

The Efficacy of the Equator Principles Framework in Mitigating Community-Related Risks during the Financing of Mining Projects.

Ву

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ABSTRACT

The research below is essentially aimed at evaluating how effective the Equator Principles are when it comes to the mitigation or negation of community-related risks while ensuring that mining projects are feasible and therefore, worthy of being financed.

The Equator Principles constitute a risk management framework that aims to offer a benchmark for "due diligence and monitoring" processes. It was established to assist Equator Principles Financial Institutions with handling the identified environmental and social risks, appropriately. Furthermore, the Equator Principles are acknowledged globally and have the potential to significantly change the way in which mining companies engage with the communities they inhabit.

This research therefore proceeded to identify key mining activities that characterise each phase of the life of a mine. Within each phase, mining companies are faced with various community-related risks which could easily be prevented if they are identified at the onset of the project. Three brief case illustrations were considered in order to aid in the evaluation of both community-related risks as well as how the Equator Principles are and could be applied.

While there are ten principles, focus was drawn on five specific principles. Thereafter, a brief historic analysis was considered before evaluating how these five principles are currently being applied. This was done by taking their respective limitations into account in an attempt to recommend an alternative approach that would result in a mutually beneficial outcome for financier and mining company alike. The key resultant limitation identified was that despite the EPs being sound principles, their application and implementation appears to be the source of many of the associated failures. The key resultant recommendation was that while the EPs need to be approached differently in that mining companies need to incorporate the EPs into their policy framework so that their application becomes inherent and a way of doing business. If done correctly, the mining company stands to save money by avoiding unnecessary interruptions and financiers stand to have the peace of mind that their requirements have been satisfactorily met while the loans will be repaid.

LIST OF ACRONYMS

EPs	Equator Principles
EPFIs	Equator Principles Financial Institutions
ICMM	International Council on Mining and Metals
OECD	Organisation for Economic Co-operation and Development
ADB	Asian Development Bank
MPRDA	Mineral and Petroleum Resources Development Act
FPIC	Free, Prior and Informed Consent
SLO	Social License to Operate
OTML	Ok Tedi Mining Limited
PNG	Papua New Guinea
ENGO	Environmental Non-Governmental Organisation
NGO	Non-Governmental Organisation
IFC	International Finance Corporation
ESMS	Environmental and Social Management System
EPAP	Equator Principles Action Plan
CSR	Corporate Social Responsibility
EIA	Environmental Impact Assessment
IMF	International Monetary Fund

KEYWORDS

- 1) Equator Principles
- 2) Equator Principles Financial Institutions
- 3) Community
- 4) Mining
- