable livelihoods. In the Antioquia case, for example, capacity building initiatives are mainly intended to supply the skill shortage in the industry, rather than providing other livelihood options for locals.

Similarly, existing corporate engagement with the community and their livelihood options has been circumstantial and opportunistic. This is another factor that shows the inadequacies of corporate social agendas, and prevents the industry from forging sustainable livelihoods and obtaining an SLO in mining regions. A case in point is an accident in 2010, which led to the death of 63 miners, caused by poor mining practices in Antioquia. This incident acted as a wake-up call for the mining companies operating in the region to improve their operational

[66] Senior government representative, interview, 16 January 2013; Senior government representative, interview, 8 February 2013
[67] Academic from Antioquia, interview, 22 October 2012

practices, including engagement with the local communities.[68] After the accident, family members were promised compensation in the form of money and infrastructure. Additionally, capacity building also became part of the corporate agenda, as the company is currently working closely with local foundations and community organizations to promote education and training programs: 'capacity-building in the form of education is a key element for this corporation, as it creates value to the mining company and the community'.[69] This opportunistic top-down approach to development is exacerbating discontent amongst community members, as they have not been able to achieve their development aspirations.

Risaralda's case differs substantially from Antioquia, as corporate social responsibility agendas in that area are more community-oriented, contributing to meet community's aspirations. Risaralda's state and local governments have pushed companies towards a more bottom-up and community-oriented agenda. This scenario has been beneficial for local communities, as they have been compensated for natural resource extraction: 'Companies operating in the region have embarked on social investment... one of the companies has helped us increase our productivity by providing us some financial assistance, capacity-building and some machinery to grow our local business'.[70] Community organizations for coffee, blackberry and jewellery production and commercialisation have been able to further develop livelihood options more appropriate to their life plans, and intended to last after the mine's closure.

While corporations operating in Antioquia seem to have limited understanding of the importance of delivering sustainable legacies through capacity building, the scenario in Risaralda suggests that mining companies have a broader understanding, due to active corporate-

[68] Ospina, 2010
[69] Manager, corporate social responsibility, interview, 25 October 2012
[70] Community leader, interview, 18 October 2012

community engagement in this regard. The companies' social responsibility managers, as well as other senior decision-making positions within mining and exploration companies, are former local government representatives and community leaders. This has helped the community engage with the company and express their concerns and demands, resulting in more effective and accurate community capacity building approaches, and gainful opportunities for both companies and communities.

Bottom-up approaches for capacity building in the frame of corporate social responsibility agendas have the potential to become key drivers of development and sustainable livelihood options for local communities. Existing approaches need to go beyond mining practices, and provide locals with alternative livelihood options more tailored towards their life plans. Promoting mining livelihood options as the only drivers for local development does not provide communities with sustainable legacies. Instead, this top-down approach increases discontent within local communities, as they cannot achieve their development aspirations, exacerbating internal conflict dynamics, and threatening companies' reputations and the expansion of future projects.

Community capacity building and local expectations: Challenges to maintain an SLO

Although existing capacity building approaches are in place, they need to be further developed, as they do not tackle priority areas relevant for locals, challenging the notion of the SLO. According to Eade (1997), capacity building approaches that have a positive impact on communities are those that better respond to their needs and expectations. However, at least for a preliminary analysis of the situation, stakeholders more often embark on capacity building initiatives that do not tackle important community issues and demands. Although capacity building is a core theme in Colombia's minerals industry's agenda, there are aspects that deserve early attention, so as to

effectively implement capacity building approaches in mining regions. While in Antioquia existing corporate approaches are mainly mining-oriented, Risaralda's communities have been able to develop assets to forge livelihood options that are more relevant to their life plans.

In Antioquia, capacity building actions are intended to attract and retain potential human capital for the industry. For example, mining companies are engaging with tertiary institutions to facilitate undergraduate practicum projects and mining student tours.[71] Similarly, corporations, in partnership with local governments, are running capacity building initiatives to build high school students' and locals' capacity in mining practices. Although these initiatives have helped communities to reach a broader understanding of the industry, they have not yet met community expectations. Miners and community members acknowledge mining as a livelihood option, but not as the only one. They agree that companies and governments should support alternative livelihood options more relevant to community members' life plans. Following Sen (1979), capacity building is a process in which individuals are free to choose their life plans. However, in the Antioquia case, mining has been positioned by the minerals industry as the most predominant livelihood option; as discussed previously, the notion of capacity building in Antioquia has been implemented as a top-down rather than a bottom-up approach to development. Companies are more often implementing capacity building initiatives in mining in order to supply the skill shortage in the industry, neglecting other sectors equally important for mining regions. This has become an issue that is preventing locals from developing other types of assets, and gaining employment opportunities in other relevant areas for the local economy.

The lack of livelihood options accompanied by the dearth of gainful job opportunities in the region has exacerbated frustration and discontent among members of civil society.. As one miner states: 'the company is

[71] Mining engineering students from Antioquia, focus group, 22 October 2012

currently helping me finish high school, but I would like to specialise on gastronomy'.[72] In addition, community members and miners more often encourage their children and family members to abandon the town to look for better study and employment opportunities, as they do not want them to be part of the industry. This negative association that community members feel with regard to mining reflects their frustration and uncertainty regarding the lack of opportunities in the region:

> 'I am the only miner in my family. I have three children and want them to study. I am aware of the risks of working at the mine and I did not want them to be part of the industry. This is a mining town… a person who does not go to school becomes a miner. Most of us do not know anything else than mining, hence, we have to work here and sustain our family members with the little income we get'.[73].

Mining-oriented capacity building has adverse implications for local development at the economic and social levels. According to academics undertaking research in the region, the local economy has become more speculative with the increase of mining operations. This accounts for the adverse social impacts that are also undermining the regional social tissue and development opportunities:

> 'Mining towns get 15% of profits derived from mining production. In addition, other industries equally important for the local economy have been displaced as companies and local traders import goods and services, instead of investing and supporting local production in mining towns. Sectors like agriculture and manufacturing are threatened as mining companies pay higher wages to local farmers who have chosen mining over their traditional livelihoods. Unfortunately the little

[72] Miner, interview, 23 October 2012
[73] Community members, group interview, 26 October 2012

> income they get is wasted in gambling, prostitution and alcohol.'[74]

In spite of corporate improvements in capacity building approaches, those initiatives still need to go beyond mining practices, as they have resulted in a large number of issues that need major attention. Development aspirations have only been partially achieved, and mining companies need to play a stronger role in developing sustainable capacity building agendas, particularly in Antioquia. In addition, corporations need to take capacity building more seriously, so that existing initiatives can make a difference in local communities, and future SLO agreements can create value for all parties:

> 'Unfortunately, mining communities who have participated in capacity-building actions have not been able to forge meaningful livelihoods. Most of the 600 children who finished high school in the last years became miners and bar tenders. A scenario that questions existing education and training initiatives to forge sustainable communities in Antioquia'.[75]

While Antioquia's communities have not meaningfully benefited from corporate capacity building actions, this approach to development has become advantageous for Risaralda's inhabitants. Active community engagement in Risaralda has helped communities request, and be part of, capacity building initiatives intended to develop their capacities and assets in economic activities relevant for the region. In order to respond to Risaralda's communities' requirements, corporations and governments have embarked on a community-oriented capacity building agenda, resulting in positive impacts on locals. Local coffee and jewellery producers, as well as female leaders, have experienced the benefits of these initiatives: 'We have participated in capacity-building initiatives in jewellery design... the mining company has also provided

[74] Academic from Antioquia, interview, 22 October 2012
[75] Academic from Antioquia, interview, 22 October 2012

us with some financial assistance to attend international fairs so that we can promote and sell our products'.[76]

Capacity building approaches need to be further developed according to a community's expectations and needs. This will have positive effects on communities, as it will provide them with more possibilities to develop sustainable assets. However, if existing capacity building approaches that do not meet community's expectations keep being implemented, this will not only be detrimental for locals, but also for companies operating in mining regions, as it will escalate community discontent and resentment towards the industry SLO agreements.

Conclusions

This paper discussed the challenges of existing community capacity building approaches, and their implications for obtaining an SLO. Considering capacity building as a top-down approach in corporate agendas has adverse implications for communities, and challenges existing SLO agreements. Instead, capacity building as a bottom-up approach to development addresses community expectations, providing communities with gainful livelihood and employment opportunities, creating added value for companies. Mining companies have a substantial potential to transform existing capacity building policy concepts, and make this approach a driver to achieve community development. This will also create value for all parties, particularly for civil society and mining corporations.

In addition, it is necessary that mining companies and civil society share responsibilities, and articulate more effectively, so as to guarantee the success of capacity building actions. However, serious research is needed on the aspects that can foster multi-stakeholder collaboration for capacity building and potential connections to the SLO. This will provide stakeholders with greater understanding of the existing forms of

[76] Risaralda's Community, Risaralda, interview, 18 October 2012

engagement, and the possibilities for achieving development aspirations in mining regions.

More than ever, there is a need to take capacity building more seriously, so as to adequately compensate communities for natural resource extraction and increase the possibilities to foster successful SLO agreements. This is possible through bottom-up capacity building approaches intended to meet community expectations, and active corporate-community engagement around capacity building implementation in Colombia and other mining regions in developing countries.

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2

EVOLVING STANDARDS AND EXPECTATIONS FOR RESPONSIBLE MINING. A CIVIL SOCIETY PERSPECTIVE

Ramsey Hart and Catherine Coumans

Abstract

MiningWatch Canada is the only national independent civil society organization with an exclusive focus on mining in Canada and Canadian mining companies' operations internationally. In 2005, MiningWatch Canada collaborated with other NGOs to develop the Framework for Responsible Mining: A Guide to Evolving Standards. The project was the result of a perceived need by NGOs and retailers, particularly from the jewellery sector, for a framework that would set out environmental, social, and governance standards for the minerals sector 'providing recommendations for retailers and others seeking to source or invest responsibly, as well as regulate and encourage responsible mining practices'. This paper is a reflection on the Framework that examines key areas of concern and notes where the industry norms and expectations of civil society have evolved. The paper focuses on developments in social issues related to the UN Guiding Principles on Business and Human Rights, new initiatives associated with financial transparency, the UN Declaration on the Rights of Indigenous Peoples. The environmental components of the Framework that are revisited are waste management,

biodiversity, energy and climate change, environmental assessment, mine closure, mercury and seabed mining.
Keywords: Mining, corporate accountability, standards, certification, environment, governance, human rights, indigenous rights

Introduction

MiningWatch Canada is the only national independent civil society organization with an exclusive focus on mining in Canada and Canadian mining companies operations internationally. In 2005, Catherine Coumans of MiningWatch Canada collaborated with Marta Miranda (then of the World Wildlife Fund), and David Chambers of the Center for Science in Public Participation to develop the *Framework for Responsible Mining: A Guide to Evolving Standards* (the Framework).[1] The Framework was the result of a perceived need by Non-Governmental Organizations (NGOs) and retailers, particularly from the jewellery sector, for a framework that would set out environmental, social, and governance standards for the minerals sector, 'providing recommendations for retailers and others seeking to source or invest responsibly, as well as regulate and encourage responsible mining practices'.[2] Seven principles inform the Framework's recommendations: sustainable development, equity, participatory decision-making, accountability and transparency, precaution, efficiency, and polluter responsibility (the 'polluter pays' principle).

The Framework characterises responses to the issues it covers as the Norm, defined as widely accepted practices, and Leading Edge practices. Leading Edge practices, for the purposes of the Framework, were defined as those that 'could generate significant environmental and social improvements if implemented'.[3] The recommendations in the

[1] Miranda et al., 2005
[2] Ibid.
[3] Ibid.

Framework were all based on Leading Edge practices of the time. While forward trending, in order to qualify as a recommendation, a Leading Edge standard or practice needed to already have received endorsement by at least three of the following four stakeholders: 1) governments and government agencies; 2) civil society groups, including NGOs; 3) the mining industry; and, 4) financial institutions, including public and private banks, as well as insurers.[4]

In its title, the Framework clearly recognizes the rapidly evolving nature of best practice standards for the mining sector. Seven years later, the Framework provides an interesting reflection on that evolution. as some standards that were Leading Edge in 2005, such as a commitment to reducing energy use and greenhouse gas emissions, have become the norm in 2012, whilst others, such as Free Prior and Informed Consent. have received steadily increasing support, but remain contested in the industry sector, and unsupported in regulation by most governments. Perhaps most striking, particularly in the social realm, are the number of issues that have arisen as core areas of concern that were not at all, or only barely, in view in 2005.

While the Framework set out standards the authors and reviewers believed to be essential norms for more responsible mining that could be adopted by regulators, implemented by companies, or required by investors, lenders, downstream consumers, communities, and civil society groups, it did not provide a mechanism by which compliance with these standards could be monitored or verified. One year after the Framework was completed, in June 2006, a new initiative was launched in Vancouver, Canada, that was based on the Framework and on other global norms such as the International Finance Corporations Performance Standards, the Global Reporting Initiative, and standards of the International Council of Mining and Metals. This effort, the Initiative for Responsible Mining Assurance (IRMA), has the

[4] Ibid.

participation of five sectors, including mining companies, downstream metal purchasers (such as jewellery retailers), environmental groups, affected communities and labour. The IRMA seeks to develop the first assurance programme for accountable mining that fully embraces a multi-stakeholder approach to developing credible standards, as well as a commitment to independently verified certification.

This paper does not provide a comprehensive update of the Framework, but rather seeks to map out some issues that have emerged or undergone rapid evolution since 2005, providing a brief discussion of these issues, in particular: project level human rights due diligence; non-judicial grievance mechanisms; supply chain due diligence; revenue transparency; free prior and informed consent; waste management; biodiversity; energy use and greenhouse gas emissions; environmental assessment; and mercury and seabed mining.

Evolution of social standards

Within the mining realm, the first decade of the 21st century was characterized by an increasing focus on local- and national-level social impacts by the industry, governments, civil society actors, lenders and investors. Between 2005 and 2012, this social focus gathered momentum, and led to significant discussions about new norms. The impetus for these developments comes from many directions, most particularly from communities affected by mining. Local opposition, conflict and resistance to mining has globally increased and strengthened, as has the awareness of these issues. Here we focus on three elements that crystallized emerging social issues: the work of the Special Representative of the Secretary General on the issue of human rights and transnational corporations (2005-2011); the passage of the Dodd-Frank financial reform act in the United States (2010); and the adoption by the UN General Assembly of the UN Declaration on the Rights of Indigenous Peoples (2007).

The UN Guiding Principles on Business and Human Rights

The same year the *Framework for Responsible Mining* was published, a global process got underway which will have significant influence on the development of human rights standards related to mining for years to come. In 2005, UN Secretary General Kofi Annan named Professor John Ruggie as his Special Representative on business and human rights.

Ruggie set out to map patterns of alleged human rights abuses by businesses; evolving standards of international human rights law and international criminal law; emerging practices by States and companies; commentaries of Unites Nations treaty bodies on State obligations concerning business-related human rights abuse; the impact of investment agreements and corporate law and securities regulation on both States' and enterprises' human rights policies; and related subjects.[5]

In 2011, Ruggie published the *Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework* (Guiding Principles), which was unanimously endorsed by the UN Human Rights Council. Ruggie maintains that it is the duty of corporations to respect human rights, namely 'do no harm.' It is hard to overestimate the significance of the UN entering the arena of norm-setting for businesses. The rights-based standards rooted in the UN will now provide an alternative source of guidance and requirements, next to the risk-based Performance Standards of the World Bank, which have become a globally recognized set of norms for mining companies.

While sector-specific guidance for implementation of the Guiding Principles has not yet been developed for the mining industry, the following requirements, among others, will be of importance: demonstrated project-level human rights due diligence; the creation of

[5] Ruggie, 2011 quoted in Coumans, 2012b

rights-based project-level non-judicial grievance mechanisms; and evidence that materials sourced through a project's supply chain are produced in a way that is respectful of human rights (do no harm).

Human rights due diligence

The Guiding Principles require that companies exercise human rights due diligence. For mining, that means that the potential project-level risks to human rights need to be evaluated and avoided, or addressed in a transparent fashion at each stage of development, from exploration through to closure. A tool that has emerged by which to assess potential human rights impacts on mining-affected communities is the human rights impact assessment (HRIA). A number of different HRIA tools have been developed. Only one, developed by the former International Centre for Human Rights and Democratic Development (Rights & Democracy) in Canada, was explicitly a participatory instrument, which provided greater assurance that the community most likely to be impacted by a mine project was engaged in the assessment. As the process of carrying out an HRIA is likely to be invasive on a community, it is important that the community give its consent to the process. Without a consensual and participatory process, an HRIA may create further tensions, rather than help to resolve them. In cases of local opposition to a mine, for example, an HRIA can be perceived by the community as a tool that will be used by the company to undermine their agency.[6]

Non-judicial grievance mechanism

One of the three pillars of the Guiding Principles is access to remedy for those who have been harmed by the operations of a corporation. The Guiding Principles highlight the need for access to justice, both through judicial (courts) and non-judicial mechanisms. With respect to the latter, the Guiding Principles recommend that companies put in place project-

[6] Coumans 2012a

level non-judicial grievance mechanisms. While such mechanisms may provide a means of finding resolutions to some problems, there are also potential dangers to local communities and individual community members who must avail themselves of such mechanisms, particularly in circumstances of community conflict with a mine. In these cases, the mechanism can be used by the company to thwart local agency, particularly in jurisdictions without strong, independent and effective legal systems to which citizens can turn as an alternate to the use of a non-judicial mechanism.[7] For project-level non-judicial grievance mechanisms to be an effective tool, they should comply with mandatory standards, be subject to independent and transparent audits, and whatever remedy the company may offer must not be made conditional on the complainant signing away the right to seek justice through the courts. Finally, as project-level grievance mechanisms currently are not subject to these conditions, complainants should be free to avail themselves of non-judicial grievance mechanisms that are removed from the project level, such as the National Contact Points of the OECD, without being first sent back to pursue remedy at the local level, as is currently required by Canada's CSR Counsellor.

Respecting human rights through supply chains

The need for corporations to take responsibility for the potential human rights impacts of companies in their supply chain is a new and significant challenge for many companies. *Shift* is an organization set up to help corporations and governments implement the Guiding Principles, and it has begun holding workshops 'to explore challenges and generate practical guidance for companies regarding respect for human rights through global supply chains' (2012). *Shift* (2012) notes that:

> 'The UN Guiding Principles state that companies may be involved with adverse human rights impacts either through their

[7] Coumans, 2012b

> own activities or as a result of their business relationships. 'Business Relationships' are understood to include relationships with 'entities in [the company's] value chain.' As part of their corporate responsibility to respect human rights, companies are expected not only to avoid causing or contributing to adverse human rights impacts, but also to address 'human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts.'

For mining companies, supply chain due diligence will be particularly challenging while operating in conflict zones, or in jurisdictions with weak governance and weak enforcement of laws.

The Dodd-Frank Wall Street Reform and Consumer Protection Act

In 2010 the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank) was passed in the United States, and in 2012 the implementing rules related to the act were passed. Section 1504 of Dodd-Frank requires oil, gas and mining companies listed on US stock exchanges to disclose their payments to governments. Companies are required to disclose the type and total amount of such payments made for each project, and the type and total amount of payments made to each government. In addition, Section 13(q) requires these resource extraction companies to provide information regarding those payments in an interactive data format. While Dodd Frank only applies to US stock exchanges, it will impact foreign-based companies listed on the US exchanges, and it will provide information on payments to governments all over the world. It is likely that the European Union will soon follow suit with similar requirements.

Revenue transparency and development

As mining companies increasingly face local level opposition, and have come under critical public scrutiny for the environmental and

social harm with which they are associated, the industry has responded by a vigorous international campaign, re-branding itself as a vehicle for development. This has taken place in spite of a growing literature that demonstrates that mining frequently negatively impacts both short- and long-term local-level development, as well as national development, in resource dependent countries with weak governance. At the same time, major international mining companies and the international industry lobby frequently oppose efforts by developing country governments to increase the revenues they receive from mining – even during boom times. Additionally, investor-state contracts – most of which are confidential – frequently contain provisions, such as transfer pricing, that result in losses of revenue from taxes for developing country governments. These funds are commonly siphoned off to offshore tax havens such as the Cayman Islands. If the mining industry wants to be seen as a development actor, it needs to move beyond Corporate Social Responsibility (CSR) projects – sometimes paid for by home state taxpayers through official development assistance – and assure that it pays its fair share of taxes and royalties to host state governments, who can then apply these to national development. Section 1504 of Dodd-Frank will require revenue transparency regarding payments made to governments, which will allow civil society, lawmakers, and others to assess the adequacy of these payments.

Mining companies, and mining industry lobby groups such as the International Council on Minerals and Metals (ICMM), should lobby for the passage of Dodd-Frank-type legislation in other jurisdictions with stock exchanges that are home to many of the world's mining companies, such as Canada. This revenue transparency will help combat corruption, and will provide greater transparency regarding the benefits mining provides through payments to governments. Additionally, the industry should move to stop the usage of accounting mechanisms, such as transfer pricing, to avoid paying taxes.

The UN Declaration on the Rights of Indigenous Peoples

The UN Declaration on the Rights of Indigenous Peoples (DRIP) (2007) sets out various rights of indigenous peoples that are relevant to mining, including: rights to property, culture, religion, and non-discrimination in relation to lands, territories and natural resources, including sacred places and objects; rights to health and physical well-being in relation to a clean and healthy environment; rights to set and pursue their own priorities for development, including development of natural resources and broader territorial management issues, as part of their fundamental right to self-determination; and participatory rights, including the right to make authoritative decisions about external projects or investments. [8]

One of the ways these rights are safeguarded is through the requirement to obtain the free, prior and informed consent (FPIC) of indigenous peoples in cases where development projects may affect them.

Free prior and informed consent

DRIP was negotiated over a period of twenty years. The concept of FPIC has long been understood as a key requirement of indigenous peoples. A standard on FPIC was prominent in the Framework for Responsible Mining, which also provided appendixes that lay out the legal case for FPIC, and examples of early adoption of the principle in some jurisdictions. However, industry and government resistance to the adoption of this standard has remained strong. The ICMM has resisted supporting the principle, as have home state governments of mining companies, such as Canada. Nonetheless, the principle is gaining acceptance and making inroads, even into financial institutions such as the European Bank for Reconstruction and Development, and mainstream risk-based standards such as the IFC Performance

[8] IRMA, n.d.

Standards, which adopted FPIC in its latest revision (although the scope of the principle is somewhat restricted in the Guidance Document). A number of mining companies have made statements in support of FPIC,[9] including Inmet, Newmont, Rio Tinto, and Xstrata, although documentation of implementation is scant. Unfortunately, some in the industry, including the ICMM, are actively trying to re-interpret FPIC, with efforts to portray the meaning as enhanced consultation, rather than true consent with the ability to withhold consent, i.e. to say 'no' to a mine.

Whilst mining companies recognize the costs of conflict, and often speak about their need to have a 'social license to operate', they largely continue to oppose a principle that entails the right of indigenous peoples to say no to a project that they consider harmful to their current and future well-being.

Evolution of environmental standards

The Framework provides guidance for the following areas of concern related to environmental protection: Exploration, Environmental Impact Analysis, Water Contamination and Use, Acid Mine (Rock) Drainage, Air, Energy Consumption, Noise, Waste Management, Cyanide, Reclamation, Financial Guarantees, Post Closure, and Monitoring and Oversight. In the following sections we will provide brief updates on waste management, biodiversity, energy use and greenhouse gas emissions, and environmental assessment. Other areas of the Framework, notably closure, remediation and post closure, have seen little evolution in industry performance or civil society expectations since the Framework was first completed. Mercury and seabed mining are two areas of emerging concern for civil society that are also discussed.

[9] Voss et al., 2012

Waste management

In its waste management section, the Framework indicates that riverine tailings disposal and shallow sub-marine disposal do not reflect responsible practices, and that deeper submarine disposal should be approached with great caution. In Canada and the US, another issue related to mine waste management has come to the fore in recent years, namely the use of lakes, wetlands and stream valleys for mine waste disposal. These natural depressions make convenient basins for waste disposal, and considerably reduce the cost of tailings impoundment construction. Because the natural basins may be more geologically stable than constructed impoundments, it has been argued they are an environmentally sound choice.[10] We have summarized the issues surrounding the practice in Canada elsewhere,[11] and an international perspective was included in a joint report by Earthworks and MiningWatch (2012), entitled *Troubled Waters*. At the policy level, both industry and Canadian and US governments have continued to defend the practice, but at a project level we have seen an increasing hesitance to destroy natural water bodies. In large part this hesitance could be attributed to the public backlash over earlier proposals, and the failure of two projects in British Columbia (Kemess North and Prosperity) to obtain necessary approvals.

We are encouraged by this more cautious approach, but remain concerned that economic factors trump other considerations in decisions over use of natural water bodies as repositories for mining waste. We have also identified significant information gaps in our understanding about the long-term biological implications for the practice that dispute assurances from industry that lakes will recover post-disposal.[12]

The current practice for waste disposal in the majority of mining projects is construction of a tailings impoundment, and maintenance of a

[10] MAC, 2008
[11] Hart, 2011
[12] Gendron & Hart, 2012

water cover over potentially acid-generating tailings. Proper construction of impoundments is a focus of the waste management section of the Framework, and of much of government and industry work within the mining and environment nexus. While effective at minimizing acid mine drainage, long-term maintenance of such facilities remains a serious concern. Options with lower risks of failure, such as paste and thickened tailings, exist, yet their application has been limited. Over the lifecycle of a mine such options may in fact prove more economical, despite higher upfront costs,[13] but it seems these upfront costs are deemed too much of a burden. None of the projects we have reviewed in recent years have given serious consideration to such alternatives, nor conducted lifecycle cost assessments including the post-closure period.

Biodiversity

Within the Framework, biodiversity is addressed as an issue of where to or not to mine, and it recommends avoiding areas of high conservation value and designated protected areas. Since the drafting of the Framework, a considerable amount of industry effort has gone into the theme of biodiversity and mining. The Mining Association of Canada's Towards Sustainable Mining programme is about to introduce biodiversity-reporting requirements, and the ICMM has both developed a guidance document, and published case studies, on biodiversity management. The emphasis in these efforts has, however, been on addressing site level impacts, and identifying methods of offsetting site-specific impacts. Indeed, if a Google search is any indication, the mining industry would seem to be a leader in the offsetting approach, as many of the hits for a search of biodiversity offsets related to the mining sector, and many of the examples cited in general documents were from the sector. Although embraced by the industry, offsets remain a

[13] Reid et al., 2008

controversial approach,[14] and should only be used after all other efforts to avoid impacts are considered. A full review of biodiversity offsets in the mining sector is beyond the scope of this paper, but would be a worthwhile project to undertake.

In contrast to work on offsets, there has been relatively little movement from the industry, or many governments, in addressing the appropriateness of mining in sensitive ecosystems. Examples of current controversies over the appropriateness of mining in high conservation value ecosystems include: various exploration projects in the Peel Watershed (Yukon), exploration in the largest remaining old-growth red pine stand in North America (Ontario), mine development in Grass River Provincial Park (Manitoba), the Pebble Mine in the headwaters of Bristol Bay (Alaska), the Cobre Panama project in the Meso-American Biodiversity Corridor (Panama) and exploration and mine development in alpine 'paramos' of the Andes (Colombia and Ecuador).

Energy use and climate change

A leading edge approach identified by the Framework is the development of energy and greenhouse gas reduction programmes. This has become the norm for major companies that subscribe to the GRI and frameworks like TSM. While reporting has increased, success at actually reducing emissions has proven more challenging. There was no improvement in GHG intensity at Canadian mines from 1998 to 2008, though important improvements were made in the refining and fabrication sectors.[15] Reported energy intensities for Barick Gold (2012), Inmet (2014) and Teck (2012) indicate a general trend of increasing emissions, with some modest gains made in 2011. The trend of accessing increasingly lower-grade deposits in remote areas that depend on diesel generators and require long-distance transport is likely to make future energy efficiency gains a significant challenge.

[14] See for example Monbiot, 2012, Maron et al., 2012
[15] NRCan, 2010

Given the potential inherent challenges in reducing greenhouse gas emissions from mine sites, the industry may turn to climate offsets to reduce their net carbon footprint (as indicated by the considerable uptake of biodiversity offsets). Carbon offsets have, however, shown to be a problematic response to civil society's demands to reduce emissions. The Indigenous Environment Network, for example, opposes the use of offsets, and points to the negative impacts that offsetting programmes such as REDD (Reducing Emissions from Deforestation and Degradation) have had on indigenous peoples and their territories.[16] MiningWatch shares many of IEN's concerns about greenhouse gas offset programmes.

Environmental assessment

In 2005, when the Framework was written, there was broad acknowledgement of the importance of environmental assessment (EA), but considerable differences in how EA should be applied in practice. The Framework notes a less rigorous approach in Canada compared to the USA, and, unfortunately, recent changes to the federal Environmental Assessment Act and the discretionary policies related to EA have further restricted Canada's federal EA processes.[17] There has also been a significant drop in the funds made available for Aboriginal and stakeholder participation. Provincial and territorial processes are in place across Canada; however, they are inconsistent in their approaches, and share many of the limitations of the new federal regime, in that broader questions of sustainability, equity, need for proposed projects, and life cycle analyses are weak or lacking.

The participation of Aboriginal peoples in the EA process remains an important concern, especially in southern Canada, where there are few modern agreements with the provincial governments to share responsibilities for resource management. A case in point is the EA

[16] IEN, 2012
[17] Ecojustice, 2012

process for the so-called 'Ring of Fire' mineral deposits in northern Ontario. The lack of consideration for the concerns and recommendations of Aboriginal peoples has resulted in a court case by Matawa Council on behalf of several First Nations. Ontario is also the only jurisdiction in Canada where a provincial EA is not required for mines; it is only engaged by Ministerial order, or on a voluntary basis.

Most of the leading-edge issues in the Framework are very much still in need of improvement across the sector. One aspect that may see some improvement in the near future is accountability for EA commitments. A positive change to federal legislation enables the government to make binding legal requirements through the EA process. Of course, these will be applied to narrow areas of federal jurisdiction and monitoring, and enforcement commitments will be needed for this new opportunity to meet its limited potential.

Environmental assessment and climate change

Climate change considerations have become an important component in environmental assessments, as climate change introduces significant risks and uncertainties to mining operations and infrastructure.[18] Under the old Canadian Environmental Assessment regime, it was required to consider the impacts of climate change on the design and operation of a proposed project. In practice, this requirement was met with a considerable degree of variability, but leading companies have been considering increased variability, and incorporating climate changes predictions into their water balances and facilities designs.

Under federal EA, it was also standard practice to provide estimates of greenhouse gas emissions for proposed projects in environmental assessments. It is not clear if this will be included under interpretations of the new act, although recently released draft EIS guidelines suggest not.[19] In the past there has been an inadequate treatment of this issue in

[18] DSF, 2009
[19] CEAA, 2013

most of the EAs we have reviewed. Emissions from a proposed project are often compared to total regional and national carbon budgets, which make the project's emissions appear insignificant. A more effective approach to assessing individual projects would be to provide predictions in intensity units, compared with other mining operations, recycling and other industrial activities. This would provide a much more robust assessment of the projects relative contribution to global climate change.

According to a recent report from Australia,[20] the climate impacts of coal mining are often not adequately addressed in project assessments. The authors found that project assessments assumed mining coal in a particular location would not increase the overall consumption of coal or release of greenhouse gases, and they provide a critique of this assumption. It would be interesting to assess how widespread this assumption is outside of Australia.

Mercury

The international community has done a considerable amount of work in recent years towards reducing mercury releases to the environment, and at the beginning of 2013, the UN treaty on mercury was finalized to mixed reviews. The Framework does not specifically address mercury, even though it is widely recognized that mining and mineral processing are important sources of mercury pollution. While much of the recent concern has been focussed on artisanal mining, large scale mining and mineral processing can also be significant sources of mercury releases. While it was in operation (to 2009), HudBay's Flin Flon smelter was the largest source of mercury releases in Canada.[21] National Pollutant Release Inventory data from 2011 indicate total releases of mercury from mining in Canada at 438 kg, an increase of over 100% of the annual 2007-2010 releases, despite the shut down of

[20] Campbell and Grudnoff, 2013
[21] NPRI, n.d.

the Flin Flon smelter. This amount does not include the mercury that is disposed of on-site, some of which could escape in the future.

The ICMM (2009) has a position paper on mercury that requires members to monitor and report mercury releases, and minimize emissions through 'the application of cost effective best available technology, using a risk-based approach'. It is unfortunate that the commitment is couched in terms that would excuse a lack of action to reduce emissions. The data above shows that more efforts need to go into reducing mercury emissions from large-scale mining, as well as ongoing work for small-scale operations. Future efforts to develop standards for mining should reflect the commitments of the Mercury Treaty, and go beyond these to ensure real reduction in emissions.

Seabed mining

Though by no means new, seabed mining has gained a heightened degree of interest and concern since the Framework was drafted. A Canadian company is at the fore of efforts to expand the frontier of mining into the deep sea, and has run up against environmental and political challenges. Seabed mining, and in particular deep-sea mining, brings along with it a series of unique and substantial challenges to responsible development. One of the most significant challenges is the lack of understanding about the deep-sea environment, and on the potential impacts of mining and waste disposal at sea.[22] Another significant challenge is the lack of a legal framework for international waters and those within national boundaries.[23] Community groups and NGOs have been clear that mining should not proceed until these issues are addressed. A guidance document has been created for south Pacific Nations to assist them with developing the necessary legal framework, but it has not been well received by civil society.[24]

[22] Rosenbaum, 2011
[23] Ibid.
[24] Island Business, 2012 & SPC, 2012

Conclusion

It is clear from our retrospective look at the Framework, and the evolution of practices and expectations, that improvements have been made in some areas of concern, and that there is an increasing degree of expectations placed on corporations by civil society. Reporting on environmental and social issues has greatly improved, and will improve further, with binding requirements such as those of the Dodd Frank legislation in the US. There has, however, been some disturbing trends in the Canadian legal framework, with a decreasing federal role in environmental assessment. We are also aware of several attacks on laws in the USA that currently restrict mining's impact on the environment or require the industry to meet rigorous standards.

It is also important to distinguish between the improvements in standards and norms, and real improvements in performance. The same can be said for improvements in reporting and transparency versus improvements in minimizing negative impacts (e.g. greenhouse gas emissions) and maximising benefits (e.g. tax payments). Although it is hard to quantify, we do not see any real indication that the number of on-the ground social conflicts are decreasing, suggesting that the performance of the sector still has a long-way to improve. Associated with these conflicts, we have observed a disturbing increase in the criminalization of those who oppose mining projects for a variety of legitimate reasons.

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3

THE STRATEGIC RISK ASSESSMENT AND MANAGEMENT OF INDIGENOUS ISSUES IN THE EXTRACTIVE SECTOR

Karim Ramji

Abstract

The extractive sector today faces growing social, legal and political risks (SLPs) from many different stakeholders including national and local governments, name and shame groups, civil society and environmental groups, and the "Occupy" movement. Beyond these stakeholders, there are the indigenous peoples who have growing legal, social, political and economic influence, which can often determine the outcome of the Project. The development curve in the extractive sector from initial exploration to mine start-up has become longer, steeper and more risky and expensive as these SLPs have grown in scope and complexity. Even if a project is permitted or starts commercial production, its ongoing development and operations are also facing these SLPs. The continuous assessment of these SLPs and the strategy to mitigate for them has now become critical for every project in the extractive sector. A project will only be successful if it is able to obtain the legal permits to operate, then withstand any judicial reviews, and then also to be able to gain and maintain the Social License to Operate (SLO). Stakeholder identification, management and engagement are key risk-mitigation tools. This paper focuses

on the growing influence that indigenous peoples are now enjoying and the impacts on the extractive sector. Indigenous peoples are a unique stakeholder group because their legal rights and interests to lands and resources, their aboriginal title and rights, are gaining more recognition. When indigenous peoples form alliances with other stakeholders, this simply adds to their growing momentum and leverage, and this can become a daunting challenge for the extractive sector. More due diligence is required by companies to understand and assess the challenges posed by operating in areas claimed by indigenous peoples. There is a real need for mining companies to develop an effective indigenous engagement strategy to address these challenges in order to successfully convert risks into opportunities. Early identification and engagement with the indigenous peoples is required and the goal should be to conclude an Impact Benefits Agreement (IBA) with the affected indigenous peoples. The real objective must be to develop a real and transparent relationship between the company and the indigenous peoples so as to gain and maintain the SLO.

Keywords: Indigenous peoples, aboriginal title and rights, UN DRIP, FPIC, extractive sector, CSR, Social License to Operate, Impact Benefits Agreements, risk management

Emerging risks for the extractive sector

These are very challenging and uncertain times for the extractive sector. Over the last 18 months a number of very significant mining projects that looked very promising have been halted because of opposition from indigenous peoples. A few notable examples include:

- Taseko's $800 Million Prosperity Mine in Canada
- Newmont's $4.8 Billion Conga Mine in Peru
- Goldcorp/New Gold's $3.9 Billion El Morro Mine in Chile
- South American Silver's Malku Khota Mine in Bolivia; and,
- Barrick's $8.5 Billion Pascua Lama Mine Project in Chile/Argentina

Not surprisingly, many publicly listed companies in the extractive sector have their shares trading at 40-60% off their historic highs from just 12 to 18 months ago.

Social, legal and political risks (SLPs)

Beyond the market risk, the extractive sector today faces significant SLPs from so many different stakeholders that this has led to uncertainty, a loss of confidence and, accordingly, a loss in market value. Some of these stakeholders include:

- Renewed resource nationalism, with governments increasing taxes, mineral royalties, and using other methods of expropriation
- Local, state or municipal governments trying to cope with the challenges, impacts, and the indirect costs related to mining projects, as well as seeking a larger portion of the economic benefits, from either the national government and/or the company
- Indigenous peoples wanting to have a greater say on the size and scope of mining projects as well as economic benefits for projects being developed in their traditional territories
- Environmental and civil society groups challenging the rationale for mining projects, and advocating for higher levels of environmental stewardship
- Shareholders/Investors pushing for greater Socially Responsible Investing (SRI)
- "Occupy" and "Idle No More" types of protest movements that can block access to the mine sites and cause significant disruption
- Digital cause marketing campaigns by "name and shame" groups that could influence the perception of risk as well as shift public opinion against a project; and,
- Lenders that require a better assessment and mitigation plans for the project's stability.

Steeper and longer development curves

All of these SLPs make it a real challenge for mining companies to bring proven mineral resources into commercial production within a specific time and budget envelope. Estimates are that Newmont spent $800,000,000 on the Conga Mine that has now been halted.[1] Similarly, Taseko has spent over $150,000,000 on permits for the Prosperity Mine. The development curve from initial exploration to mine start-up has become longer, steeper, more risky and expensive, as these SLPs have grown in scope and complexity. For this reason, more due diligence and a proactive stakeholder identification, engagement, and management strategy is required. It is also critically important that the desire for meaningful engagement with indigenous peoples be respectful and genuine, as these are the critical foundations required for building relationships.

Indigenous peoples: Not just another stakeholder

Indigenous peoples are a unique stakeholder because of their distinct legal rights and interests to lands and resources; their aboriginal title and rights are gaining more recognition and leverage. These *sui generis* rights are legally unique and distinctive, and may overlap other legal, surface and subsurface rights. Moreover, these legal rights are geographic and site specific. Thus, indigenous peoples are able to claim and assert legal rights to the lands and resources that are a part of the mining project footprint; this is what sets them apart from other stakeholders.

Tug-of-war

Because of this legal recognition of specific lands and resources, indigenous peoples are able to form strategic alliances with other

[1] *www.bloomberg.com/news/2012-06-25/newmont-s-conga-gold-project-gets-peru-authorization.html*

stakeholders, such as environmental groups, NGOs, and other civil society groups, who piggy-back on these legal rights to gain even more leverage against a project. When indigenous peoples form alliances with other stakeholders, this simply adds to their growing momentum, and can become a daunting challenge for the extractive sector. On the other hand, an IBA between a company and an indigenous group can smoothen and shorten the permitting process significantly. Because of this growing influence, there is often a tug-of-war between the mining companies and the environmental movement to have the indigenous peoples on their side. As these strategic alliances form and develop, they are often widely advertised via social media, and can become the cornerstone of digital cause campaigns.

It is also worth noting that indigenous peoples do not always act in a collective fashion. There are often clans and other familial sub-groups that may or may not act in tandem. It could be that a portion of the indigenous peoples may oppose or support a project. Thus, support or opposition to a project may not be equivocal, but it is often misrepresented in this way.

Alliance with the environmental movement

If the indigenous group opposes a proposed mine, then an alliance with environmental and civil society groups may result in the following:

- longer and more difficult legal hurdles for the permitting process
- a greater chance for judicial challenges to permits
- barriers to access equity and debt financing
- a greater challenge for companies to fulfil their stated CSR mandates
- alliances with other stakeholders such as local governments and activist shareholders, and
- a physical blockade to the project on the ground

Alliance with the company

On the other hand, if the indigenous group lends its support to a project, then the company may enjoy the following benefits:

- overall stakeholder management becomes significantly easier because the other stakeholders may not be able to assert a legal interest to the proposed mining area
- the environmental review and permitting process will move forward more smoothly
- the risks of successful legal challenges falls significantly
- the company is able achieve its CSR goals for meaningful Indigenous participation, and
- the company is more likely to gain the SLO

Who are indigenous peoples?

A commonly-used definition of indigenous peoples has been developed by Martinez Cobo: indigenous communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing on those territories, or parts of them. They form at present non-dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories, and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal system.[2]

National governments and constitutions in many countries accord legal recognition and status to indigenous peoples. In Canada, Section 25 and 35 of the *Charter*, the *Indian Act*, and a host of other legislation that gives legal recognition to more than 630 First Nations.[3]

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[2] *indigenouspeoples.nl/indigenous-peoples/definition-indigenous*
[3] *laws-lois.justice.gc.ca/eng/Const/page-15.html* and *laws-lois.justice.gc.ca/eng/acts/I-5/*

In the United States, there are over 560 recognized Tribes. Similarly, many other national governments have recognized and accorded indigenous peoples with legal recognition through their own domestic legislation, which are known as hard laws. For example in the Philippines, the Indigenous Peoples' Rights Act creates significant legal rights for indigenous peoples to their ancestral lands.[4]

However, there are also many other jurisdictions in the world where indigenous peoples have no meaningful recognition or legal status. There are many countries where democratic principles and human rights are not developed or entrenched into the national fabric or conscience. In these cases, the identification of indigenous peoples, and the assessment of their legal rights under domestic laws, could pose a challenge.

Where are the indigenous territories?

Aboriginal title is unique at law and, practically speaking, very difficult to establish. The concept of *Terra Nullis* has been rejected in many jurisdictions, and there is legal recognition that the concept of aboriginal title existed theoretically at the time of first European exploration. The question then becomes one of scope and timing. Some argue that traditional village sites may be where aboriginal title can be established; that the indigenous group had sole use, control and occupation of a geographically-defined area.

However, indigenous peoples may have been nomadic, and/or had a seasonal round between various encampments, but still remained very much dependent on the land and resources in a broader geographic area. The areas of settlement would be different from those of seasonal use and occupation. In traditional societies, vast tracts of lands were often used for hunting, gathering, cultural and spiritual activities. These aboriginal rights are often more difficult to delineate and define. In

[4] *www.congress.gov.ph/download/ra_10/RA08371.pdf*

many cases, there are multiple indigenous groups which used the same resources, and hence there could be overlapping claims.

Section 35 of Canada's Constitution Act, which was passed in 1982, states that 'the existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed.' As we have now passed the 30th anniversary of the Charter, there has not been a single judicial finding of aboriginal title in Canada.[5].

In the United States, the tribes were also forced onto reservations, but many still maintain a claim to larger traditional territories. In Nicaragua, along the region of the coast, where the aboriginal people are the vast dominant majority, their aboriginal title has been recognized by the state government. In Australia, as a result of the *Mabo* decision[6], the concept of aboriginal title is gaining traction in some limited areas.

Thus, in almost all cases, indigenous groups will be able to present maps showing their asserted 'traditional territory'. However, there will likely be no formal agreement or recognition by the government or courts to these boundaries. It is, for this reason, important for a company to gain local legal advice on these issues, in order to understand the legal implications and strengths of the asserted claims. Those that do provide local legal advice should also be familiar with the UN Framework and international jurisprudence on indigenous peoples from forums such as the Inter-American Court of Human Rights.

UN Declaration on the Rights of Indigenous Peoples

Just over five years ago, on 13 September 2007, the UN General Assembly adopted the Declaration on the Rights of Indigenous Peoples (DRIP), looking to promote the human rights of approximately 370,000,000 indigenous peoples around the world. DRIP sets out the individual and collective rights of indigenous peoples, as well as their

[5] *laws-lois.justice.gc.ca/eng/Const/page-15.html*
[6] Mabo and Others v. Queensland (No. 2) (1992) 175 CLR 1

rights to culture, identity, language, employment, health, education and other issues[7].

Some of the key provisions are found in Article 8(2), which provides that States must protect indigenous peoples and their territories:

> *Article 8(2).* States shall provide effective mechanisms for prevention of, and redress for:
>
> (a) Any action which has the aim or effect of depriving them of their integrity as distinct peoples, or of their cultural values or ethnic identities
>
> (b) Any action which has the aim or effect of dispossessing them of their lands, territories or resources
>
> (c) Any form of forced population transfer which has the aim or effect of violating or undermining any of their rights.

DRIP also 'emphasizes the rights of indigenous peoples to maintain and strengthen their own institutions, cultures and traditions, and to pursue their development in keeping with their own needs and aspirations.' It 'prohibits discrimination against indigenous peoples', and it 'promotes their full and effective participation in all matters that concern them and their right to remain distinct and to pursue their own visions of economic and social development.'

In 2007, only 4 countries in the UN voted against DRIP: Australia, Canada, New Zealand and the United States, all of which are jurisdictions in which mining is a large industry. Since then, all four governments have succumbed to domestic and international pressure, and ratified DRIP. This, again, is another indication of the growing influence of indigenous peoples.

Hard versus soft laws

DRIP is a declaration in international law and hence is considered to be a 'soft law'. There are no sanctions or remedies set out in DRIP; it is

[7] *www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf*

a norm of international law. This is in contrast to Canada's domestic laws, which require that indigenous peoples must be consulted and accommodated before project permits can be issued by the Crown. There can be, and there often are, legal challenges to these hard law requirements in the courts from both sides.

However, as practical matter, the requirements for the SLO are transforming some of these soft laws into hard laws. The World Bank Group is bound by DRIP, and the International Finance Corporation has set out Performance Standards to which it will adhere prior to making an investment or loan to a project.

These standards have been adopted by 77 of the leading financial banks on the world, including all 5 in Canada. These are known as the Equator Principles, 'a credit risk management framework for determining, assessing and managing environmental and social risk in project finance transactions'.[8] Lenders will now look beyond EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization) and debt service ratios, and there will a real assessment of indigenous engagement and the SLO.

The International Financial Corporation's Performance Standard #7 deals with indigenous peoples and was updated on January 1st, 2012 'The Performance Standards are directed towards clients, providing guidance on how to identify risks and impacts, and are designed to help avoid, mitigate, and manage risks and impacts as a way of doing business in a sustainable way, including stakeholder engagement and disclosure obligations of the client in relation to project-level activities.'[9] Performance Standard #7 warrants a careful review, as it is insightful into the issue of engagement with indigenous peoples. It is, in many ways, a checklist of issues and processes that may be required by both lenders and SRI funds.

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[8] *www.equator-principles.com/*

[9] *www1.ifc.org/wps/wcm/connect/1ee7038049a79139b845faa8c6a8312a/PS7_English_2012.pdf?MOD=AJPERES*

Free, prior, informed consent

The concept of free, prior, informed consent (FPIC) of indigenous peoples had its roots in the International Labour Organization's Resolution 169, passed in 1989.[10] At the time it was limited in scope with respect to the forced relocation of indigenous peoples. The FPIC concept has found its way into UN DRIP, and was expanded to include situations other than forced relocations. Initially, Performance Standard #7 provided that the "C" was for consultation and after much debate and controversy, the new version of the Performance Standard #7 has moved to consent.

FPIC, as a concept, is challenging in practice for two reasons. First, FPIC assumes that the aboriginal rights and title of indigenous peoples to their lands and resources are both clearly delineated and recognized. This is not the case, except in very finite locations around the globe. There are, in the US and Canada, postage-stamp-sized reservations where aboriginal people have statutory rights. However, most of these First Nations and Tribes claim traditional territories that are quite large, and there is no agreement with the governments on these boundaries. Second, indigenous peoples are not necessarily organized or legally recognized as a group – and with this challenge, how do you legally obtain consent from an undefined or unorganized group?

What is of significance is that the FPIC concept has now migrated from Performance Standard #7 to a common demand by indigenous peoples when dealing with governments and industry. It has resulted in a mind shift, a language shift, and an expectation shift. There is a growing debate in many circles on this issue. Industry associations will have a different view and interpretation on this compared to other NGOs. The debate will no doubt continue: consent vs. consult? However, the industry should be aware of these growing and shifting expectations. Notwithstanding these challenges, if a company requires debt for a

[10] *www.ilo.org/indigenous/Conventions/no169/lang--en/index.htm*

project or export credit guarantees, then an effective and documented engagement with indigenous peoples will now be required – this is the new Golden Rule.

Corporate social responsibility

The Canadian government, through Industry Canada, defines corporate social responsibility (CSR) as 'the way companies integrate social, environmental, and economic concerns into their values and operations in a transparent and accountable manner'.[11] Another way of putting this is the way in which the company sees its own corporate policies on addressing identified stakeholder issues.

DRIP started as a concept at the committee level in the UN in 1989. Since then, the recognition gained by indigenous peoples at the UN has been so significant that it has added to the broader requirement for corporate responsibility and human rights, and added momentum to the Indigenous Revolution. In 2005, Dr John Ruggie was appointed by the United Nations to address the need for more government and corporate responsibility for human rights. This was the genesis for the "Protect, Respect and Remedy Framework" Guiding Principles, the UN Global Compact and the Global Reporting Initiative.[12] All of this has added to the CSR expectations and requirements on companies. Throughout all of this work, the rights of indigenous peoples have been explicit and prominent.

However, a webpage or company policy on CSR will not equate to either gaining or maintaining the SLO. There are many companies in the extractive sector that have detailed CSR policies and objectives, but have failed to gain or maintain the SLO. There are some companies where the executive leadership has fully embraced and understood the need for the SLO and, in such cases, CSR is central to senior

[11] *www.ic.gc.ca/eic/site/csr-rse.nsf/eng/h_rs00577.html*
[12] *www.unglobalcompact.org/Issues/human_rights/The_UN_SRSG_and_the_UN_Global_Compact.html*

management's stewardship of the company's resources and reputation as they move through the development curve.

Companies which are able to accurately assess these SLPs and develop a proactive strategy to meaningfully address them will be more successful in navigating the narrow path required to bring economically-viable resources through to the development and operation of a sustainable mine. Examples of this include the Detour Gold Project in Northern Ontario, the New Gold Project near Kamloops and the Polaris Minerals Project on Northern Vancouver Island. On the other hand, companies that are in a reactive mode and fail to understand and assess the SLPs will find many detours and roadblocks. CSR is not a photo-opportunity for a corporate website or corporate philanthropy. Rather, it has become a required strategy that is measured and reported, and rewarded with successfully-permitted projects that result in higher stock values and enhanced corporate reputations.

Social license to operate

Every mining project has to go through an environmental and legal permitting process, and then ensure that the permits withstand legal challenges and reviews. But beyond this legal requirement, there is a real need for companies to both obtain and maintain the SLO. The SLO is not a document – rather, it is an ongoing dynamic relationship that exists between the company and all stakeholders that are affected by a project.

Companies are required to develop a strategy, commit financial and human resources, and provide undertakings and assurances in order to be granted the legal permits for the exploration, development, construction, and operation of a project. Likewise, a real proactive strategy is also needed to both gain and maintain the SLO. Strategies for stakeholder identification, management and engagement need to be developed from the outset, and then continually assessed and refined. It is important for the company to identify all stakeholders, even those that

may be physically distant from the Project such as NGOs, but who can become significant activists, especially through social media. Because the SLO is a dynamic relationship, the interplay and relationships amongst the stakeholders can also have a significant impact on the project. The company could get caught in the crossfire amongst stakeholders, or be blindsided by new alliances, which become more challenging to manage.

In order for a company to commit its corporate resources, including its reputation, to a project, it needs to be certain that it will be able to navigate the uphill permitting process and, at the same time, will be able to gain and maintain the SLO. As there are no assurances in the outcome for the company, it has to have confidence in both its strategy and the project team to gain both the legal permits and the SLO.

All of this makes it even more difficult for companies to gain the SLO when indigenous peoples oppose mining projects. The need for companies in the extractive sector to develop a proactive strategy to properly address the issues raised by indigenous peoples is a significant and growing hurdle in the development and permitting process for the extractive sector. Simply put, companies which understand this issue will succeed, and those which don't will struggle and often fail. Thus, it is vital for a company to develop an effective Indigenous Engagement Strategy (IES) from the outset. This is how risks can be converted into opportunities.

Stakeholder identification, management and engagement

Addressing the concerns of stakeholders is a growing challenge for the extractive sector. In 2011, Deloitte's *Tracking Trends* report identified the centre-stage issue for mining companies to be securing a social license by engaging stakeholders. In 2012, Deloitte's *Tracking Trends* report identified the issue as "Restless Stakeholders: the demand for heightened corporate social responsibility". In 2013, the *Tracking Trends* report noted that 'Obtaining permits, negotiating with local

communities, attracting qualified labour, partnering with EPCM suppliers, procuring sufficient equipment and materials, transitioning from exploration to development – these activities all require years of advance planning'.[13]

Engaging with stakeholders is a very personal process because it is a relationship-building exercise. The team of people that represent the company, including consultants, must have a clear mandate and focus on what their tangible objectives are. Communication between the corporate head office and the on the ground team needs to be transparent and clear. But, more than those objectives, there is a real need to develop respectful and transparent relationships. There is a need to find that common ground, and the process of getting there is often even more important than the result. The key goal must be the relationship-building process.

Companies need to be able to find the balance between being meaningfully able to engage with stakeholders, while at the same time neither increasing expectations unrealistically, nor infuriating them with a level of tokenism. Strong engagement manages expectations, and provides real responses to issues. This process of meaningful engagement with stakeholders will add to the costs of the project, and may also lengthen the development timeframe. However, the failure to do this properly will be even more expensive, not only in terms of economic costs and investor confidence, but also in terms of reputation risks.

An indigenous engagement strategy

The human rights impact assessment (HRIA) undertaken by the company will assist with its due diligence and the development of its strategy.

[13] *www.deloitte.com/view/en_CA/ca/industries/energyandresources/mining/index.htm*

Initial steps

There are some initial steps that need to be taken by the company. First, the selection of the team/consultants who will undertake the HRIA is critical. Local knowledge and language skills are required, and a reputation for professionalism, fairness, integrity and transparency.

Second, what is the physical footprint of the project? From where are the water resources coming from, and which watersheds will potentially be impacted? What are the impacts on the downstream users? Where are the utility and transportation corridors?

Third, which groups of indigenous peoples are potentially affected? Who are they, how are they organized, and are there any interrelationships between these communities? What do they use the project area for? Is it a seasonal activity or close to their core area of use? Is access possible from third parties, or knowledge of their use and occupation of their project area? There is also a need to assess the strength of their asserted use/claim to a part of the project area.

Initial engagement

The company should seek to initiate contact at the earliest opportunity, even prior to the initial exploration work. It is important to recognize both legal and cultural norms, but should not overlook personal norms. If there is a wait to initiate contact, and start the exploration work, there could be both ill-will and a misunderstanding of what is being done and the company's understanding and approach to indigenous peoples. A company should remember that it is are a guest on another group's lands, and want to be seen as a good neighbour.

If more than one group is claiming use of the project area, then there is a need to develop a strategy to address the overlaps. Which group has the stronger strength of claim? What is their own history of dealing with each other? Should they be approached jointly or separately? It is also important to understand the history of the indigenous peoples, their challenges and successes, and their history of dealing with all levels of

government? Also, what is their track record and reputation with industry? What are their needs for both economic development and human resources development?

It is also important to be respectful of their leadership and organizational structures, which could be formal or informal or both. Is there a chief and council- is it hereditary or elected? Is there an elder's group? Is there an economic development portfolio? Is there a lands/environmental portfolio?

When and how are decisions made by this indigenous community? Are these made by a Council or the whole group? Are family groups dominant? Where are the decision-makers in the community? Is there a separate administration? Are there formal or informal processes and structures?

How to initiate contact

Whom to approach, and how? This is a critical step in the relationship building exercise. Should a a letter be sent or a meeting held in person? Who from the xompany should be involved: the CEO, VP Exploration/Corporate Development, Consultants, or legal counsel? Then the other big question is with who to meet in the Indigenous Community: the Chief, the Council, the elders, or the Band Manager? A really important consideration for the Company is to have some constant faces throughout the process for efficiency, continuity and consistency.

Role of the government

An issue that often arises is whether to let the government take the lead? In Canada, the legal requirement for consultation falls on the government, thus should the government take the lead and the company take the back seat? The answer to this is no. The company has the most to gain and lose, and therefore needs to be in the lead in the relationship-building process. There may be bureaucratic indifference from or a previous acrimonious history with the government, both of which could

negatively impact on the project. In other jurisdictions, the government may demand to take the lead and the company may be forced to have a secondary role only. There is a fine balance here between not offending the government, but also making sure that the concerns being raised by the indigenous peoples are being integrated into the decision making processes.

The basis of the IBA agreement

It is important to listen and understand what the indigenous peoples' concerns are with respect to the Project. There could be sites where they have high spiritual/archaeological values. There could be concerns about the environment, and water in particular. There could be concerns about economic opportunities and social impacts. It is important that these concerns are meaningfully integrated into the Project.

Beyond, this it is also important to get to an IBA. What should the company offer? It should do a risk/benefit analysis, and internally decide on what it needs from the indigenous group and what it can offer in return. Local employment and procurement can be important, but a larger financial interest or stake through royalty-sharing is important. Also, the company should develop mechanisms and processes to address the issue of unaddressed or unexpected impacts.

Where is the indigenous group's legal leverage? The company should examine the requirements on the permitting processes; assess how having the indigenous group support the project can shorten and streamline the permitting process; assess how having the indigenous group oppose the project can delay or derail the project; and, assess how other civil society and environmental groups gain or lose legal leverage depending on whether or not the indigenous group has signed on to an IBA. The use of social media has become a very effective tool to move public opinion and to organize protests and rally. The "Occupy Movement" and "Idle No More" movement helped to galvanize widespread rallies and bring media focus on social justice issues.

Government support

The company should also determine what is the government's position on indigenous participation; assess what government support can be provided for the project; whether there are offsets for royalty payments made to the indigenous group and are there funds to support training and employment and support for infrastructure development. The company should ensure that investment climate/envelope that is being offered by a government can be maintained through a Project Development Agreement, and determine whether the government agree to binding international arbitration?

Further, the company should determine what impacts the project would have on the local government and infrastructure; whether municipal permits are required; what local taxes there may be; and what impact will the project have on local services such as schools, hospitals, and law enforcement

The above is certainly not an exhaustive list. In cases where the project is situated in Africa, Asia, Central and South America, a real analysis and assessment will have to be made about the stability, transparency and integrity of the national and local governments. An assessment of the country risk is critical. As the demand for minerals is growing, the move into more unstable regions of the world is inevitable.

A real tension may also appear in these less stable jurisdictions on the recognition of local indigenous groups. The situation may arise where a company is seeking to enter into an IBA with an indigenous group that the national government does not want to acknowledge, and to which it may even be opposed. This is where the country risk assessment comes into play, and the principle of the rule of law may lead to a view that the jurisdiction is too risky to warrant any further effort or investment.

Some common pitfalls and challenges

One of the more challenging parts of the exercise is to know what should be put into an IBA. There is a balance here between what is needed and what can be afforded. In the Canadian context, the Supreme Court of Canada, in its 2004 decision in *Haida*[14], laid out these two principles:

1. the duty to consult is on the Government and not industry (yet industry needs to take the lead on this issue), and
2. the spectrum for consultation from mere notification to deep and meaningful consultation which will depend on (a) the strength of the asserted claim; and (b) the potential impact on aboriginal rights and title

Within the range of where the company is on the consultation spectrum, there is the possibility for a veto. The no-go option is not what mining companies want to hear. However, they should be mindful of this possibility from the outset, and may even want to stop or abandon the project early in the exploration process.

Many have advocated that this Canadian approach on consultation should be followed in other jurisdictions. Consultation must be timely, done in good faith, and should not be seen as an opportunity to just blow off steam. The company needs to show that it has demonstrably responded and incorporated the concerns of the indigenous peoples into the project. There is no need to come to an agreement on where the company is on the spectrum and hard bargaining is permitted; but the consultation must have some form of accommodation, as, without this, the consultation is meaningless.

What is also of critical importance, and not articulated in case law, is a third factor that drives consultation: the ability of the indigenous peoples to articulate, advocate and engage. There are instances where an

[14] *Haida* Nation v. *British Columbia (Minister of Forests*). [2004] 3 S.C.R. 511, 2004 SCC 73

indigenous group has a very strong strength of claim and significant potential impacts, but does not properly engage and thereby misses an opportunity for a real role and benefits.

On the other hand, there may be an indigenous group that has a very loud and articulate leader, a website declaring where development is permitted in portions of its territory, and is able to rally with other stakeholders. In such cases the true strength of claim may be weak, the project impacts minimal, but the indigenous group is able to extract significant concessions.

This third factor becomes critical for stakeholder management and engagement. The indigenous peoples can create process risks that can lead to delays and uncertainty, especially as they engage other stakeholders. The disciplined use of capital resources and the certainty required for investment decisions require project stability and certainty, which can be gained through an IBA.

Common elements in an IBA

It is quite common for companies to provide indigenous groups with some capacity funding to review projects and to engage in the consultation process. Companies need to gain access to traditional knowledge and understand the strength of the asserted claim and traditional land use patterns.

There may be some initial exploratory agreements but the real goal is to get to an IBA. It is here where the company makes its assessment of what it needs in terms of support for the project, and what incentives it wishes to provide. The internal assessment that is done must be reasonable in the circumstances, and these will be unique for each project and indigenous group.

Each project and each community will have variations, and there is no standard IBA. A helpful publication on IBAs is available at *www.ibacommunitytoolkit.ca/*. The common elements of an IBA will often include:

- Project definition, design and location
- Support for the environmental and permitting processes
- Opportunities for preferential employment and training, and procurement of goods and services
- Equity/royalty participation
- Project monitoring
- Project scope and expansion, and
- Closure and reclamation

In many cases, the discussions between the company and the indigenous group are undertaken with confidentiality and on a without prejudice basis. However, if the talks break down, the company may want to table its last offer on a with prejudice basis, and would then be able to present that to the Court if a judicial challenge is brought by the relevant indigenous peoples. The Court would then decide if the accommodation offer was reasonable.

Similarly, the indigenous group will also want to table and present its strength of claim and asserted project impacts. It may want to show inflexibility on the part of the company on the scope, design and location of the project and the lack of benefits. There will be paper trails on all sides, to show who was the more reasonable or unreasonable party, as the case may be.

Hostile or no responses

In some cases, the initial response from an indigenous group may be ‘go home’ and ‘not in our territory’. In other cases, there is no engagement or response except near the end, when it is ‘no’. In such cases, it is always important to keep a paper trail, as there will be a contest to appear to be the more reasonable party, especially in the eyes of the Court.

In other cases, a company may encounter an enthusiastic leader, promising that he can deliver to you the community and green lights all the way. This should be treated with obvious caution. The key is to

engage with the leadership, but also make sure that the Company is connected to the centre of the community. However, it should be cautious not to interfere with internal governance and politics.

Continuity

From the initial contact being made before the start of exploration work, to the point where all the projects permits and funding is in place to start construction, may take 5 or 10 years, if not longer. It is important to understand and recognize that the elected leadership of an indigenous group may go through two or three election cycles in this time frame, and there will most likely be change in the leadership.

Similarly, in the company there may be changes in the project personnel, and even in leadership and/or ownership of the project. These changes can be disruptive not only because people may change, but also because there could be a change in corporate focus and strategy.

Since this is a relationship-building exercise, it is important that there is widespread buy-in and commitment from both the company and the indigenous group. The fundamental pillars for building this relationship are trust, respect and communication. These elements are critical to every important relationship. The need for good faith, transparency and integrity on all sides is essential.

Each individual's skill set, experience, background, cultural sensitivity, common sense and good judgment will determine how successful they will be in this relationship-building task. It is important that the team leads have the full support and commitment of senior management to undertake this role. Also, everyone has to have a long-term vision in order to get to this goal; there are bound to be ups and downs in the process. Do not walk away; be patient and remain focused.

Conclusion

It is no longer sufficient for a project to simply obtain the legal permits required for exploration, construction and ongoing operations. The bar has now been raised to also require projects to gain and maintain the SLO. The time, costs, and risks to develop mining projects have become much more significant. The SLPs, especially the failure to properly and meaningfully consult with indigenous peoples, on its own and when coupled with environmental and civil society groups, can easily derail or stop a project.

In the extractive sector, the requirement to clear this indigenous hurdle is becoming more daunting and challenging, consequently adding both significant time and costs to the steep and long development curve. Companies and governments which develop proactive strategies to meaningfully address the concerns and wishes of indigenous peoples will be able to attract more investment to develop more mining projects. In contrast, if this path is not chosen by governments and companies, this will likely lead to friction and conflict, which can escalate into social unrest and violence.

An IBA may provide stability for projects, to help to gain access to equity and debt markets, to help fulfil the CSR mandates, and lead to the development of sustainable projects. This will ensure that all of the project's soft costs are recovered, and that the company will enhance both its bottom line and its reputation. The process of developing and concluding an IBA will hopefully result in the SLO being gained. This has to be understood as an effective risk-management strategy.

The process on which a company embarks to connect with indigenous peoples is often more important than the result. This has to be seen as a partnership and a relationship- building exercise between a company and the affected indigenous peoples. When this is done properly, and a real partnership emerges, then project stability and

certainty are enhanced very significantly. This is the foundation for a civil society.

The benefits pie

In order for a project to proceed, it must be environmentally sound and sustainable, and withstand the challenge from civil society and environmental groups. Those challenges become less daunting when you have the indigenous peoples standing by your side and supporting the project. As global demand for resources continues to grow, it has to be understood that the benefactors from any project must include:

- the shareholders/investors in the project
- the government
- the local community, and
- the indigenous peoples

This benefits pie must be divided into at least these four pieces. If there is a protracted discussion on this single point, getting the project to fruition will be a challenge. On the other hand, if there is a genuine desire to share this pie, the collaborative approach will hopefully develop and build relationships that will streamline the process for the development of the project, and hence increase the size of the pie, and therefore the benefits available to all parties. An effective Indigenous Engagement Strategy can convert risks into opportunities. In this way, the triple bottom line of people, profit and planet can be met.

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THE SOCIAL ACCEPTABILITY PROCESS OF THE CANADIAN MALARTIC MINE

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Abstract

This article analyses the social acceptability process of a mining project located in an existing city. It will explore how the principles of sustainable development have been integrated in the project of the Canadian Malartic open pit mine, held by the Osisko Mining Corporation, and the corporate social responsibility (CSR) initiatives proposed to strengthen the social acceptability of the project. This mine is located in the old south neighbourhood of Malartic, and has required the displacement of hundreds of houses and five institutions. The location and the inherent social impacts generated by the relocation of the citizens of the south neighbourhood makes this case particularly interesting when exploring social dynamics in an era of environmental consciousness. These major constraints generate high expectations within the urban population with regard to the social and economic benefits they will receive from the project. In a context where society demands higher CSR from a corporation, Osisko is closely observed regarding their actions under the sustainable development principles to see if it respects the environment and the desires of the community. From the beginning, the company had to be a model of sustainable development in various aspects reflected by the manifold interest of the population.

To understand the endeavour made by the company to fulfil the demand of CSR, we will analyse how the company understood sustainable development principles, and what CSR initiatives Osisko put forward. We will explore the involvement of the company in various social aspects such as employment, employee satisfaction, and the level of commitment to the non-discrimination policy in employment, notably with the native populations. We will also take a closer look at the relationship built by the company with the community and the level of commitment with the various stakeholders of the community. In this way, we will be able to seize the level of involvement of the company in the fulfilment of the principles of sustainable development toward a higher CSR, and to specify the trajectory adopted to build social acceptance.
Keywords: Social acceptability, corporate social responsibility (CSR), sustainable development, mining, stakeholder relations

Introduction

In the region of Abitibi in Quebec, mining is undergoing unprecedented growth. Since the price of gold has reached more than $1800/oz in 2011, and because of various infrastructure advantages,[1] many projects that have aimed to unleash the economic potential of the many gold deposits of the region are flourishing. Such is the case with the Canadian Malartic mine, a project developed by Osisko Mining Corporation.

However, at the other end of the spectrum, the mining sector suffers from a bad social and environmental reputation. For some time now, in response to recurrent environmental disasters and human rights violation episodes, mining companies have been asked to take on their responsibilities in the pursuit of their activities. In the face of this new reality, the mining industry has had no choice but to engage in a reflection on the sustainability of mining, and on a way to achieve a higher degree of corporate social responsibility (CSR).

[1] Anonymous, 2011

This questioning had been the object of a first real debate, from 2000–2002, in the Mining, Minerals and Sustainable (MMSD) project initiated by the Global Mining Initiative, whose goal was to create a space of reflection to think about the concept of CSR in the mining industry.[2] It resulted in the formulation of a Framework of Change and an Agenda for Change[3] that aimed at achieving a sustainable practice and a better relationship between the industry, the environment and the community. Then, this questioning crystallized in 2001 into the foundation of the International Council on Mining and Metals, a grouping of mining companies who sought to improve sustainable development performance in the mining and metals industry. As we have seen, over the last decade, the industry has sought to become a proactive actor in the field of sustainable development, so as to address society's concerns.[4]

However, despite these developments in favour of better integration of sustainable development in mining practices, one issue has remained hardly unchallenged: relations with the community. This issue is particularly important, given the high impact that mining has on different social, environmental and economic aspects of the community. In particular, the mining industry faces community development issues, given the fact that mining companies are often operating in poor or isolated communities that see mining as a great way to improve their conditions of life.[5] Therefore, the mining industry has to think about how to achieve and maintain a 'social license to operate' through its engagement in mitigating its negative impacts and in meeting the expectations of the community in terms of benefits and opportunities for the development of the involved communities. The failure to address this question may lead to contestation of the projects, and to the

[2] Azapagic, 2004
[3] Hilson & Basu, 2003
[4] Franks, Boger, Côte, & Mulligan, 2011
[5] Kemp, 2010

temporary, or permanent, shutdown of the mines. It may expose the company to compensation, fines or litigation costs, and it may affect the reputation and the capacities of the company to lead future projects.[6]

To better understand the way this issue is concretely addressed by the industry, we propose here to take stock of definitions and tools that are used in the domain, and to analyse the social acceptability process that has been developed at Osisko's Canadian Malartic mine, a well-documented case considered by many to be a success story in matters of relations with the community.

In so doing, our aim is double: first, we seek to reveal what mining companies are doing regarding social acceptability and CSR, and how they integrate the economic, social and environmental dimensions of sustainable development into practice. Second, since the concept of social acceptability is fairly recent, and surely needs updates that could benefit the industry, we aim to contribute to a theoretical conceptualization of the concept.

The present article is developed according to the following guidelines: first, we present the different issues that the mining industry must face in the hope of achieving sustainable development in the pursuit of its activities at the environmental, social and economic levels. Then we define the concept of social acceptability, and present the most used tools in the domain. In a third section, we describe the social acceptability process the Osisko Mining Corporation has developed at Malartic, and how the company integrated the principles of sustainable development when taking on its social and environmental responsibilities. Finally, we discuss the implications of the case for the concept of social acceptability, and suggest leads for future research.

[6] Franks et al., 2011

The mining industry and its challenges

Although the mining industry is a relatively small industry compared to the global economy, with 30 million people involved in large-scale mining, and 13 million more involved in small-scale mining, the mining industry represents an important part of employment and GDP for some countries,[7] including Canada, Australia and some countries in Africa. However, for a few years now, a serious challenge has affected the industry: building a framework of practice compatible with the idea of sustainability.

The notion of sustainability, and, more precisely, the notion of sustainable development, is a polysemous concept that is difficult to seize in its practical applications, thus different agents of society use it in different ways to legitimize theirs actions.[8] Sustainable development is nonetheless based on a hierarchical combination of the economic, social and environmental aspects of human activities[9] that appears useful as a basis for a first sketch to evaluate the mining industry's practices, impacts and contributions. According to this combination, ecological integrity is a condition, economic efficiency is a means, and social and individual development is an end.[10] In this definition, the implementation of sustainable development implies also a governance system that ensures the participation of all in the decision making process.[11] In the mining sector, these three dimensions of sustainability and the notion of governance call for three broad types of issues.

[7] Azapagic, 2004
[8] Gendron & Revéret, 2000
[9] Bisaillon, Gendron, & Turcotte, 2005, p.78
[10] Gendron, 2012
[11] Bisaillon et al., 2005

Environmental impact

Mining involves the extraction of non-renewable resources, which contradicts the notion of sustainability.[12] The question of the mitigation of the negative environmental impacts in the mining sector is equally challenging for mine managers, because they have to deal with a wide range of environmental problems in the various stages of a mine's development. Azapagic (2004) states that the sustainable development issue in the mining sector must be understood through a holistic approach based on the life cycle of the involved mine. Mining activities include two types of life cycles: 1. the life cycle of the mineral products includes extraction of primary resources, processing, product use and post-use management; and, 2. the life cycle of the mine includes design and exploration, operation, decommissioning and rehabilitation. There are thus many stages to take into consideration in the exploitation of a mine. As Mcleod (2000) points out, at every stage there are numerous impacts to take into account. For example, in the exploration phase, several negative impacts can occur, such as the destruction of flora and the pollution of water. More significant are the damages produced in the operation stage with the 'removal of soil and rock, loss of topsoil, loss of vegetation and economic plants, pollution of surface waters and loss of fishing grounds, sedimentation of rivers and streams, pollution of inshore fisheries from tailings, dredging of rivers and inshore reefs for rock, sand or coral from construction and the reduction in local wildlife and biodiversity'.[13]

In addition to these impacts, mining managers also must consider the impacts linked to the closure of mines and the rehabilitation of mining sites. Azapagic (2004) stresses that these impacts are only considered by the more proactive companies. However, the environmental impacts of a mine's bad closure or a site's poor rehabilitation are environmentally

[12] Hilson & Basu, 2003
[13] McLeod, 2000, p.115

disastrous. The tailings produced by the mining industry can contain a diversity of contaminants at high concentration, such as arsenic, lead, zinc, or copper.[14] If the tailings are left on-site without being correctly rehabilitated, these different contaminants can generate an acidic condition that can be released in the environment. The bad rehabilitation of a mining site can also lead to a phenomenon known as acid mine drainage (AMD). AMD negatively affects the environment at chemical, physical, biological and ecological levels.[15] Ultimately, this results in the loss of species and in the simplification of the food chain.[16]

Economic impact

One of the issues at stake in the development of a mining project is the question of the sharing of its economic benefits. On one hand, the project has to be profitable for a company and its shareholders; on the other hand, the project must generate economic benefits for the different stakeholders that overcome its negative aspects. One of the main critics of the mining and minerals industry states that the environmental damage caused by the mine outweighs its economic benefits.[17] It is difficult for the industry to eliminate the environmental impacts of a project. If the mineral deposit is situated underneath the ecosystem, the company will have to disturb this ecosystem to access the deposit, for instance by deforestation. Thus, the mining industry has to think of a way to find social and economic benefits that overcome these impacts.

These questions are problematic for the industry, because the projects it sets forth are conceived in the short-term, based mainly on the stages of resource extraction and processing.[18] However the viability of the project can change quickly, due to the high volatility of metal prices. This has for effect that a company will focus more on short-term

[14] Roussel, Néel, & Bril, 2000
[15] Gray, 1997
[16] Gray, 1997
[17] Hilson & Basu, 2003
[18] Hilson & Murck, 2000

production volumes than on valued-added products and services.[19] It is difficult for a mining company to foresee long-term benefits for the community, given the quick change in the viability of its projects. This situation is even more complicated in the context of global competition, where large-scale multinational mining companies exploit deposits in different parts of the world. Furthermore, the pressures of competition between companies weaken the capacity for small-scale companies to address the environmental question.[20] Given their small scale, these companies have limited financial resources and limited staff to devote to cleaner technologies or practices.

Along the same lines, globalisation creates a context wherein foreign mining companies simultaneously exploit the resources of different countries. This could lead to the perception by local populations that the resources that are situated on their lands are being spoiled or exploited by private and foreign interests, to their disadvantage. This creates another challenging situation, where mining companies must prove to the community that the exploitation of the resources situated on their lands can be an advantage for both parties. This proof can be in the form of monetary compensation, a fair tax distribution, royalties, the development of infrastructure for the community, or training and skills development programs that aim to hire local people.[21]

Social impact

This type of issue is particularly challenging for the mining industry, given the tension between economic responsibility and social and environmental responsibilities that a company needs to manage and balance to achieve good CSR.[22] These two responsibilities have been discussed, as either antagonistic or complementary. To Friedman (1970)

[19] Azapagic, 2004
[20] Hilson, 2000; Hilson & Nayee, 2002
[21] Kemp, Owen, Gotzmann, & Bond, 2011; Owen & Kemp, 2012
[22] Onkila, 2009

for instance, the main responsibility of a firm is to make profits for the benefits of its shareholders, and ultimately for society. Whereas to Freeman (1984), the firm has to make profits, but its responsibilities apply not only to its shareholders, but also to its stakeholders, namely 'any group or individual who can affect or is affected by the achievement of the organization's objectives'.

Moreover, a mining company often has to manage its operations in socially sensitive areas located near indigenous or marginalized populations in contexts of weak or corrupted political and legal institutions.[23] In addition to demands for the mitigation of the negative impacts of mining activities, the population often demands that the company engage in community development. This is particularly important in marginalized communities where the mining industry is often the greatest and only opportunity to achieve development.[24] Such an engagement from the company towards community development can take the form of local employment, training and skill development, and provision of infrastructure and services[25]. To integrate the two opposite visions (company and community), the mine must build a system of relations with the community that can take the form of: 'consultations and engagements, public relations and donations, community programs and responding to community complaints'.[26] However, Owen and Kemp (2012) note that the relations developed between the mining industry and the involved communities are more consultative than participatory. In the same context, Kemp (2010) states that the mining companies' public relations tend to privilege the company agenda, and reputation management. The mining companies' public relations seem to be more a tool for management than a tool for the development of the community. However, sustainability implies the elaboration of a governance system

[23] Kemp et al., 2011
[24] Kemp, 2010
[25] Owen & Kemp, 2012
[26] Kemp, 2010, p.3

based on the participation of the salient stakeholders[27] of the involved companies to ensure the future of next generations. Indeed, because of the multiplicity of values and interests inherent to the issues that the mining industry is facing, and because it permits the construction of collective and rational social norms and politics to develop sustainable practice that is suitable for all[28], this process of governance is essential.

In considering the social issues that the mining industry is facing, one last element has to be taken into account: the regulation of the sector. In Canada and in Quebec, the principle of free mining regulates the mining industry. This principle can be defined as: 'a series of measures that permit and even privilege free access to ownership and exploitation of mineral resources'.[29] This principle has important social impacts because it provides the mining industry with the right to engage in resource exploration and extraction, despite urban or regional planning. This right is, by law, put above the title of property of the owner of the land. The principle of free mining can generate numerous social problems, including population relocation and the question of expropriation. Also, it can cause problems in the protection of ownership, as in the case of Malartic, where citizens have been relocated before the environmental impacts assessment.[30] The mining industry then faces social tension within communities, who feel that mining companies have rights above theirs.

In summary, to use Suchman's work on legitimacy (1995), the mining industry is facing challenges on the environmental, economic and social levels, challenges that confront its pragmatic (if it does not answer community needs) and moral legitimacy (many questions exist on its contribution to economic and social development) from the perspective of the consequences of industry activities (its negative

[27] Mitchell, Agle, & Wood, 1997
[28] Van den Hove, 2001
[29] Laforce, Lapointe, & Lebuis, 2009, p.55
[30] Lapointe, 2010

environmental externalities are criticized), of the procedures it uses to do so (lack of consultation of the companies' stakeholders when current moral values point towards consultation as a norm), and of its structure (per se, mining industry activities are seen as incompatible with sustainable development). To maintain these two kinds of legitimacy, Suchman (1995) proposes to monitor communities' needs, values and opinions, to answer them as much as possible, and to communicate with them clearly about its activities and strategies to improve. It is our opinion that these strategies are relevant, but need to be integrated into a specific strategy, rather than used separately. To this end, the concept and practices of social acceptability seem promising.

Social acceptability

Social acceptability is a relatively new concept. Although it is largely used in the scientific literature, rare are the authors to have provided a detailed definition of the concept. To Simard (2003), social acceptability, 'beyond a technical and rational demonstration becomes the main problem and requires the use of decision making modes, even more open and participatory'. This implies that the issues related to the planning of a project must be politicised by embedding it into local priorities by giving the community higher legitimacy. From the same perspective, social acceptability can be defined as a globally positive interpretation of a project shared by a community and resulting from the evaluation of the impacts of the project regarding the expectations and the ideals of development in the community[31]. This process is embodied in governance and institutional practices that aim to involve as many people as possible in the decision making process. In this context, according to Gendron (2013), social acceptability is connected to more than to a bad understanding of the projects and of their impacts by the community. Social acceptability refers to community consent in a

[31] Fortin, Devanne, & Le Floch, 2009, p.93

project or decision, given its implications for the community. Also, for Brunson (1996) social acceptability: 'results from a judgmental process by which individuals (1) compare the perceived reality with its known alternatives; and (2) decide whether the real condition is superior, or sufficiently similar, to the most favourable alternative condition'. According to this definition, people will consider a project socially acceptable only if it is judged superior or similar to the other existing alternatives.

Côté (2008) identified four elements that favour the achievement of social acceptability of a project. First are the elements related to the industry, which are divided in two constitutive categories: the initial public opinion toward the industry, and the institutional framework regulating the industry. If the industry is well perceived by the population, and if the political framing of the industry is well established, the social acceptability of a project will be strengthened. Second are the elements related to the project: the impacts and the benefits of the project, and the degree of involvement of the promoter within the community. Obviously, if the benefits of the project largely overcome its negative impacts, it will favour the acceptability of the project. Also, the fact that the promoter is involved in the community, or that local people participate financially in the project, can have a positive impact on the acceptability of the project. Third are issues related to the decision making process in terms of legitimacy of the process, and in terms equity of decisions. If the process is led in a transparent and fair way, the population will see this process as more legitimate, and thus will find the project more acceptable. Finally, the elements related to the social characteristics of the community include the social capital, and the history of project controversies. The first dimension relates to the capacities of the population to mobilize and cooperate to make business decisions in the perspective of economic development that favour collaboration, and ultimately the acceptability

of the project. The second dimension relates to the history of the project in its community. Bad experiences with past projects can generate fear and scepticism from the community, whereas good experiences can favour the dissipation of these apprehensions.

Finally, referring to the social acceptability processes of the wind industry in Quebec, but also in France (especially challenging with regard to the transparency of the relations between the promoter of a project and the involved community), Chataignier and Jobert (2003) talk about the creation of conditions of 'unacceptability' of some projects, given the lack of information, the impossibility to formulate a global vision, and the presence of private interests. These conditions of unacceptability lead to questioning of the wind energy industry, and can ultimately challenge the establishment of future projects.

According to these definitions, the issue of social acceptability appears to be particularly relevant in the context of mining, since the industry is asked to be more committed to the communities it influences and towards the mitigation of its environmental impacts. However, there are few tools that aim specifically to help mining companies to obtain social acceptability for their projects. Instead, on a voluntary basis, these companies have to rely on sustainable development guidelines that integrate features of social acceptability. Below, we present three of the most influential guidelines on the matter: UNEP's Berlin Guidelines, MMSD's Sustainable development framework and GRI's Sustainability Reporting Guidelines & Mining and Metals Sector.

First, the Berlin Guidelines, elaborated at the initiative of UNEP, which sought at the beginning of the 1990's to improve the environmental practice of the mining industry by providing guidance in sustainable development. These guidelines recommend prioritising the management of environmental impunity and dialogue with the stakeholders (Belem, 2009). However, these guidelines are applicable at the state level, not at the company level, and thus, they require the

elaboration of regulation at the national level, to be truly effective. The report explicitly states that: 'Each country must decide for itself how to construct and implement its own regulatory framework'.[32] The Berlin guidelines are a tool to help the mining industry, but are not prescription. Managers that follow their recommendations can strengthen the social acceptability of a project in considering its various impacts at the economic, social and environmental level; thus, these guidelines can encourage a better perception of the mining activities in the community.

Second, to challenge the demands of various stakeholders regarding the negative impacts of the sector, some mining companies have assembled in the International Council on Mining and Metals (ICMM.) This organization created the Mining, Minerals and Sustainable Development (MMSD) initiatives in 2000, with the goal of formulating a sustainable development chart for the industry. This initiative resulted in the elaboration of the Sustainable Development Framework, which consists of a set of voluntary principles with no performance exigencies. In terms of social acceptability, the MMSD is interesting because it focuses on stakeholders' concerns by identifying nine key challenges to achieving and preserving good relations with the community.[33] The advantage for the company that addresses these challenges is to maintain its social license to operate, and thus to preserve its social acceptability in the community.

Finally, in 2005, the Global Reporting Initiative (GRI) provided a tailored version of its famous guidelines for the mining and metals sector. This led to the creation of sustainability guidelines for the mining industry that act as a reference for the practice of the industry at the economic, environmental and social levels. The purpose of sustainability reporting for the GRI is to measure, disclose and make companies

[32] United Nations, 2002, p.2
[33] Mining & Project, 2002

accountable to internal and external stakeholders regarding their performance on sustainable development.[34] Thus, in helping the mining sector to achieve better practices at the level of sustainable development, and regarding its commitment to its stakeholders, it can be thought the guidelines provided by the GRI will strengthen the social acceptability of mining activities.

The Osisko Mining Corporation and the Canadian Malartic project

The Osisko Mining Corporation is a young mining company headquartered in Montreal, Quebec, that currently operates two major concessions. The real flagship of the Company is the Canadian Malartic mine, which extracts a gold deposit situated under the city of Malartic. The mine has the greatest amount of gold deposits in Quebec.[35] The mining industry in the region is not used to the type of exploitation put forward by Osisko, which consists of a high tonnage/low grade exploitation that requires the extraction of a large quantity of rock. The major particularity of the mine is that it required the relocation of a whole neighbourhood, relocating over 200 houses and five public institutions in a whole new neighbourhood built by the Corporation, since the gold deposit was situated under the city. [36]

To understand properly the issue surrounding the process of relocation of the neighbourhood and the implementation of the mine in the community, it is necessary to understand the specific context and characteristics of the population of Malartic. Before the arrival of the project, the city was suffering a significant economic downturn, reflected by a constant drop in the population from 4,474 inhabitants in 1986 to 3,604 inhabitants in 2006.[37] In parallel, in the same period, the city was also characterised by a higher rate of aging than the rest of the

[34] Global Reporting Initiative GRI, 2006
[35] SECOR-Taktik, 2008
[36] GENIVAR, 2010
[37] SECOR-Taktik, 2008

population of Abitibi or in Quebec. This drop in population was mainly driven by a rate of unemployment that was 10% higher than in Abitibi or Quebec.

Thus, the project fed great economic expectations among the population in terms of employment and development. Moreover, due to the necessity of relocating a whole neighbourhood, the company had to minimize the impact of the relocation on the community as a whole. In the same context, the company had to ensure the development of new public infrastructures suitable for the community, given the destruction of the old ones. Finally, the great proximity of the mine with the city made the population more vulnerable to the different environmental impacts of the project (i.e., air and water pollution, noise, vibration, etc.). In short, the mining company had to face and solve numerous challenges regarding the economic expectations of the community, as well as the social and environmental impacts of the project, having to build a project that was economically viable for shareholders, but also suitable for community stakeholders.

Methodology

To analyse the way the company implemented this reality, we have focused on the different sustainable development reports made by Osisko for the years 2008, 2009, 2010 and 2011, as well as examining some of the reports mandated by the company from different consulting organizations:

- Assessments of the economic impact of the Canadian Malartic gold mining project[38]
- Survey of Displaced residents of the southern sector of Malartic[39]
- Impact study on the environment[40] and,
- Study on local and regional economic impact[41]

[38] SECOR-Taktik, 2008
[39] GENIVAR, 2010
[40] GENIVAR, 2009

We analysed the different sections of these reports that were linked with the spheres of sustainable development, which enabled us to present some initiatives developed by Osisko in this context. So doing, we aimed to demonstrate the social acceptability process and the integration of sustainable development as made by the company.

Subsequently we examined the reactions and opinions of the community with regard to the project. Thus, we analysed 76 newspaper articles related to Osisko in the following newspapers: Le Devoir, Les Affaires, L'écho Abitibien, La Presse. To do so, we searched for the phrases "Osisko" and "Canadian Malartic" in the newspaper website's search engine. We then looked at all these articles and analysed in depth those which were linked to or relevant to our research question. Further, we analysed three surveys that determined community perceptions of the project, and its impacts on the community:

- Survey: Notoriety and perceptions of the mining company Osisko (CROP, September-October 2011)
- Transformations and changes of territory: The case of the municipality of Malartic (LeBlanc, Asselin, Ependa, Gagnon, & Pelletier, 2012), and
- Monitoring the social environment of the operational phase (GENIVAR, February 2013)

Project initiatives in the field of sustainable development

In this section, on the basis of what we defined above as sustainable and socially acceptable practices in the mining industry, we show how Osisko has tried to have its Malartic project accepted by society, then how sustainable development was translated in the process.

First, with regard to engaging the principles of sustainable development, the company affirms that it is "A fresh outlook on Mining".[42] In this report, the company emphasises that the Canadian

[41] KPMG-SECOR, June 2013
[42] Osisko, 2013

Malartic project will be socially acceptable from the first to the last step of its development. This ideal is precisely stated in its first two reports (2008, 2009), but is not stressed in the later reports. In those, only the importance of engaging with stakeholders is underlined. In this context, the company contacted the city and its citizens on 4 May 2006, to advise them of its intention to relocate more than 200 houses in the south quarter of Malartic, plus five public institutions, in order to exploit an open pit gold mine on this site. The company asserted at the time that it would support the full costs of the operation (Turcotte et al., 2011) which started in July 2008. To answer and manage the concerns of the population, the company created the *Groupe de consultation de la communauté* (GCC), a community consultation group. However, the group was quickly challenged for being insufficiently transparent.[43] Indeed, some people criticized the GCC for being an information body of the company, rather than a real consultation committee (Le Devoir, 7 March 2009). As a consequence, a second citizens' group was created, the Comité de vigilance de Malartic, the Malartic oversight committee. This group was proactive, demanding public consultation regarding the project, and informing those citizens who were to be relocated on the importance of having professional advice when signing the agreement with the company. [44]

From this perspective, the company launched two types of activities to engage with the community: information-related; and, consultation-related activities.[45] The first established the OSISKO centre of communal relations in the downtown of Malartic, the elaboration of a website on the project, a bimonthly chronicle of Osisko's activities published in the local newspaper, and the distribution of informative flyers. The consultation activities took place through meetings with elected officials and the representatives of local organizations, public

[43] Turcotte et al., 2011
[44] Ibid.
[45] GENIVAR, 2009

presentations in the community, and meetings with the people to be relocated. The objectives of all these different activities were to develop good relations with the community, and to understand their concerns, in order to make the project socially acceptable.

After the approval of the project in August 2009, the company put in place a new liaison group with the community, the *Comité de suivi*, a monitoring committee. According to the 2009 report, this committee, funded by the company, is independent of Osisko, and has as a mission to 'act as a liaison between Osisko and the community with the goal of promoting quick and efficient problem resolution in the interest of working towards a sustainable community'. However, this committee was criticized for a lack of transparency, and for the modification that Osisko imposed on the committee's press releases[46] which prevented the committee from fulfilling its role. In February 2013, Osisko engaged a mediator to initiate reflections to get the committee back on track 'so it can properly achieve its mandate, in the best interest of the Malartic community'.[47]

Now that we have clarified the process of consultation with the population put forward by Osisko, we will see how the company's commitment to "A new outlook on Mining" translated concretely into the different spheres of sustainable development. We will begin by developing the economic aspect of sustainable development, continue on the environmental aspect, and conclude with the social aspect..

The economic aspect of the project was crucial to obtain legitimacy. The company put great emphasis on assuring regional development as one core aspect of its sustainable development approach. This will was reflected by the desire to make most of its purchases from Quebec suppliers (more than 85%)[48] and by giving particular attention to hiring its employees directly from the community (33% directly from

[46] Sioui, 25 November 2012
[47] Osisko, 2013
[48] Osisko, 2010

Malartic).[49] Moreover, the company invested in the training of local people, even if they were lacking professional training.[50] Furthermore, the company hired aboriginal people and young people, and tended to give a second chance to older workers. For instance, regarding the economic benefits for the aboriginal people, the 2011 sustainable development report underlines that the company paid them $700,000 in salaries.

Moreover, the company pursued its economic commitment to the community through different forms of financial support. On the one hand, the company made donations to different institutions or events in the region, such as the local high school, the local hockey team and the University of Quebec in Abitibi-Témiscamingue. On the other hand, the company also displayed consciousness of economic issues from a long-term perspective. To respond to this issue, the company created the Fond essor Malartic Osisko (FEMO), the Osisko Malartic fund for the development of the community. The fund's goal is to improve the life conditions of the community from a long-term perspective, in particular with regard to the social and economic impacts related to closure of the mine.

The project also had to deal with numerous environmental impacts resulting from mining activity. We have to note that, given the proximity of the mine to the community, the government approved the project conditionally, stipulating respect of strict operation norms related to the noise and the vibrations resulting from its activities, and the blast duration and time of the day.[51] To mitigate its impact, the mine erected a buffer zone, called the Green Wall, between the city and the mining site. Further, the company monitored the noise and the vibrations caused by its activities, with the aim of reducing its nuisances.[52] Mining requires

[49] KPMG-SECOR, June 2013
[50] Osisko, 2011
[51] Radio-Canada, 20 August 2009
[52] Osisko, 2013

the consumption of large amounts of water and generates wastewater.[53] At the Canadian Malartic mine, the treatment of the ore required 25,000 m^3 of water.[54] To avoid over-consumption of water, the mine recirculated 90% of used water. With regard to carbon gas emissions, the company engaged in mitigation by planting trees. This project was called the *Forêt Osisko*, or the Osisko forest, and the aim was to plant 200,000 young trees. The mine also instigated the purchase of electric mining shovels that produce less carbon gas than hydraulic mining shovels.

Regarding the rehabilitation of the site after the cessation of mining activities, the company encouraged innovative ways of rehabilitation. The company developed a partnership with the University of Quebec in Abitibi-Témiscamingue to develop a project for reforestation of the site. Osisko aimed to begin the reforestation before the closure of the mine, so as to rehabilitate the site quickly and efficiently. Indeed, the company committed to rehabilitating 65% of the site before its closure.[55] In addition, the company secured a financial guarantee for the rehabilitation of the site, which covered 100% of estimated costs ($46.44 million), whereas the law requires only a guarantee of 70% of the estimated costs. Regarding the rehabilitation, the partnership the company has developed with the government in order to share the costs of the rehabilitation of the East Malartic's abandoned tailings' site is near the site of its operations.[56] The company will use this site to stock its tailings, which are neutral, and will consequently stop the AMD phenomenon by covering the tailings site.

However, despite these initiatives, the mine has had some difficulties in respecting norms regulating its operations, which is particularly disturbing for the people living close to the mine. As a consequence,

[53] Kemp, Bond, Franks, & Cote, 2010
[54] Osisko, 2011
[55] Osisko, 2008
[56] Osisko, 2009

these people organized themselves as the *Regroupement des citoyens du quartier sud de Malartic* (group of citizens of the south quarter of Malartic), to demand relocation, as had been the case for other residents of the South Quarter. The group tracked the number of grievances and notices of non-compliance that the company had received since the beginning, estimated to be (on 3 May 2013) 1,140 grievances and 86 notices of non-compliance. The group particularly criticized the impact that the mining activities had on their livelihood, especially regarding noise, vibrations and air pollution.[57] Indeed, these citizens have grave concerns about the nature and quantity of dust sent into the environment resulting from the mine activities, and demand an air analysis in order to understand the health threat posed by the mine.[58] In short, even if the company took environmental precautions, it still had room for improvement.

Regarding the social aspect, Osisko ensured the reconstruction of all the public institutions that were destroyed to allow the exploitation of the mine:[59] an elementary school, a retirement home, a day-care centre, a communal centre and an auditorium. This had the advantage of providing the community with brand new infrastructure. Also, to minimize the social impact of the mine, the company embellished its surroundings to mitigate the different visual and sound impacts of the open pit. Along the Green Wall, the company planted 36,000 trees, and built a cycle path.

The company was also committed to promoting education. Conscious of the fact that many students do not finish high school in order to get a job at the mine, Osisko established a policy that set an obligation for their workers to have their High School Diploma. This policy also applied to the subcontractors the company hires. Similarly, the company financially encouraged post-secondary students by giving

[57] *Regroupement des citoyens du quartier sud de Malartic*, 3 May 2013
[58] *Regroupement des citoyens du quartier sud de Malartic*, 3 May 2013
[59] Osisko, 2011

bursaries. Osisko aimed at gaining better confidence from the population by sharing information on its activities. The company organized visits to the mine in partnership with the mineral museum of the city, thus letting the public gain a better knowledge of its activities and practices.

Discussion

As described above, with the aim of gaining social acceptance for its project, Osisko initiated concrete and innovative economic, environmental and social actions in the elaboration of its open pit mine project. In this section, we discuss these actions in the context of sustainable development, suggesting issues for discussion on the questions of sustainable development and social acceptability in the mining sector.

As previously mentioned, sustainable development involves a transparent and accessible governance process.[60] Thus, for community concerns to be expressed, a space should be dedicated to dialogue between the community and the company.[61] In our analysis of Osisko's initiatives, we reported that such a space was indeed created, which is fairly new in the sector. However, as Kemp (2010) and then Owen and Kemp (2012) explain, these initiatives are often limited to the company's agenda. It is legitimate to think that the governance process established by Osisko has been conceived in this way, and the governance process initiated on 4 May 2006 was rapidly contested by the population, which complained that it was not transparent enough. However, even if the consultation committees were severely criticized by some citizens, we have to note that the company did not have any legal obligation to create such committees. Nevertheless, in the context of sustainable development, and particularly of social acceptability, the process could have been led in a more transparent way and could have

[60] Bisaillon et al., 2005
[61] Kemp, 2010

involved the participation of more stakeholders. Indeed, rather than embracing a participatory and inclusive approach to democracy, Osisko's approach is still mainly focused on consultation. Many authors, such as Simard (2003), have nonetheless stressed the importance of developing a more participatory and open decision-making process. Furthermore, the criticisms addressed to the GCC and to the monitoring committee regarding their lack of transparency and the independence of the information disclosed could also strengthen conditions of unacceptability, given the lack of information provided about the project. Nonetheless, according to a survey mandated by the company in September-October 2011, a good proportion (87%) of the population has a favourable or highly favourable opinion of the company.[62] These tendencies had been confirmed in another survey made at the end of 2012.[63] However, some people have criticized the low rate of participation in these surveys, especially regarding the representation of the people living close to the mine (those most impacted), who responded to the survey only to a proportion of 22%.[64]

At Malartic, Osisko's mining project generated great economic expectations from the community. This is often the case for marginalized or poor communities.[65] Also, as Hilson and Basu (2003) mention, it is important for a mining company to offer economic benefits that will overcome its numerous negatives impacts. Osisko's initiatives towards the economic development of the community appear to be extremely significant, stemming from what seems to be the company's real desire to generate economic development in the community. The company favoured the employment of local inhabitants, giving them proper training. This latter initiative is especially relevant, given the economic difficulties of the community. In

[62] CROP, September-October 2011
[63] GENIVAR, February 2013
[64] Grenier, 18 February 2013
[65] Kemp, 2010

addition, it is important to note that the company considered the long-term viability of the community, in the investment made in the educational institutions. These professionals will be able to participate proactively in the development of their community following the closure of the mine. From the same angle, the creation of the FEMO is a relevant way to ensure financial support for projects of economic diversification. The closure of the mine could potentially generate numerous negative impacts in the community; nonetheless, Osisko's activities in Malartic constitute an opportunity to obtain the financial support needed to revive the town's economy. These initiatives were particularly well perceived by the community who have shown great support to the company's activities. For example, many employees (300) supported the company by manifesting and petitioning to lower the norms regulating the operation of the mine.[66] Also, the mayor of the city stated that the company had given a second life to the city (Vezeau, 5 August 2009).

The process of social acceptability was thus strengthened by the fact that the company's activities are globally positively interpreted by a good part of the population. Indeed, these activities fulfil some of the economic ideals of the community, by offering great employment opportunities.

A mining company should also take into account the environmental impacts of its activities. As McLeod (2000) has demonstrated, mining activities generate many impacts on the environment. These impacts need to be taken into account in a holistic way at every step of the mine's life cycle,[67] and particularly at the stages of the mine's closure and the site's restoration.[68] To minimise its impacts on the environment, the company has favoured water recirculation. This initiative is especially relevant in the mining sector, since it is a big water

[66] Doherty, 24 October 2012
[67] Azapagic, 2004
[68] Gray, 1997; Roussel et al., 2000

consumer.[69] In this way, the company showed a proactive concern with one of the biggest issues it is facing. The company also planned to restore the site immediately after the mine's closure, acting in a proactive way in minimizing the environmental impacts linked to the closure, especially regarding the AMD that will be minimized if the site is quickly restored.[70] We can then determine that Osisko proved to be willing to take into account its environmental impacts in a holistic way on the Canadian Malartic site. However, some grievances were addressed to the company regarding the company's lack of knowledge on the mine health impacts. This lack of knowledge can create the perception of lacking the information necessary to evaluate the whole impacts of the project. According to a survey by GENIVAR at the end of 2012, 42% of the population stated that the quality of the environment had worsened with the mine activities. Nevertheless, the company continues to be positively perceived within the community. Indeed, 82% of the community is favourable or highly favourable to the mine operations.[71]

Finally, as Kemp et al. (2011) stated, it is important for the mining company to take into account the social context of the community involved with a mining project. Such was the case at Malartic, with the need to relocate a whole neighbourhood of the city. In parallel, the company must integrate the expectation of social development from the community, as it is often the only opportunity of development.[72] We see that the company mitigated these negative impacts by financing the construction of brand new infrastructure, with the effect of rejuvenating the city's infrastructure as a whole and the construction of a whole new neighbourhood. Also, the valorisation of the surroundings of the pit mitigated the impacts of the site. Indeed, it transformed it into a positive

[69] Kemp et al., 2010
[70] Gray, 1997
[71] GENIVAR, February 2013
[72] Kemp, 2010

area of recreation and relaxation for the community. In the end, we can see that the company took numerous initiatives to mitigate its social impacts; however, we have to underline the fact that the company did not have the choice, given the implication of the project on the community. In summary, according to our analysis, we consider that the company has answered the concerns of the community and acted as a socially-responsible actor. Indeed, the project took place and the mine is still operating, with the approbation of most of the population.[73]

Conclusion

Thanks to our analysis of the sustainable development reports of the company and of the newspaper articles we selected about Osisko, we can conclude that the company tried to engage proactively in the different spheres of sustainable development. Although some people criticized the lack of transparency and the low participatory nature of its initiatives, the project seems to have achieved a good level of social acceptability. Indeed, the project faced few real and strong challenges (the groups that have questioned the project have tended to question not the existence of the project, but the way it operates). Also, a high percentage of the population is satisfied with the project. We consider that a mining project that aims to be sustainable should rely on practices that come close to the sustainable development definition we presented earlier. In particular, mining exploitation should be done in a way that maintains ecosystem integrity through the adoption of the best and the newest technologies in terms of waste minimization (polluted water, carbon gas, sterile rock) and resource use (energy, water, fuel). Thus, economic benefits generated through mining activities should contribute as much as possible to local population development. The articulation of these principles should be considered by a committed mining sector through proactivity, transparency and dialogue. Indeed, in the

[73] GENIVAR, February 2013

perspective of sustainable development, if mining projects affect the community, it is crucial to open a space dedicated to the expression of community concerns. Such a space should also be used by promoting agents to re-evaluate the projects they put forward, and make them better fit to the community's development ideals. Ultimately, the consideration of the three dimensions of sustainable development through the lens of social acceptability should lead to a mining project's greater social acceptability.

In conclusion, despite the increasing concerns for social acceptability, there is little academic work on the question. Indeed, the literature fails to offer a strong definition of the concept and to link it to the practice of the industry. Moreover, the regulation guidelines provided to the industry concentrate almost exclusively on sustainable development. Thus, the mining sector is left to itself to elaborate practices that could enhance its social acceptability. For the future, we suggest that academics and the industry collaborate in elaborating a framework to develop good social acceptability practices, in the better interest of the industry and the community.

However, we have to note that this research was limited to a document analysis, and it was thus impossible to understand in depth the opinion of the population of the initiatives taken by Osisko, and how the company has engaged these questions internally. For the future, it will be interesting to conduct interviews both with the managers of the Company, to understand how they have faced these challenges, and with the population.

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5

RESOURCE DEVELOPMENTS ON INDIGENOUS LANDS IN AUSTRALIA. THE JAMES PRICE POINT GAS PRECINCT

Margaret Anne Stephenson and Tina Hunter

Abstract

In Australia today, it is increasingly common to see agreements between Indigenous peoples and resource companies being achieved generally as Indigenous Land Use Agreements or agreements pursuant to the 'right to negotiation' process under the Native Title Act 1993 (Cth[1]). Despite progress in this area, resource development on Indigenous lands is not without its challenges, for both the resource proponents and the Indigenous parties. History demonstrates that resource development on Indigenous lands has produced struggles between the traditional owners of the land and the resource proponents. In Australia, their relationship is generally defined by issues of access to land and assuring continued access to the land for the life of the project. In this context, divisions in indigenous communities often emerge. The proposed resource project can have the effect of polarising members of an indigenous community. It may be regarded by some traditional land owners as an advantageous opportunity for the community, and by others as a hazard to

[1] Commonwealth of Australia

country and culture. The process of agreement making has proved not only a test for the indigenous community but also for the resource proponent.

In this paper we undertake a contemporary case study of a proposed Australian resource related-development project on indigenous lands. This project involved a multi-billion gas hub precinct, proposed at James Price Point, in the Kimberley region in Western Australia. The James Price Point proposal produced a litany of challenges for all parties. The traditional owners faced fundamental social and human rights issues, including a minority opposition to the project, the project's potential cultural heritage impact, the threat of compulsory acquisition of their native title interest by a State government due to an initial failure to settle an agreement, a fracture of their unsettled land claim and a minority rejection of the agreement ultimately reached. Additionally, the green lobby also rejected the proposed gas hub on environmental grounds, bringing the green lobby into direct conflict with both the traditional owners in favour of the project, and the resource proponent. Ultimately, Woodside announced its decision in April 2013 not to proceed with the proposed gas precinct at James Price Point. In this paper we analyse the complexity of the James Price Point gas hub negotiations with the traditional owners, which resulted in an Agreement that promised to deliver substantial benefits for the indigenous communities. We question why such a favourable and beneficial agreement for the indigenous community also produced the plethora of challenges and concerns, and we consider how future negotiation processes could be better structured to avoid the difficulties that have confronted indigenous land owners and resource proponents alike.

Keywords: Negotiations, consultation, indigenous, aboriginal, indigenous informed consent, mining/resource agreements

Introduction

The proposal by Woodside Energy Ltd (Woodside) and its joint venture partners (Chevron Corp, Royal Dutch Shell Plc, BP Plc and BHP Billiton Ltd) to build a gas hub at James Price Point, 60 km north

of Broome, in Western Australia's Kimberley region, to process off-shore gas from the Browse Basin off the Kimberley coast, has been a 'hot topic' in Australia for several years. The story behind the James Price Point gas hub began in 1976, with the discovery of lucrative gas fields and oil reserves some 400km off the Western Australia coast, in the Browse Basin. It was proposed that the gas be piped ashore for processing into Liquefied Natural Gas (LNG). Given rising gas prices and the awakening of the Asian gas market, the Western Australia government established the Northern Development Taskforce in 2007, with a mandate to identify a single site for an LNG processing precinct development. The government position was that a single site for gas processing should be chosen, rather than each extractor developing its own processing site. In December 2008, James Price Point (Walmadany) was recommended as the preferred site to service the Browse Basin gas finds.[2] Land at James Price Point was part of a native title claim lodged in 1994, under the *Native Title Act* 1993 (Cth), by the Goolarabooloo and Jabirr Jabirr Peoples (the traditional indigenous owners on whose land the project would impinge). Agreements regarding the proposal were signed with the traditional owners in 2011. In April 2013, Woodside announced its decision not to proceed with the proposed gas hub project at James Price Point, citing high costs of business in Australia, and expressing concerns that the project would not deliver the returns needed[3]. Woodside has not ruled out developing its Browse Basin gas resources with alternative processing facilities such as FLNG (floating LNG) technology, or utilising the existing Pilbara gas hub[4].

The gas precinct proposal at James Price Point faced numerous obstacles. It was opposed by environmentalists concerned that the project would destroy one of the most beautiful and pristine regions in Australia. It also divided the traditional Aboriginal land owners,

[2] O'Faircheallaigh, 2013
[3] *The Australian*, April 2013
[4] *Broome Advertiser*, April 2013; Wilcox, 2010

particularly over sensitive cultural heritage concerns. Despite negotiated Agreements being reached between the proponent, the State, and the native title claimants, subsequent uncertainties and concerns emerged. Divisions in the existing native title claim prompted an application for a split of the single claim into two claims. One claimant group, satisfied with the benefits to be conferred, was content to see the project proceed, while the other claimant group vehemently opposed the gas hub development continuing in its proposed form, and regarded the development as a hazard to country and culture. The latter claimant group launched a challenge to both the validity of the Agreement, and to the compulsory acquisition notices issued by the State.[5]

Although the gas precinct will not now proceed, valuable lessons can be learnt regarding negotiating sustainable agreements with the traditional land owners. In this paper we analyse the negotiation of the Browse Agreements and examine:

- Processes and options available for reaching agreements for resource projects with the traditional owners under the Native Title Act and why commercial agreements (not Indigenous Land Use Agreements (ILUAs)) were negotiated, and
- How, despite commercial agreements being reached, the outstanding concerns of the traditional owners could have been better addressed to prevent challenges and disputes that had the potential to derail the reached agreements.

The native title agreements

The agreements

Negotiations with the Kimberley Land Council, representing the indigenous native title claimants from the Goolarabooloo and Jabirr Jabirr communities, took place over a number of years.[6] The

[5] Laurie, 2010; Mortimer, 2010
[6] Kimberley Land Council, 2010

Goolaraboolloo and Jabirr Jabirr peoples were a single native title claimant group, with a registered claim under the *Native Title Act* 1993 (Cth). After James Price Point was identified as the preferred location for the LNG gas hub, negotiations were undertaken in tight time-frames requested by the State. This resulted in an understanding-in-principle (Heads of Agreement) being signed by the traditional owners, Woodside, and the Western Australia Government in 2009. Pursuant to the Heads of Agreement, an LNG facility would be established – provided the requisite cultural and spiritual safeguards were met. After further negotiations in 2009 and 2010, the Kimberley Land Council advised that divisions and dissent within the native title claimant group meant that no final agreement could be reached. Consequently, the State of Western Australia commenced compulsory acquisition procedures to acquire land for the gas hub, together with any native title interest in that land.[7] The Kimberley Land Council opposed this compulsory acquisition.[8] Subsequently, extensive negotiations resumed, and the compulsory acquisition notices were withdrawn.

On 30 June 2011, the Kimberley Land Council signed final comprehensive Agreements with Woodside and the State of Western Australia, which allowed for the processing of gas at an LNG Precinct at James Price Point. The three separate agreements (collectively referred to as the 'Browse Agreements') dealing with discrete aspects of the project are:

- The Browse LNG Precinct Project Agreement,
- The Browse LNG Precinct Regional Benefits Agreement, and
- The Browse (Land) Agreement.[9]

As part of the negotiated outcome, the agreements secured the land required for the LNG Precinct, and delivered a substantial package of benefits and initiatives for the traditional indigenous land owners.

[7] ABC Kimberley, 2010
[8] KLC Newsletter, 2010; O'Faircheallaigh, 2010, p. 26
[9] See State of Western Australia, 2011

Despite a view that indigenous people are frequently disadvantaged by resource projects, this was not such a case.[10] Generally, agreements negotiated between resource companies and traditional owners contain confidentiality clauses preventing disclosure of the terms of the agreement; however, these agreements were publically available on the Western Australian government's webpages. Woodside reported that: 'The initiatives in the Agreement are worth in excess of A$1 billion over the life of the precinct and have the potential to enact meaningful and positive change to the economic and social circumstances of Indigenous people in the Kimberley. Woodside's commitments include the implementation of ongoing education, training and employment initiatives, Indigenous job targets, support for Indigenous businesses, cultural initiatives and payments upon project milestones being met'.[11] The State Government package for the native title traditional owners is worth 'around $30 million dollars' worth of funding, housing and land'.[12] Additionally, these comprehensive Agreements provided benefits that included employment, training, environmental and cultural protections. Also promised were significant grants of freehold land to the traditional owners. Regional benefits comprising education, health and housing for the Kimberley's indigenous peoples were also included. Clearly these Agreements had substantial value, and were some of the most favourable which have been negotiated by traditional owners with resource proponents in Australia.[13]

The Native Title Act negotiation processes

To understand how the Browse Agreements were framed and negotiated, it is necessary to understand the requirements of the Native Title Act 1993 (Cth) (NTA). If resource companies propose activities on

[10] Langton & Longbottom, 2012; Langton M & Mazel, 2008
[11] Woodside/Browse
[12] Woodside/Browse
[13] Langton M, Boyer Lectures 2012

land where native title has been determined to exist, or on lands that are subject to a registered native title claim, then such actions will be termed 'future acts', and compliance with certain procedural rights under the *Native Title Act* is mandated to ensure validity of the 'future acts'.[14] Within the resources sector, a 'future act' will generally comprise the grant of a mining interest/tenement, the undertaking of a resource activity, or the compulsory acquisition of land by government. Depending on the activity proposed, a resource proponent will undertake the strongest of the rights, the 'right to negotiate' (for a minimum of six months) or the weakest of the rights, 'a right of notification'. The 'right to negotiate' requires that the negotiation parties must negotiate in good faith.[15] Alternatively, a proponent can reach a voluntary Indigenous Land Use Agreement (ILUA) with the native title holders or registered claimants. Once an ILUA is authorised and registered with the National Native Title Tribunal, it has contractual effect on the parties to the agreement and the ILUA will be legally binding.[16]

Nothing in the Native Title Act provides a veto for traditional owners, nor does anything in the Act establish a right to indigenous 'free, prior and informed consent' before a resource development proceeds. However, the processes under the Act do allow native titleholders and claimants to have some influence and control over future developments of their lands. It was intended that under the Act's 'right to negotiate' procedures, alternative dispute resolution methods (i.e. negotiation in good faith, mediation and arbitration) would be utilised, rather than having issues contested in court. Agreements reached under these processes can include revenue distribution to an Indigenous community, employment of community members, business opportunities for community enterprises, for training and education

[14] See NTA Div 3 Pt 2 ss ss 226, 233(1)(a), 227, 24AA(2).
[15] NTA ss 30A and 31
[16] NTA ss 24BI(2), 24CI, 24DJ

programmes as well as cultural heritage protections and environmental monitoring.[17]

Negotiations at James Price Point

Woodside's proposal to establish the gas precinct at James Price Point was a 'future act', but the issue was – what mechanism should be best employed to ensure compliance with the Native Title Act provisions. Negotiating an ILUA with the native title claimants seemed the obvious choice. Early attempts to negotiate an ILUA were aborted, probably because the diverse views held by the native title claimant group were considered unlikely to produce the authorisation essential for registration of the ILUA with the National Native Title Tribunal in accordance with the Act.[18] The option of utilising the right to negotiate process (that could lead to an agreement under s31 Native Title Act) could not be directly invoked, as the proposed gas hub precinct did not involve a grant of a mining interest. Certainly, establishing the gas precinct infrastructure development would require a level of consultation with the native title claimants, but it did not directly fall within the formal right to negotiate process[19]. Accordingly, a commercial agreement, but one crafted to satisfy the Native Title Act requirements, was pursued. A careful framing of the Agreement, designed to allow certain aspects of the gas precinct development to trigger the 'right to negotiate' process, would enable the 'future acts' to be validated by the National Native Title Tribunal pursuant to section 31(1)(b) Native Title Act. The trigger for invoking the 'right to negotiate' process was to be the State's compulsory acquisition of certain lands required for the project. Without the 'right to negotiate' process being activated, the National Native Title Tribunal would be unable to endorse the commercial agreement reached and thus ensure

[17] Ritter 2009; 2013
[18] NTA ss24CG(3); 251A
[19] NTA ss24MD(6A) & (6B)

the validity of the 'future acts', including the gas precinct infrastructure and land access.

Compulsory acquisition

Browse (Land) Agreement and compulsory acquisition

To ratify and implement the Browse Land Agreement, the Western Australian government passed the Browse (Land) Agreement Act 2012. This Act provided, *inter alia*, that the State agreed to grant an area of land, under freehold title, to the Native Title Party at the end of the life of the LNG Precinct. However, granting of title to the traditional land owners was contingent on the State's compulsory acquisition of land at James Price Point, pursuant to Land Administration Act 1997 (Western Australia). If the land being resumed is the subject of a registered native title claim or a favourably determined native title claim, the Native Title Act 1993 also requires the State Government to follow the 'right to negotiate' process to undertake compulsory acquisition of native title rights and interests, including liability compensation for extinguishment of the native title interest. In accordance with the Browse Land Agreement, compulsory acquisition notices were issued to acquire land for the gas hub at James Price Point, as well as land which was later to be transferred to the traditional owners in freehold.[20] These notices triggered the 'right to negotiate' process. In December 2011, the Western Australia Supreme Court found that the compulsory acquisition notices were invalid, as they failed to specify precisely which areas of land were to be acquired for the project (*McKenzie* v *Minister for Lands).* Fresh notices to compulsorily acquire the land were issued again in March 2012. Legal action by the traditional owners challenging the compulsory acquisition notices was then begun.[21]

[20] *WA Today*, 2012
[21] *The Australian*, 2012.

Previous attempted compulsory acquisition

The State of Western Australia had first threatened compulsory acquisition of land at James Price Point in 2008, and issued taking notices in 2010 when negotiations with the traditional owners stalled.[22] This attempted resumption of native title land in 2010 produced splintered factions within the indigenous community, and challenges within the Kimberley Land Council.[23] Once agreements with the traditional owners were reached, the resumption notices were withdrawn. In previous negotiations with traditional owners in Western Australia (regarding the Burrup, and MG-Ord and Wimmera Agreements), the State reportedly also threatened compulsory acquisition if agreements were not reached within set timeframes.[24] In legal terms, support for the government's compulsory acquisition can be found in a 2008 High Court decision, Griffiths v Minister for Lands, Planning and Environment, in which the Court endorsed a government's compulsory acquisition of un-alienated Crown land, in which native title was assumed to exist, where the purpose was to allow for the alienation of the land through sales to private individuals. It is arguable that the Western Australian government could have legally proceeded by compulsory acquisition to acquire the land for the gas hub at James Price Point. Such compulsory acquisition would, of course, be subject to the Native Title Act 'right to negotiate' procedures and subject also to the payment of compensation.[25]

Challenges

Challenges to the agreements

Indigenous opinion polarised regarding the James Price Point gas hub proceeding, resulting in much-publicised intra-indigenous disputes,

[22] ABC Kimberley, 2010
[23] Laurie, 2010
[24] Guest, 2009; Wall, 2010
[25] NTA ss 33(1), 38(2)

as well as a number of legal challenges by some traditional owners. Generally, the Jabirr Jabirr people were in agreement with the project, and welcomed the potential economic development benefits that would follow. However, many Goolarabooloo people opposed development at the proposed site for the LNG gas hub. These challenges were potential obstacles to the implementation of the Browse Agreements, and included challenges to the compulsory acquisition notices issued by the State of Western Australia, challenges to the validity of the agreement itself, objections in relation to a lack of protection of Indigenous cultural heritage, and environmentally-related challenges.

Cultural heritage concerns

A key objection to the LNG Gas Precinct at James Price Point was the inevitable destruction of significant Indigenous cultural heritage. A number of traditional owners considered their cultural heritage as non-negotiable.[26] The Lurujarri Trail, which follows the traditional Song Cycle of the Kimberley coastline, was established by Paddy Roe to encourage his peoples to remain connected to their traditional culture, heritage and skills. When 'Law Bosses' were asked to identify the boundaries of cultural heritage along the Song Cycle coastal areas, they advised that no boundaries existed, as each culturally significant area merged with the next, and was a part of a continuous system. This evidence was accepted by the Mining Warden's Court in a decision of 20 August 1991, in relation to an application by Terex Resources NL for mining exploration licences in this region. Senior 'Law Boss' Joseph Roe, a grandson of Paddy Roe and a traditional owner of Walmadany (James Price Point), expressed his concerns: 'The LNG Gas Precinct proposal is a dangerous and frightening prospect for the Traditional Owners and Custodians. Without Country there can be no culture. Law cannot be practised. Nor can the Country be 'kept quiet' and safe. The

[26] *The Sydney Morning Herald*, 2012; *Green Left*, 2013

site-specific cultural heritage has arisen directly from this coastline. It cannot be relocated or put on hold while the Country is destroyed for Industry. No amount of compensation money can substitute for it. Culture cannot exist without Country nor Country without culture'.[27]

Paddy Roe's grandsons applied to the federal Minister under the Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth) for a declaration to preserve and protect parts of the proposed LNG Precinct from injury or desecration. Key concerns were that their indigenous cultural heritage in the James Price Point region was largely ignored and overlooked in the making of the Browse Agreements, and that serious destruction of cultural heritage of the land and coastline and loss of country would result from such a project. Apprehensions that the James Price Point development would destroy the traditional links to culture, and that this development would be the beginning of heavy industry in the Kimberley, were also relevant. [28] Indigenous cultural heritage can receive emergency protection under Commonwealth legislation, Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cth).[29] This legislation was the basis of indigenous challenge to protect cultural heritage in the Hindmarsh Island bridge dispute, which delayed the building of the bridge for a number of years.[30] The Commonwealth Act allows the relevant federal Minister to make declarations in relation to significant indigenous areas that are under 'serious and immediate threat of injury or desecration', and indigenous objects which are under 'threat of injury or desecration'. A protection decision by the federal Minister could potentially impact on the implementation of the Browse Agreements. In this instance, no decision was made by the federal Minister regarding cultural heritage protection.

[27] Wilcox**,** 2010
[28] State of Western Australia, 2005
[29] ss 9, 10, 12
[30] Taubman, 2002

A possible challenge under the State cultural heritage legislation, Aboriginal Heritage Act 1972 (WA), could also have been made.

Environmental questions

Environmental considerations would also have significantly impacted on the realisation of the Browse Agreements. In 2008, the Minister for State Development referred the proposed James Price Point onshore LNG industrial processing precinct, as a strategic proposal, to the Environmental Protection Authority (EPA), under the Environmental Protection Act 1986 (WA). This assessment took four years. The EPA recommended approval in July 2012, and in November 2012 the Minister granted approval. Woodside then obtained EPA approval of the Browse LNG facility, as a derived proposal. A traditional owner, Richard Hunter, and a conservation group, the Wilderness Society, challenged the validity of the EPA approvals.[31] In August 2013, the Supreme Court in *The Wilderness Society of WA (Inc)* v *Minister for Environment* determined that the environmental authorisation underlying the proposed James Price Point gas hub development was invalid, as the EPA failed to comply with the legislative procedures stipulated in the Environmental Protection Act (WA). Pursuant to that legislation, if EPA members have a 'direct or indirect pecuniary interest in a matter that is before a meeting of the Authority', they must disclose their interest, and must not consider or vote on those matters. When four board members disqualified themselves, the EPA Chairman alone ultimately made the recommendation. It was argued that Chairman's decision was flawed, as the other board members continued their participation in the process until just prior to the ultimate decision being made. The Court found that members of the EPA had conflicts of interest during the various stages through which the proposed gas hub development was assessed. The Court stated that 'the assessment was

[31] *WA Today*, 2013

undertaken following a process which was directed and controlled by a number of decisions purportedly taken by the EPA, but which were invalid because they were taken at meetings at which a number, often a majority, and on one significant occasion, all of those participating in the decision-making were disqualified from participation by reason of their pecuniary interest in the Proposal'. The Western Australian government indicated that it may resubmit the environmental approvals to the EPA.[32]

Also outstanding, at the time the Browse LNG project was discontinued, was the outcome of the Commonwealth approval process under the Environment Protection and Biodiversity Conservation Act 1999 (Cth).[33]

Informed consent

The principle of Indigenous 'free, prior, and informed consent' (FPIC) in the United Nations Declaration on the Rights of Indigenous Peoples (DRIP), adopted by the General Assembly in 2007,[34] is an acceptable international standard of negotiation with relevance[35]. Article 32, DRIP, provides 'States shall consult and cooperate in good faith with the Indigenous peoples concerned…in order to obtain their *free, prior and informed consent* prior to the approval of any project affecting their land or territories….'. In 2008, the Commonwealth and the Western Australian Governments entered into an agreement to undertake a strategic assessment of the impacts of actions under a plan for the Browse Basin LNG precinct and associated activities. In accordance with this Agreement, a Report, assessing the environmental, heritage and socio-economic impacts of actions regarding the LNG gas hub precinct, was to be prepared to satisfy the requirements of both the

[32] *The Australian*, August, 2013
[33] Lindsay, 2012
[34] Resolution 61/295
[35] IIED, 2013

Environment Protection and Biodiversity Conservation Act 1999 and the WA Environmental Protection Act 1986 (Part 10 Strategic Assessments, s146(1)). The Kimberley Land Council, with State agreement, undertook a study that addressed the Indigenous elements of the Terms of Reference for Strategic Assessment, and produced an Indigenous Impacts Report documenting the potential impact of the gas hub on the Aboriginal people affected.[36] The Strategic Assessment Processes and Final Reports were to be completed at the end of 2012.

The Strategic Assessment Agreement mandated that the Reports included a comprehensive analysis of the potential impacts of the Plan on Indigenous people and their culture, and whether **'**the Traditional Owners have given *informed consent*, in a culturally appropriate manner to the implementation of the Plan'.[37] One of the key findings of the Kimberley Land Council's Kimberley LNG Precinct Strategic Assessment Indigenous Impacts Report, is that 'the principle of Indigenous Free Prior Informed Consent (IFPIC) provides an appropriate standard for determining whether Traditional Owners have given "Indigenous informed consent" or have "given informed consent in a culturally appropriate manner", because the principle sets explicit benchmarks for assessing issues related to the granting of Indigenous informed consent that are grounded in international law, are increasingly recognised in relevant international fora, are central to the United Nations Declaration on the Rights of Indigenous People, which Australia has endorsed, and are consistent with Australian common law principles on what is valid and effective consent and reflects fundamental cultural values and political principles held by Kimberley Traditional Owners'.[38] Accordingly, as informed consent is the standard

[36] KLC Report, 2010.
[37] *Environmental Protection and Biodiversity Conservation Act 1999, Part 10 Strategic Assessments*
[38] O'Faircheallaigh & Twomey, 2010

adopted in the Strategic Assessment Agreement, this is the standard by which government actions in implementing the plan would be measured.

Unsound negotiation process and absence of indigenous consent?

Certain native title claimants expressed disagreement with aspects of the Heads of Agreement, disquiet that their consent was not given to the gas hub project proceeding, and stated that the Kimberley Land Council had failed to represent the traditional owners during negotiations.[39] Concerns surfaced that the Browse Agreements were unduly influenced by the threat of compulsory acquisition and the pressure from the Western Australia State to deliver a quick negotiated outcome. In the case of the Heads of Agreement, the State allowed a three-month period for negotiations in relation to the complex infrastructure project. This pressure was contrary to the promise of a former State Premier that no gas hub would be implemented without the 'fully informed consent' of the traditional owners[40]. Questions were also raised regarding the legitimacy of a meeting held by the Kimberly Land Council to obtain native title claimant approval for the signing of the Heads of Agreement in 2009.[41] For example, it was alleged that the meeting was not advertised for the purpose of voting on the LNG gas hub, some members of the Goolarabooloo claim group were unable to attend, and others departed prior to the endorsement vote, while wider community members, not directly affected by the gas hub, were permitted to vote on the approval.[42] Accordingly it was argued that the vote to accept the Heads of Agreement was not free, fair and fully informed and a view was expressed that the Agreements were flawed.[43] While legal action

[39] O'Faircheallaigh, 2013
[40] Carpenter, 2006
[41] Mortimer, 2010
[42] Wilcox, 2010
[43] Mortimer, 2010, Botsman, 2012, O'Faircheallaigh & Twomey, 2010

against the Kimberley Land Council was dismissed,[44] many issues could have been avoided if proper consultation and negotiation processes had been implemented, and if the time had been allocated in this process to fully engage with the traditional owners, particularly in relation to the choice of the gas hub site.

Native title claims split

Separate claims

For 15 years, the Jabirr Jabirr and the Goolarabooloo people have had a joint native title claim over the proposed gas hub land. In February 2013, after a meeting in Broome, the two groups of traditional owners of the James Price Point land voted to separate their claim, and apply for a discontinuance of the current claim.[45] Two new, independent and competing claims would then be lodged: a Jabirr Jabirr claim and a Goolarabooloo claim. An application for discontinuance was heard by the Federal Court in April 2013.[46] The Court considered that the matter should be referred to a mediator to resolve resultant issues from the discontinuance, and that leave to file a new claim after the 18th April 2013 would minimise prejudice to all parties (including the State and Woodside). The significance of the 18th April 2013 was that this was the date by which a new claim was required to be lodged so that the Goolarabooloo Peoples would obtain independent procedural rights, including the right to negotiate, under the Native Title Act 1993, with the State in relation to the proposed compulsory acquisition. The Federal Court further considered that the private interests of the Goolarabooloo were less significant than the public interest in this regard. It is not totally certain what impact the split of the native title claims might have had on the James Price Point agreements. Kimberley Land Council chief

[44] *Roe* v *Kimberley Land Council Aboriginal Corporation*; *Roe* v *State of Western Australia*
[45] ABC News, 2013
[46] *Rita Augustine* v *State of Western Australia*

executive, Nolan Hunter, reportedly stated that: 'if the process goes smoothly, the discontinuance shouldn't affect the benefits of the LNG project native title agreement', and 'The Browse Precinct Project Agreement specifically allows for discontinuance of the Goolarabooloo Jabirr Jabirr claim, and the Agreement remains valid and continues in full force and effect'.[47] However, if new claims were registered, it is probable that the State and Woodside would be legally required to negotiate new and separate agreements with both claimant groups in order to satisfy the requirements under the Native Title Act.

Impact of the gas hub project not proceeding

Given that Woodside has announced its decision not to proceed with the James Price Point gas hub, at least in the manner contemplated in the Agreements, it appears that the negotiated benefits pursuant to the Agreements may now evaporate for the traditional owners. As the existing Agreement was signed as a conditional agreement subject to the gas hub venture proceeding, it is possible that the Indigenous parties will forfeit the substantial benefits package negotiated under this Agreement. Woodside has reportedly ruled out any ex-gratia payments to traditional owners for the now-shelved James Price Point gas hub. It seems that the Indigenous communities will receive only a small portion of the negotiated package, because benefits were conditional on the onshore processing hub at James Price Point proceeding to completion. Woodside chief executive, Peter Coleman, reportedly stated that only $18 million in native title payments would now be made. The traditional owners argued that Woodside has a moral obligation to deliver the package regardless of the project proceeding.[48]

[47] ABC News, 2013
[48] *The Sydney Morning Herald*, April, 2013

Conclusion

The Browse Agreements demonstrate that indigenous peoples can negotiate agreements with both resource proponents and the State, and that such agreements have potential to direct substantial benefits to the Indigenous community, as well as creating opportunities for their involvement in development. Although such agreements potentially deliver good economic outcomes, the same agreements may also have considerable constraints. Choices between preserving land and culture and potential economic benefits, including better education and health, can produce divergence and conflict in an Indigenous community. Certainly, a number of issues haunted the James Price Point experience of negotiating an agreement with native title claimants. Fundamental concerns regarding the impact and potential destruction of Indigenous culture and country, which were not satisfactorily addressed in negotiations, together with concerns regarding the internal endorsement process for the Agreement in Principle, produced resultant objections and challenges. The experience at James Price Point demonstrates that the absence of an inclusive negotiation framework in which the divergent views of all native title claimants can be accommodated can expose an agreement to delays and legal challenges, particularly when a commercial agreement is negotiated. Both the involvement of the traditional owners at all stages of the development process and the allowance of reasonable timeframes for negotiations to occur are absolutely essential pre-requisites to sustainable and acceptable agreements. Experiences from the James Price Point story will be of relevance to both resource proponents and traditional owners in understanding and adapting future processes for negotiated native title resource agreements in the Australian context.

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6

CORPORATE STAKEHOLDER EFFECTS ON INTERNATIONAL LAW NORMS OF CONSULTATION WITH INDIGENOUS COMMUNITIES

Dwight Newman

Abstract

This paper discusses the author's work identifying international law norms of consultation with indigenous communities, and poses a potentially counterintuitive argument that corporate stakeholders' interactions with indigenous communities may have effects on the content of those norms. The claim is counterintuitive because the international law of pertinence is customary international law, which arises from consistent state practice and *opinio juris* (a belief by states that they are acting in a way they are legally bound to do so). Customary international law traditionally has no reference to corporate conduct per se. The paper first surveys several sources on developing international law on consultation obligations. Then it references the impact these norms can have on corporate stakeholders in industries like mining. Then, it poses an argument as to an economic ratcheting effect that can occur through various agreements between corporate stakeholders and indigenous communities and that then feeds through into international law via several mechanisms. The consequences for mining companies are diverse, and include the possibility that conduct by one company can have longer-term implications for the obligations of other

companies and, indeed, of states. The effects will differ in the context of different competitive environments and may actually have effects on the economics of different competitive models.

Keywords: International law, consultation, duty to consult, indigenous rights, mining law

Introduction

Consultation obligations with indigenous communities, even when owed by governments rather than by corporate stakeholders per se, give rise to significant implications for mining companies. Developing international law on consultation is significant, because it may lead to further developments in domestic law in various mining jurisdictions. International law norms on consultation may not have a direct effect on corporate stakeholders, but they have significant implications. One important task, then, is to seek to better understand the existing state of international law on norms of consultation. Pronouncements by several pertinent bodies have offered a view as to this developing international law, and the author's ongoing work on this issue is yielding data and analysis that is consistent with the view these bodies have been proposing, as discussed in the results section of the paper.

In addition, the activities of corporate stakeholders, this paper will argue, can also have future implications for the ongoing development of international law in this area. This claim is partly counterintuitive, as corporate activity has not traditionally been a means by which international law is formed. The discussion part of the paper builds upon the results, however, and argues that, within the way in which international law is developing, corporate stakeholder activity can actually contribute through several mechanisms. This fact has implications due to different competitive environments, and may have varying effects in different competitive environments.

Methods

Introduction of methods

The contents of international law are principally defined by states; this methodology is at the heart of the traditional voluntarist model of international law, departure from which has been argued to threaten the cohesiveness of international law as a discipline.[1] Strict attention to this principle thus calls for analysing customary international law solely in terms of consistent state practice, which must also be accompanied by the required belief by states that their practice is based on law (*opinio juris*). Nonetheless, statements by 'publicists' (certain highly recognized scholars) as to the contents of international law have always been influential, and modern analyses of customary international law are ready to also examine a more diverse set of materials as to the contents of international law, notably the developing pronouncements of certain United Nations bodies and human rights decision-making bodies.[2] It is also increasingly common to bring theoretical perspectives explicitly to the analysis of the law, with the possibility that in areas such as indigenous rights they have a larger role, given the relative absence of prior legal precedents.[3]

Examination of leading statements on international law norms of consultation with indigenous communities

The methods on which the paper is founded thus begin with an examination of leading statements on international law norms of consultation with indigenous communities. The United Nations Declaration on the Rights of Indigenous Peoples (DRIP)[4] of course represents a meaningful starting point in examining modern statements on the contents of international law related to indigenous communities.

[1] Oppenheim, 1908
[2] Roberts, 2001
[3] Newman, 2009; Newman, 2011; Newman, 2013a
[4] DRIP, 2007

The United Nations Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous People prepared a major report in 2009 interpreting the elements of DRIP as related to consultation,[5] which has become an important reference.[6] Finally, the International Law Association adopted a report on indigenous rights issues at its August 2012 meeting in Sofia, which also pronounces on the issues.[7] The results begin by stating what emerges from these reports.

It also bears noting that the InterAmerican Court of Human Rights released a decision in June 2012 in the case of *Pueblo Indígena Kichwa de Sarayaku vs. Ecuador* purporting to enunciate general norms on the issue.[8] This case concerned petroleum development in a region of the Amazon to which the Sarayaku indigenous peoples had asserted claims, with the Court determining that Ecuador had breached various rights of the Sarayaku peoples, including their right to be consulted prior to the development. Many of the determinations within the decision were based on a particular treaty, ILO 169, to which Ecuador is a party. Those determinations would thus not necessarily apply beyond parties to that treaty, of which there are a limited number (albeit many states in Latin America). However, the InterAmerican Court also purported to pronounce upon an obligation of consultation with indigenous peoples as a 'general principle' of international law, referencing the presence of such consultation requirements in the practices of many states. Thus, it is worth noting from the outset that the reports to be discussed further in the results section are covalent with some emerging judicial decisions as well.[9]

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[5] United Nations Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous People, 2009
[6] Newman, 2013a
[7] International Law Association, 2012
[8] *Sarayaku vs. Ecuador*, 2012
[9] Newman, 2013b

Independent examination of state practice on norms of consultation with indigenous peoples

Because the primary evidence of international law is state practice itself, the second method which the paper employs is extensive examination of material evidencing actual state practice on norms of consultation with indigenous communities. The material drawn upon was sought using standard legal research methodologies across a range of different states, as required within the context of an international law argument.[10]

Theoretical discussion

Aside from the role for theoretical reasoning in law in general, materials in this specific context cohesively support the idea of drawing out a core of consistent state practice, and then reasoning purposively from that core to best practices for implementation of the fundamental norms it expresses.[11] It then becomes possible to reason as to the interaction of corporate stakeholders with emerging norms in this area.

Results

Leading statements and development of spectrum analysis for consultation

Leading statements are suggesting the presence in international law of norms of consultation with indigenous communities as a general requirement of international law (with some framing this outright as customary international law, and the InterAmerican Court[12] preferring to speak of general principles of law). A cohesive analysis is emerging across these different statements with DRIP[13] providing different

[10] Newman, 2013b
[11] United Nations Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous People, 2009; International Law Association, 2012; Newman, 2013b
[12] *Sarayaku vs. Ecuador*, 2012
[13] DRIP, 2007

language in different contexts as between ideas of consultation or free, prior, and informed consent (FPIC), which the Special Rapporteur was able to interpret into a sort of spectrum analysis.[14] The main idea within this spectrum analysis is that limited impacts on indigenous communities may give rise to some duties of consultation, but that major impacts that affect the core of an indigenous community's ability to survive or preserve its culture will give rise to a deeper duty of consultation, rising in some circumstances even to a duty of obtaining free, prior, and informed consent.

This spectrum analysis has a strong resemblance to the Supreme Court of Canada's duty to consult analysis, enunciated since its 2004 decision in *Haida Nation*,[15] which has led to a major body of case law in Canada.[16] It is not possible within a short paper to summarize all of this case law. However, the *Haida Nation* case itself illustrates effectively some of what is at stake for natural resource project proponents. The case concerned the government's approval of the transfer to a different forestry company of a forestry licence within an area subject to an unresolved claim of Aboriginal title. The Haida community sought an injunction against the transfer of that licence. The Court held that an injunction was not appropriate, but that the government did have a duty to consult the community prior to making a decision that could affect its rights, even in the context of unresolved rights claims. The Court also held that third parties were not subject to such a duty, although the government could delegate procedural aspects of the duty to third parties. The duty of third parties operates differently in different jurisdictions, but the Canadian duty to consult indigenous communities whose rights might be affected by a particular government decision has close parallels with the duty to consult elsewhere, particularly around the spectrum analysis.

[14] Special Rapporteur, 2009
[15] *Haida Nation v. British Columbia (Minister of Forests),* 2004
[16] Newman, 2009

Within a spectrum analysis, the depth of required consultation varies with the potential impact on indigenous communities. In the Canadian doctrine developed since the *Haida Nation* decision, a duty to consult is triggered relatively easily, based on the government having actual or constructive knowledge of a potential impact on a claimed right. The extent of the duty then depends upon a combination of the *prima facie* strength of the rights claim, and the impact on the indigenous community's rights from the government decision. Considering them together, both elements effectively orient the depth of consultation required to a probabilistic assessment of the impact of a particular government decision on an indigenous community.

In some instances, a government decision may give rise to no duty to consult, even where indigenous communities would have sought consultation. For example, in 2010, several years into the duty to consult jurisprudence, in *Rio Tinto,* the Supreme Court of Canada revisited the developing doctrine from lower courts in a situation where it held that there should be no duty to consult.[17] In the case, the Court considered a situation where an indigenous community sought consultation on the latest power deal between BC Hydro and Rio Tinto Alcan for power produced by a dam built in the 1950s without consultation. However, the Court held that the duty to consult concerned only forward-looking effects and did not arise from historical effects from the construction of the dam, which could have been challenged in other ways. Thus, there was no duty to consult in the circumstances, since there was no potential future impact.

In many instances, there will be consultations that may even lead to certain adjustments to projects so as to lessen the impact on an indigenous community, often with all being quite content with these outcomes and with many consultations thus not ending up in litigation. At the far end of the spectrum, there may be situations where

[17] *Rio Tinto*, 2010

consultations identify such impacts from a project that it cannot proceed. Although there is limited scholarly writing on this example thus far, and it did not involve a judicial decision, one might reference the November 2010 rejection by Canada's federal government of Taseko's Prosperity Mine proposal in British Columbia, with extensive submissions from an indigenous community concerning a spiritually significant lake (which the company proposed simply to replace) appearing to have been a decisive factor. There were of course mixed environmental and indigenous impact elements, and Taseko seems to be trying to pursue a new proposal, but it is in any case possible in principle for the duty to lead to a particular project not proceeding where the depth of consultation required is particularly significant due to a significant impact on an indigenous community.

The orientation of the extent of the duty to an assessment of the impact on the indigenous community from the decision at issue is a similar kind of spectrum analysis, perceived by the Special Rapporteur as uniting a variety of textually different provisions within DRIP.[18] Later statements appear to be following this same analysis.[19]

These leading statements have not yet provided details on the implementation of norms on consultation such as those developed by the courts in Canada, which have ended up considering many very detailed questions.[20] However, they reference a common method of examining the common core of the norm, and then extrapolating as to best practices for its implementation.[21]

State practice confirming these statements

These leading statements on international law reference minimal actual state practice, with partial exceptions in *Sarayaku vs. Ecuador*

[18] DRIP 2007; Special Rapporteur, 2009
[19] International Law Association, 2012
[20] Newman, 2009
[21] Special Rapporteur, 2009; International Law Association, 2012; Newman, 2013b

(2012) and the International Law Association's (2012) statement. However, there is a wider body of state practice. Basic texts on mining issues hint at this more widespread state practice, which in many cases requires consultation with indigenous communities prior to operations on territories where these operations will affect them.[22]

The practical business consequence, of course, is that in many instances – at least in jurisdictions where there are clear modalities for doing so – corporations engaging in resource development are entering into impact benefit agreements (IBAs) with indigenous communities potentially affected by the resource development, allowing for the achievement of agreement that satisfies all consultation requirements. For example, numerous such agreements have been negotiated in Australia, with certain provisions of its national legislation on 'native title' having provided a clear framework within which this practice occurs, although there have also been many such agreements in certain other jurisdictions as well.[23]

This author's independent analysis of widespread state practice finds ample practice to confirm the presence today of consultation with indigenous communities as established state practice, with evidence including constitutional norms, domestic legislation of various types, and domestic judicial decisions.[24] It is usual in legal research to publish those results in detailed form, and the author is currently preparing a journal article that details those results in a manner building upon a current working paper.[25] However, it is fair to say that there is a widespread state practice of consultation, that it would appear to be roughly consistent with the sort of spectrum analysis hypothesized by the international bodies discussed earlier, and that there is meaningful

[22] e.g. Sutcliffe ,2012
[23] See e.g. Stephenson, 1997; Langton & Longbottom, eds., 2012
[24] Newman, 2013b
[25] Ibid.

heterogeneity in the details of state practice.[26] In many contexts, obligations of consultation do not apply directly to corporate stakeholders, but they will nonetheless be very interested to see that consultation obligations are fulfilled if their projects are to go ahead.[27]

It also bears noting, as a result that emerges in certain instances within this state practice, that courts interpreting the developing norms of consultation will in some instances be making decisions with very significant implications for existing legislative or business models. From a business perspective, corporations need to be prepared to engage with indigenous communities in areas in which they operate, and it may be that this poses additional challenges for junior exploration companies, as compared to senior development companies, as they are differently situated in terms of their ability to have the necessary human resources dedicated to indigenous engagement and consultation.[28]

One example of note in terms of possible changes in legislative models arises from a recent Canadian case. A recent decision of the Yukon Court of Appeal,[29] on which leave to appeal to the Supreme Court of Canada is currently being sought, appears to imply that free entry mining systems may no longer be considered consistent with the duty to consult doctrine as being interpreted in Canada. Under the Yukon free entry system, an individual staked a claim and then sought the automatic registration of that claim provided by statute. There would have been subsequent permits for development activities that might be undertaken, although some exploration activities would arise as of right. However, the Court held that in the context of a claim staked on land in an indigenous community's asserted traditional territory, there should have been some means for the government to engage in consultation prior to approving the claim. This case differs significantly from the

[26] Ibid.
[27] Newman, 2009, Newman, 2013b
[28] Newman, 2009
[29] *Ross River Dena Council v. Government of Yukon*, 2012

doctrine that has existed in Canada thus far, which has concerned discretionary government decisions as opposed to automatic decisions under statutory rights, and it effectively says that the government has to set up a different legislative model. This case obviously has significant implications if confirmed and extended in other jurisdictions.

Emerging implications of corporate practice

As referenced briefly earlier, many corporate stakeholders in many contexts engage in negotiation processes with potentially affected indigenous communities,[30] so there is already corporate practice that is related to the state practice under discussion. In some jurisdiction, this practice of negotiation is specifically mandated under particular legislation,[31] but in others it has simply emerged in response to the legal landscape.

One interpretation would see corporate practice as simply following changed modes of business implied by the developing norms.[32] In this case, one could expect an ongoing and potentially increasing impact on business, with specific implications for mining such as those already referenced, larger impacts from the recognition of an increased number of indigenous peoples at an international level, and differentiated effects on different business structures arising from the required changed modes of doing business. However, both indigenous communities themselves and corporate stakeholders also have agency. As this author has argued previously,[33] there are contexts in which general law may have something to say, but what actually occurs arises from a combination of the law and the policies and practices of governments, indigenous communities, and corporate stakeholders. Where the interaction of these latter processes finds solutions not specifically defined by law, the

[30] Rocky Mountain Mineral Law Foundation, 2012
[31] Rocky Mountain Mineral Law Foundation, 2012, Newman, 2009
[32] Newman, 2009
[33] Newman, 2009

famous concept of "law in action" may take priority over that of "law in books".

Where corporate stakeholders are involved in negotiations, there are strong tendencies to seek confidentiality in the agreements, but agreements by one corporation with one community may nonetheless be anticipated to affect agreements by others in the same vicinity, simply through certain competitive dynamics, even if some asymmetry of information can be maintained. Corporate transactions with communities will often shift the perception of what is feasible, and thus open space for state regulation. As a result, one can offer a model of how corporate practice, through a process of economic ratcheting, feeds through into the ongoing development of international law. Where international law in this area is setting itself up to look for best practices for implementation of the underlying norms, the creation of specific practices, even when done by corporate stakeholders, provides additional detailed practices that may be taken up into the emerging doctrine.

The detailed examination of state practice carried out within the reported research may actually also have identified specific instances where conduct by a particular corporate stakeholder has, whether directly or indirectly, appeared to influence at least certain domestic norms. These will be referenced specifically in the legal journal publication that will report on the detailed results.[34] At a broader level, there is some evidence consistent with the model proposed whereby corporate practice can have at least some effects on the emerging international law doctrines in this area that will ultimately guide again the ongoing development of domestic legal regimes.

[34] Newman, 2013b

Discussion

Corporate stakeholders in various industries, and certainly in the mining industry, are significantly impacted by requirements of consultation with indigenous communities. The results of this research, that identifies the emergence of a consistent core of customary international law on the issue, combined with the approach of now filling in further components by reference to best practices carrying out the underlying values of the norms, thus have very significant implications, from which one may attempt to make forecasts concerning various detailed norms to emerge in the years ahead.

Specifically, those corporations that wish to be ahead of the regulatory curve may well watch developing international law practices, with the knowledge that these practices will later impact on practices in particular domestic jurisdictions. International law is significant to the ongoing evolution of regulatory practices impacting on mining companies in various jurisdictions.

One further implication, initially counterintuitive, is that corporate practices on consultation may help to shape the contents of regulation on consultation in the years ahead. Where there are intense competitive pressures as between firms, one result is that competitive practices on consultation may lead to the entrenchment of more significant requirements. Where corporate stakeholder firms are able to enunciate practices at an industry level, they may be able to help shape norms on consultation in a manner that avoids the entrenchment of over-extensive norms that pose deep challenges for future development, and to attempt to shape norms that find win-win solutions. Those involved in the industry should be giving serious thought to how to maintain these issues under discussion in appropriate fora that allow some harmonization around types of norms that find win-win solutions, and that represent sustainable norms for the industry in different competitive circumstances in future.

There is no question that norms of consultation with indigenous communities imply changed modes of doing business in various contexts. The full extent of the implications will remain to be seen in the years ahead, but the underlying moral grip of a major human rights declaration and creation of related human rights machinery is such as to expect that these impacts will be expanding over time. At the same time, there are important choices to be made, some of which are impacted by corporate practices.

Conclusions

Three principal conclusions emerge: (1) mining companies need to remain attentive to the ongoing development of international law norms on consultation, which have become a significant influence in the modern legal landscape; (2) their own conduct will in some instances impact on the more detailed interpretation and elaboration of these norms; and (3) ongoing thought on the choices to be made may help to shape the developing norms in a manner that makes them more practical for all sides.

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7

EARTH OBSERVATION TO SUSTAIN INTERACTION BETWEEN MINING INDUSTRY, REGULATORY BODIES AND LOCAL STAKEHOLDERS – THE EO-MINERS TRIALOGUE

Horst Hejny

Abstract

Given the current status of political discussion in Europe about raw materials issues, the sustainable development of the extractive industry and the reduction of its environmental and societal footprint are among the key topics in this discussion. In this context, the European Commission approved the EO-MINERS project (Earth Observation for Monitoring and Observing Environmental and Societal Impacts of Mineral Resources Exploration and Exploitation) with the overall aim of bringing into play EO-based methods and tools to facilitate and improve interaction between the mineral extractive industry, authorities, and the society in view of its sustainable development while improving its societal acceptability. Developing generic, standardised and reliable EO-based products to monitor the environmental and societal footprint of mining projects is the way chosen by EO-MINERS to improve this interaction, along with the organisation of tripartite meetings gathering all relevant stakeholders.

The project uses existing EO knowledge and carries out new developments on three demonstration sites (Sokolov lignite mining area, Czech Republic,

Witbank coal field, South Africa, Makmal gold mine, Kyrgyzstan) to further evaluate and demonstrate the capabilities of integrated EO-based methods and tools in monitoring the environmental and societal footprints of the extractive industry during all phases of a mining project, from the exploration to the exploitation and closure stages. It contributes providing reliable and objective information about affected ecosystems, populations and societies, to serve as a basis for a sound trialogue between corporate stakeholders, governmental organisations and societal stakeholders. The presentation will discuss results obtained during these trialogue workshops, as well as the success and difficulties and reluctances encountered. The project will further indicate ways and means how the EO products and other project results may be used for monitoring purposes in all phases of a mine.

Keywords: Earth Observation, environmental impacts of mining, societal impacts of mining, stakeholder interaction

Introduction

Today, the European extractive industry is facing increasing environmental and societal pressures, regulatory or other, during all phases of mine and quarry projects, from exploration to exploitation and closure. The social acceptability of a project is among the major key issues to be dealt with.

Mining, active or abandoned, is among the man-made activities that have the most significant impact on the environment. Much of the environmental impact of mining is associated with the release of harmful substances from mine waste. Improper waste disposal practices can cause increased turbidity in receiving waters, and the release of polluted drainage and highly acidic waters. The consequences of such pollution can extend to impoverishment or deaths of aquatic flora and fauna, damaging the livelihood of terrestrial animals that feed on aquatic plants and animals, contamination of surrounding land and air, abandonment of public water supply intakes, damage to property and

commerce, the disincentive to urban redevelopment posed by visible pollution, and damage to society such as through the loss of visual amenities. The impact on surrounding farmland is of concern if livestock ingest contaminated grass and soil, which can shake health and consumer confidence among a much wider community. The reclamation of mine sites that have not fully recovered through soil and plant regeneration is an important issue for local authority planners. These sites are eyesores within regions keen to develop tourism to replace the abandoned mining activity as a major part of their economies. Quality of life is also highly dependent on the surrounding scenery where people live.

On the other hand, mining activities are fundamental in order to provide society with sufficient mineral raw materials needed for manufacturing industries, construction, and thus public welfare. Obviously, there is a conflict among the different interests related to mining activities. The solution of these conflicts depends on neutral information as a basis for trustful dialogue.

Objectives

The aim of EO-MINERS is to bring into play Earth Observation (EO)-based methods and tools to facilitate and improve interaction between the mineral extractive industry, society and governments in view of the requirements of sustainable development, while improving the societal acceptability of extractive activities.

Strategic objectives

Mining companies, regulatory bodies and stakeholders need various EO-based tools and methods adequately juxtaposed to local contexts and applications (in compliance with Group on Earth Observation (GEO) and Global Monitoring for Environment and Security (GMES) objectives and tasks).

Forecasting impacts, footprints, and relevant remediation measures requires developing prospective tools. The Geographic Information System (GIS) using EO data, allows for visualising prospective evolution over time (flow modelling), playing on one or several GIS-layer parameters. For instance, population migration flow is often taken into account during the pre-feasibility phase, but not properly monitored further. Cumulative impacts must be adequately addressed at a regional scale (valley, district...), including induced impacts (population migration, livestock impact, etc.) with respect to the concept of a heavily exploited area.

As the EU is strongly interested in the establishment of measures for raw material flow analysis, especially for imported mineral resources, this project will contribute to the development of measures that can be used to analyse mining operations, taking the individual potential ecological and societal footprint into account.

Scientific and technical objectives

The social acceptability of a mining project, from exploration to closure, is among the major key issues to be dealt with. EO-MINERS scientific and technical objectives are to

- assess policy requirements at macro (public) and micro (mining companies) levels and define environmental, socio-economic, societal and sustainable development criteria and indicators to be possibly dealt with using EO
- use existing EO knowledge and carry out new developments on demonstration sites to demonstrate the capabilities of integrated EO-based methods and tools in monitoring, managing, and contributing towards reducing the environmental and societal footprints of the extractive industry during all phases of a mining project, and
- contribute to making available reliable and objective information about affected ecosystems, populations and societies, to serve as a

basis for a sound trialogue between industrialists, governmental organisations and stakeholder

Methodology of the EO-MINERS trialogue

Exploration as well as exploitation activities related to mineral resources will always cause some impact to the environment and society. The EO-MINERS project will make available reliable and objective information about affected ecosystems and societies, to serve as a basis for a sound trialogue between the three main groups involved, the industry, governmental organisations and other stakeholders (e.g. local communities, NGO, etc.). This trialogue, 'an interchange and discussion of ideas among three groups having different origins, philosophies, principles, etc.' (Webster's), will help to reconcile differing interests and reach agreement on actions to deal with the environmental and social impacts of mining activities. The reliable and objective information necessary for this will be derived from publicly-available information sources and EO-MINERS products that are to be developed, and which will aim to characterise the effect on ecosystems, populations and societies, becoming an objective and indisputable basis for a sound trialogue.

Explanation

EO-MINERS will use the trialogue to facilitate and improve interaction between the mineral extractive industry, society, and governments. The three groups involved in the EO-MINERS trialogue are the industry, government and civil society. It is meant to contribute towards reconciling interests among the three groups involvedm in order to reach common agreement upon actions to deal with the environmental and social impacts of mining activities. Besides, the trialogue reinforces the project idea and outcomes, and confirms its usefulness.

Industry

The industry includes mining companies and associations, for instance in the context of corporate social responsibility (CSR). This article evaluates industry codes and policies and their external verification. tackling the issues of credibility and accountability,, and considers their synergies with ISO 14001 standards and state of implementation. The analysis will be limited to aspects of exploration, exploitation and processing of raw materials.

Government

This group relates to governmental policies from supranational to national, regional and local levels at the test sites. The reference points are EU policies, such as the EU Sustainable Development Strategy, the EU Thematic Strategy on the Sustainable Management of Natural Resources, the EU Action Plan for Sustainable Consumption and Production, the Sustainable Industry Policy, and the EU Raw Materials Initiative.

Civil society

Civil society is by nature very heterogeneous, and agendas and interests will also be very heterogeneous. This can probably be best captured through the diverse groups of stakeholders and their form and level of organisation. Civil society encompasses a wide array of individuals and organisations of different type, size, and function, including not-for-profit NGOs, community-based organisations (CBOs), religious organisations, cooperatives, and many more. They address mining footprints primarily from a social and environmental perspective.

Dissociation of the trialogue from other project activities

In the EO-MINERS case, and for reasons internal to the project, tasks related to the trialogue were distributed to two work packages. One main challenge was to decide where to define the boundary between trialogue actions, and the other actions within project activities. The

actions carried out to identify the stakeholders involved and the information requirements from different policies including site-specific requirements will serve as input to the trialogue activities, and are not themselves considered direct activities of the trialogue. The same applies for all activities on collecting information based e.g. on stakeholder interviews or returned questionnaires. All activities with a technical background, e.g. assessment and development of EO methods, are also not considered direct trialogue actions.

Therefore, the trialogue methodology will start with the evaluation of available information concerning their relevance in the trialogue. In the evaluation process, we need to distinguish individual local and overall European conditions. On the local level, this exercise will result in a kind of description of the current situation specific for the particular site. On the European level, it determines the way of presenting the project contribution to policy developments.

The way forward in principle

A number of discussions have been carried out about the trialogue activities. In particular, the trialogue methodology was a matter for intensive discussion between the partners involved. Common agreement regarding the trialogue methodology and the way forward was reached in principle towards the end of the first half of the project, although details still need to be fixed in the preparation process of the individual workshops.

In principle, the trialogue will deal with any kind of stakeholder interaction activities, in the sense that the outcomes of such events will be considered in the conclusions of the trialogue of EO-MINERS. Therefore, the EO-MINERS trialogue comprises two parts:

- Trialogue related to the European level (European trialogue), and
- Trialogue related to each of the mining sites under investigation (Site-specific trialogue" carried out at the three demonstration sites,

namely Sokolov lignite mining area, Czech Republic; Witbank coal field, South Africa; and Makmal gold mine, Kyrgyzstan).

Figure 1 gives an overview of the EO-MINERS trialogue.

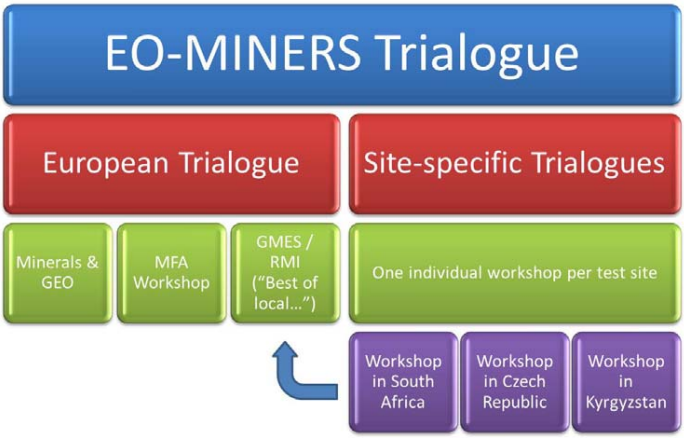


Figure 1 – Overview of the EO-MINERS trialogue

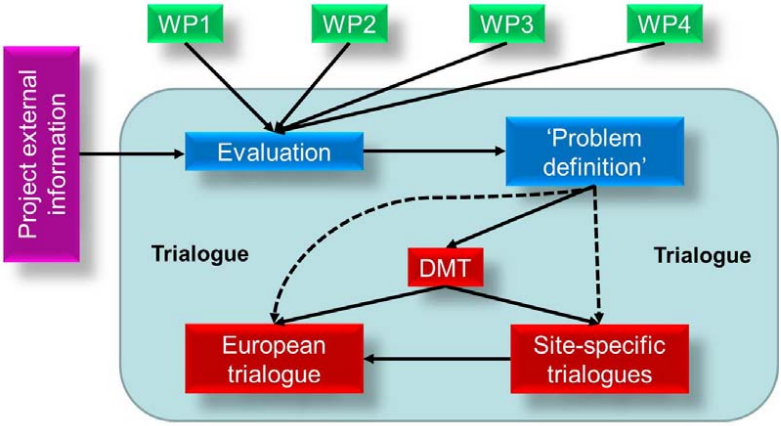


Figure 2 – Trialogue methodology in principle
DMT: Deliberation Matrix tool (kerDST)
Problem definition: European trialogue: Determining how to present the project contribution to policy developments
Site-specific trialogue: Description of current situation specific for the particular site (including problem identification).

The site-specific trialogue is aimed more at the local society, whereas on the EU level we are aiming at governments and industry. In principle, both groups of activities will follow the same methodology, as shown in Figure 2.

Site-specific trialogues

The local trialogue helps to redress information imbalances by providing options for retrieving information (i.e. EO methods)

The site-specific trialogue will start with the evaluation of available data and information concerning their relevance for the particular site. In any case, the participants in the site-specific trialogues will be provided with the results of the interviews made during the site visits, and/or the results of the application of the Deliberation Matrix tool (if feasible).

The result of the evaluation process will be a document describing, for example, the current situation specific for the particular site, and will also include problems that have been identified. If all stakeholders/participants share the views expressed in the document, we only need to initiate an exchange of information and suitable actions to solve the problems. However, if the views are different – and this is most likely – we have to identify a sub-set of problems, which shall be tackled in the trialogue workshop, because we probably cannot discuss all problems in one workshop. A prioritisation of problems will then be necessary to cope with their wide variety. Still, such a selection process is somewhat risky, as the selection can already affect the perception of different problems by the EO-MINERS project, and thus be in conflict with the assessment of single stakeholders.

We will also provide a selection of the indicators identified and established.[1] The indicators are the result of policy assessment (both on corporate and public level), stakeholder identification, and identification of stakeholder needs. Results of EO measurements (field measurements,

[1] See Chevrel, 2013

remote sensing, etc.) will be prepared for presentation, as well as EO-MINERS products available at that time. The set of actions will be completed by a moderated discussion to determine stakeholders' general perception, and their perception of indicators, suitability of EO measurements and EO products.

All this will serve as input for the trialogue workshop, and help the moderator(s) to give an introduction to the problems to be tackled, and moderate the discussion. The workshop itself should be run entirely in the local language (simultaneously translated to English and vice versa).

It may be an option to communicate all above-mentioned information with all stakeholders beforehand, and ask for something like a position paper from the diverse stakeholders. These position papers should highlight again the related points of view, and should also provide ideas for possible solutions. Such papers might be very helpful for the preparation of the workshop by the moderator(s).

We believe that the general structure of the site-specific trialogue events needs to be adjusted to the specific site and the composition of participating stakeholders. Cultural factors need to be taken into account as well.

European trialogue

The European trialogue has to be seen in a wider policy context, such as through A resource-efficient Europe: flagship initiative of the Europe 2020 Strategy, which is a common vision to support a long-term perspective for an efficient use of natural resources. It will provide a platform for interaction between all stakeholders at the European level that are directly and indirectly related to the minerals sector (e.g. industry, policy makers, professional associations, governments and authorities, NGOs, environment agencies, etc.). This also includes groups dealing with the environmental and social effects of mining. The target groups comprise among many others the GMES, the Raw

Materials Initiative, and European Technology Platform on Sustainable Mineral Resource (ETP-SMR).

Three trialogue activities are proposed at the European level (see Figure 3). All workshops will be dedicated to different target groups: the GEO community, the member states, and the industry.

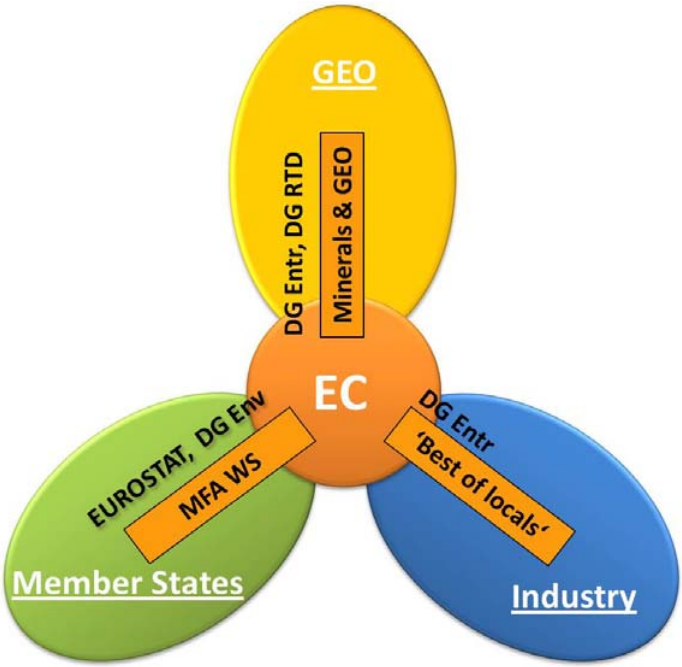


Figure 3 – Scheme of the European trialogue activities

Minerals & GEO

Minerals are a critical part of modern societies. Their exploitation and use generates wealth, as well as added values, jobs, and comfortable lifestyles, and play a vital role in almost every aspect in modern life. Unfortunately, their exploitation can cause unwanted pressures on the human and natural environment, and many developed countries are strongly dependant on both the import of energy and on raw materials.

Both issues might produce unwanted risks in the future, and the security of supply is a major concern. Such facts have been recognised by the European Commission, which sets the role of GEO and Earth Observation as important tools for reducing the supply risks.

However, GEO Work Plan 2012-2015 identified minerals as a part of Energy and Geo-Resources Management Information for Societal Benefits, but the role of minerals within GEO is still strongly underestimated, as not being one of the strategic targets. The possibilities of including minerals within GEO are thus the primary focus of the workshop, which will include GEO and EO-MINERS presentations, panel discussions and round tables. Common agreement and statements about proper inclusion of minerals within GEO will be a welcome outcome of the workshop. It will also address services in mineral exploration, impact assessment, closure and reclamation, and will tackle the GMES.

Workshop on materials flow analysis (MFA)

The trialogue activities at the European level have to be seen – apart from serving to fulfil the objectives of the EO-MINERS project – in a wider policy context. Within the framework of the Europe 2020 Strategy for a smart, sustainable and inclusive economy, the European Commission has initiated communication on a flagship initiative for a resource-efficient Europe. With this flagship initiative, the European Commission intends to create a common vision to support a long-term perspective for an efficient use of natural resources. In this context, the mining sector is one of the key economic sectors, because it directly influences the extent and quality of raw material use by the European economy, but also influences the environment and thus the quality of life. It is therefore essential for the success of the European Commission's flagship initiative to define the impacts of mining activities, and develop indicators that can be used to support policy-making at the EU level and to help evaluate policy-effectiveness.

Furthermore, cost-efficient methods should be developed to collect the necessary data in an appropriate temporal and spatial context.

The MFA workshop will aim:

- To assess the situation in accounting for used and unused extraction to support public policy-making with regard to resource efficiency and sustainable resource extraction
- To discuss the use of Earth Observation to quantify used and unused extraction induced by mining activities; and,
- To assess options for future application of EO in the field of economy-wide material flow accounts in the context of GEO System of Systems and the flagship initiative for a Resource Efficient Europe.

'Best of locals...' workshop

It is proposed that this event could be a conference to present and discuss results and conclusions from the site-specific trialogue workshops. The results of the site-specific trialogue events – although partly only relevant for the specific site – can be shown and discussed in order to draw Europe-wide common conclusions. We intend to invite the following stakeholders:

- Directors/Head of Units within the European Commission Directorate-Generals on Enterprise and Industry and on the Environment
- GMES
- Raw Materials Initiative
- Resource Efficient Europe Group of Eight (Brussels-based environmental NGOs)
- European Trade Union Confederation
- Euromines (European Association of Mining Industries)
- Euracoal (European Association for Coal and Lignite)
- EuroGeoSurveys (European Association of Geological Surveys)

- ETP-SMR (European Technology Platform on Sustainable Mineral Resources); and,
- ETC LUSI (European Topic Centre on Land Use and Spatial Information)
- The expected outcomes of the trialogue activities on the European level are:
- To determine the perception developed on indicators
- To determine the perception of EO-MINERS products and their suitability
- To gather information from stakeholders on further work required, if any (gap analysis, what will be required in the future); and,
- Assessing the suitability of EO-MINERS results for contributing to policy development.

Above all, the European trialogues should raise awareness about the possible contribution of EO methods and EO-MINERS products to impact assessment and influence related policy developments.

Conclusions

Mining and the extractive industry will continue to play a significant role in the development of many countries all over the world, and especially in the context of mineral raw materials supply. The social acceptability of a mining project, from exploration to closure, is among the major key issues to be addressed. The EO-MINERS project contributes to providing objective and reliable information based on Earth Observation methods.

In particular, the methodology developed to initiate and carry out stakeholder interactions is a promising tool to help find consensus in controversial questions related to a mining project. The EO-MINERS trialogue will facilitate and improve interaction between the mineral extractive industry, society, and governments. It is meant to contribute to reconciling interests among the three groups involved in order to

reach common agreement upon actions to deal with environmental and social impacts of mining activities. Besides, the trialogue allows to reinforce the project idea and outcomes, and confirm its usefulness.

The trialogue workshops both on site and at European level are in preparation at the time of drafting this paper. The author will concentrate on reporting results of the workshops at conference time.

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8

EDUCATION IS THE STUMBLING BLOCK FOR THE MINES OF THE FUTURE

Theophile Yameogo and Jose J. Suarez

Abstract

Many ideas, tools, technologies, and methodologies are believed to have staked their claims on the future of mining. For example, automation is strongly positioned as the platform within which mining will be practiced. A subset of automation, intelligent mining, will add some smart interactions between machines, technologies, the rock and the environment. The future also calls for an improved approach to sustainability and corporate social responsibility. Mines of the future are dreamed of to be more ethical, and more balanced. They will boast optimized designs, integrated value and supply chains, produce less waste, recycle and reuse, and will require less energy to operate. Then, what about the people that will operate this optimized ecosystem? How is the education system teaching the operators of the mines of the future? What kind of a future should mining education foresee to prepare the workers appropriately? In recent years, the shortage of skilled labour for mines around the world has created a tough competition to attract, retain and train the very people without whom mining will cease to exist. In Australia, Canada and the United States in particular, the war for talents that resulted in higher-than-usual labour costs. Such costs have dented the unit costs of many mining businesses. Concomitantly, mining contractors' and consultants' prices have increased to

reflect the escalation of labour costs across the value chain. From labourers to engineers, from juniors to seasoned professionals, the increase in compensation is unprecedented. Yet, the shortage is still hurting the industry, and the high calibre candidates continue to be rare gems. The industry has been implementing aggressive solutions that include the increased hiring of skilled immigrants, the training and recruitment of minorities, and the retaining of near-retirement experienced employees. Public relation campaigns are about the benefits of embracing careers in mining are also common. The CIM has also devoted a "M4S" section to its pan-Canada meetings to educate the public, especially the youth, about the importance of the mining industry for Canada. More, mining associations and universities are enticing students' enrolment through scholarships and financial support. Still, the balance between quantity and quality of workers can be discussed. This paper intends to discuss the present of mining education as an essential part of the future of mining. The author brushes the picture of the education of miners, technicians, and engineers, against the backdrop of the technology-advanced mines of the future.

Keywords: Mining education, labour shortage, future of mining, miners, technicians, engineers, universities, colleges, technology, automation, mining educators, technology applications, technology preparedness.

Introduction

The future of mining espouses the development and application of advanced technologies. Automation, intelligent systems, analytics, and sustainability are part of the building blocks of the mining ecosystem of tomorrow. These essential pillars have been the centre of attention for research projects, as well as of significant investment. Another crucial pillar is education, and the development of talent. Nelson Mandela once said that education is the most powerful tool that can be used to change the world. Benjamin Franklin also believed that 'an investment in knowledge pays the best interest'. The shortage of talent in the mining industry is a worldwide phenomenon, and governments and the mining

industry have taken major steps to resolve the issue. While the shortage is still lingering, the potential issue of mismatch between current education programmes and future technological needs will have to be addressed. In the following paragraphs, the current trends in the workforce and the education programmes will be presented, and rhe ability of education programmes to support the development and application of technological advances in mining will also be discussed.

Current trends in the workforce

The challenges of the labour shortage in mining still plague major producing countries such as Canada, Australia and the United States.[1] In Canada, the Mining Industry Human Resources Council (MiHR) continues to predict significant requirements to fill the needs of the mining industry. According to a study,[2] the Canadian mining industry needs thousands of additional people in the next nine years to cope with career changes and retirements. Based on a business-as-usual scenario ('baseline'), at least 112,000 new hires will be needed between 2012 and 2021, which represents more than half of the current workforce. As shown in Table 1, the industry would require even more workers (141,540) if it expanded. Even in an economic contraction, there is still a demand for 75,280 employees that needs to be satisfied.

Mining Economics	Job Change	Retirement	Non-Retirement	Cumulative
Contractionary	-28,200	61,550	41,930	75,280
Baseline	-1,000	67,080	45,940	112,020
Expansionary	20,500	71,740	49,300	141,540

Table 1 – Scenario-based Cumulative Hiring Requirements for the Canadian Mining Industry (MiHR 2011)

[1] Martell, 2012; Robinson, 2012; Blais, 2011
[2] MiHR, 2011

Although the overall industry is faced with this shortage, the demand for some occupations is more critical than that of others. Figure 1 details the requirements by occupation, for the baseline scenario. Trades and undesignated occupations (55% of the total) are a major concern, followed by support workers (17%) and first line managers (13%). The MiHR[3] identified the following occupations as being particularly critical, as they represent more than a third of the total requirements:

- Production clerks
- Heavy-equipment operators (except crane)
- Truck drivers
- Underground production and development miners
- Construction millwrights and industrial mechanics (except textile)
- Primary production managers
- Welders and related machine operators
- Heavy-duty equipment mechanics
- Machine operators, mineral and metal processing; and,
- Labourers in mineral and metal processing.

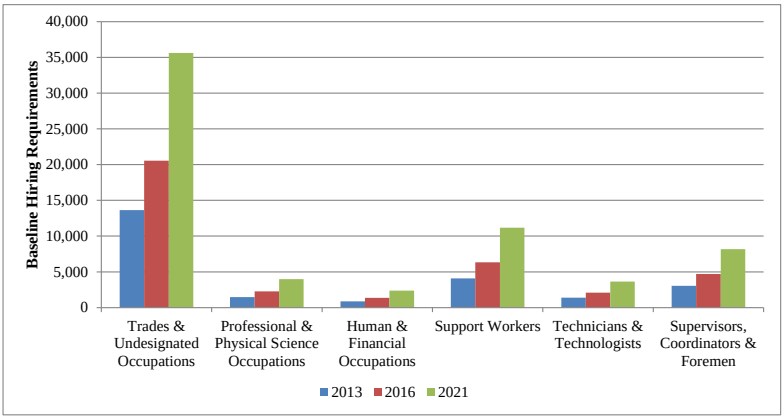


Figure 1 – Hiring requirements by occupations in the baseline scenario (MiHR 2011)

[3] 2011, p. 14

The requirements across provinces also vary due to the regionalization of commodities, services and history. Between 2011 and 2021, the majority of the needs will be in the Prairies, where an economic boom has been ongoing.

In addition to the numbers (quantity), there is also a challenge attracting experience and expertise (quality). Recently, HD Mining, a BC-based coal mining company, was allowed to hire foreign temporary workers to outfit its Murray River Project. The lack of experienced Canadians to safely operate longwall coal mining was cited as the main reason. Although the issue spurred a huge controversy with governments and unions, it indicated that the search for qualified workers has become a major concern in Canada. According to a study by the Center for the Study of Living Standards (CSLS), the quality of the workforce has a direct impact on labour productivity, which, in the case of the Canadian mining industry, has been deteriorating, partly due to the rapid employment growth on pools of lower quality workers.[4] While economic growth is in itself positive, lower education attainment and workforce composition are to be blamed for the decline in productivity.

Industry reports[5] have focused on the lower education levels in the Canadian mining workforce. Using data from the 2006 census, they demonstrated that the mining workforce is less educated when compared to the average Canadian labour force (Figure 2, below):

- only 11% has a university education, versus 22% for the other industries
- 18% has no certificate, diploma or degree versus 15% of the average labour force; and,
- 3% has technician/technologist education, versus 5% of the average labour force.

[4] CSLS, 2009, p. 36
[5] MiHR, 2010, p. 15; CSLS, 2009, p. 37

However, 'in the mining occupations where a university education is likely required (e.g., engineering, geosciences and management positions), a higher proportion of the workforce has university degrees than in other industries'.[6] Still according to Figure 2, the main source of labour is noticeably from trades and apprenticeship (21% in mining, versus 12% on average); thus, a correlation can be made between the requirements in Figure 1 and the statistics in Figure 2.

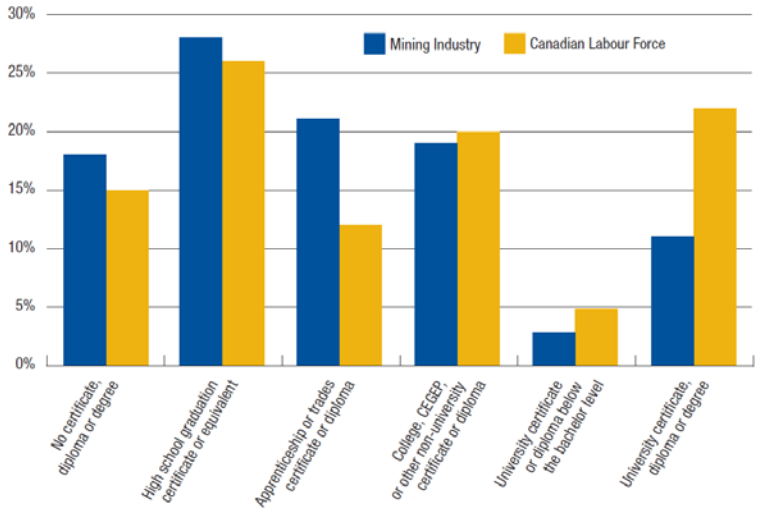


Figure 2 – Mining employees' education levels compared with Canadian labour force (MiHR, 2010)

Another method of assessing the quality of the workforce is through the analysis of labour composition, a ratio of labour input to the hours worked.[7] An increase means an improvement in education attainment and work experience. Figure 3 shows the trend in labour composition in the mining industry, in comparison to data of the business sector. Mining has experienced an improvement in quality workers in the period of 1989 to 2000. However, a significant drop

[6] MiHR, 2010, p. 15
[7] CSLS, 2009

occurred afterwards, and has been attributed to the 'deterioration in the quality of mining industry's workforce relative to other industries'.[8]

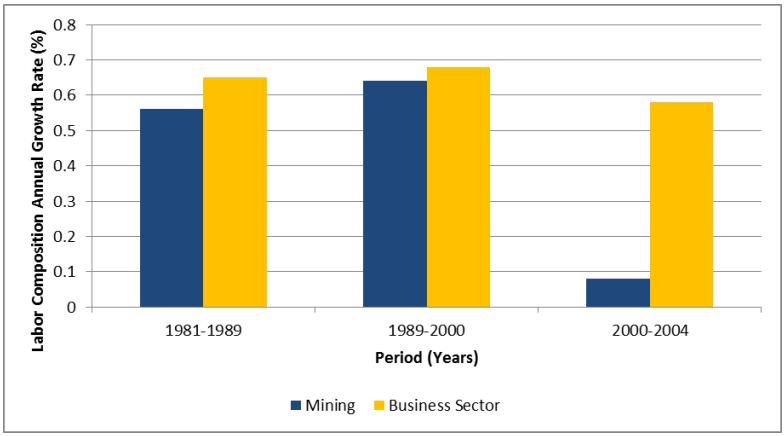


Figure 3 – Trends in labour composition (CSLS, 2009)

Figures 1, 2 and 3 indicate that the labour shortage faced by the mining industry is more than a numbers game. Filling the hiring requirements by massively recruiting and retaining workers is not enough to address the issue. The crisis is not only occupation-based, but also quality-focused and provincially-differentiated. The next section discusses the education system that trains new workers to join the mining industry.

Education programmes and technological advances

In nearly all universities in Canada, mining-related education can be acquired. Many community colleges offer mining education programmes as well. The strength of the accredited programmes varies, and programmes have different foci depending on the commodities and mining methods in the immediate regions. Colleges and universities in Alberta, for example, have a strong educational emphasis on oil sands,

[8] CSLS, 2009, p. 38

and students in British Columbia learn more about open pit mines. However, the question is whether the programmes equip students with the knowledge required to function in the technologically-advanced mines of the future. Although technology attracts young people, mining programmes hardly boast about technology and innovation in their curricula. Most advertising campaigns continue to focus on high salaries, outdoor living, travels and scholarships as enrolment incentives. This is partly due to the crisis of low enrolment that plagued almost all mining programmes in Canada. In fact, students' enrolment and graduation have been increasing since 2008, and that seems to have secured mining programmes within universities.[9] Educating those students and placing them in the industry may actually become a challenge in an economic downturn, especially if the programmes do not suit industry needs, or if the quality of graduates is not acceptable.

The debate on the mining education content of mining programmes has been researched by academics at Queen's University.[10] The authors interviewed mining operators to assess the quality and appropriateness of new hires from the mining engineering programmes. The study asserts that university education, although in tune with industry needs, is less than ideal in many areas, especially for specialized computer applications. Besides the limits that interviews bring, the study is an important investigation into the technology preparedness of mining education programmes. Lack of resources and industry support, and minimal university support, are usually blamed for the suboptimal conditions. Consolidation amongst university programmes has been discussed as a solution to increase the strength of the programmes and coalesce funding. The joint McGill University and Ecole Polytechnique programme in Montreal is an example, but some academics oppose the idea for various reasons.[11]

[9] Scoble, 2009; Hadjigeorgiou, 2008
[10] Heuchan & Archibald, 2011
[11] Meech, 2007

Changes in curricula are also discussed. In place of actual curricula, the modern mining curriculum should include the main features of the mines of the future, namely automation and robotics, sustainability, and technology applications.[12] Most mining programmes have enhanced their curriculum to add sustainability and the environment, both of which are fashionable in today's world. Automation, robotics, and technology applications are still embryonic in many mining programmes, not only because they require more investment, but also because the collaboration between manufacturers, universities and industries is minimal in these areas.

The situation in trades' colleges is similar, although enrolment numbers tend to be higher due to less stringent entry requirements, lower tuition fees, the shorter lengths of the programmes, and the hands-on aspects of the education. However, the quality of graduates has recently been a matter of concern for the industry. One reason for this could be the overall sense of a diluted education, while a possible explanation may be the obsolescence of the education programmes with regards to technological advances. Colleges may be teaching the same curricula, or teachers may not have the mining experience that goes with high quality education. One third, and plausible, reason comes from the externality of a generational and socio-economic change. According to Robinson (2012), the old, yet still in use, apprenticeship model in Canada is no longer functional, because the socio-economic reality has changed. In the past, an apprentice would be paid minimal wages in exchange for learning the tricks of the trade for some years. By the time graduation comes, an apprentice would most likely remain with the employer for more years. Today, young people require higher wages, and change employers more frequently. Since employers cannot be certain to recover their "education investment" from apprentices, they rely on governments to provide such training. The content of the

[12] Ibid.

curriculum is then designed outside of the industry, and may be insufficient for the needs of the mining industry, which is potentially problematic when trades and apprenticeships represent the largest source of talent that the industry will rely on in upcoming years.

Another looming, but hidden, crisis is that of the educators. Mining teachers and researchers are a wealth of knowledge that are slowly being eroded within universities and colleges, due to retirement and career changes attributed to unattractive compensation and working conditions. Even though donations for research institutes sponsored by the mining industry are now common,, it takes time and effort to craft a knowledgeable teacher. In addition, there is a silent but tough recruitment and retention competition between mining companies, mining services, government agencies, and teaching institutions.

Conclusion

The labour shortage in the mining industry is being addressed mostly through aggressive enrolment campaigns in university and college programmes, the inclusion of minorities, women and immigrants in the workforce, and the rescheduling of retirements. While these solutions are required to fill the vacancies, a major challenge is to ensure that new graduates of appropriate quality enter an industry that is being transformed by technology and innovation.

The future of mining is that of advanced technologies, from the exploration stages to the decommissioning and reclamation phases. Robotics, automation, and technology applications will require highly qualified workers, a fundamental enhancement to the current profile of the workforce. Investments in education have to address the gaps in the curricula of colleges and universities, so as to match industry needs to the knowledge that is being taught to students. To do so, it is essential that the mining industry, especially mining operators, participates even more in the accreditation of mining-related programmes across the

country. For example, the modern mining engineering curriculum,[13] could be a dynamic reference for Canadian mining engineering programmes. Customized hiring and retention processes for mining professors could also to be an issue for reflection. Considering the independence of teaching institutions, consolidation may be challenging to establish. However, industry sponsorship and donation can be optimized to ensure that centres of excellence thrive, and support industry needs even more. An organization within the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) could help orient and manage such strategy. In fact, the Canadian Mining Innovation Council (CMIC) may be the appropriate candidate for such involvement in the curricula and industry investment in education institutions.

Company in-house training and other online training and simulation could offer workers the opportunities to upgrade their skills post-college or university. In doing so, the overall education level of the mining industry could be improved without losing employees, who may be enticed to stay following the free education upgrade. While companies may be reluctant to pursue this option due to additional costs and employees' mobility to competitors, the below-par education may force them to. In fact, virtual mines are being set up by some major mining companies, in collaboration with education institutions.

The additional 112,000 people required to operate the mines by 2021 may still be missing if college and university intakes remain low, or if more attractive conditions are offered elsewhere, such as Australia and the United States, or if other sectors of the economy become more attractive (e.g. the energy sector depletes the already scarce mining workforce). One proactive and seemingly more sustainable approach is automation and robotics; not only do these reduce the size of the workforce required to perform the same activities, but also replicate the qualities of the best teams through reliable, efficient and effective

[13] Meech, 2007

routines. For example, autonomous haulage trucks will decrease the incremental need of truck drivers, an occupation in serious crisis. More technology applications may also reduce the levels of experience and expertise that is currently needed to perform certain occupations, by allowing the worker to focus on less taxing activities. For example, the use of integrated positioning systems allows surveyors to take on more meaningful activities. Therefore, technology and innovation can help solve the shortage of high quality labour, and lead to an increase in labour productivity.

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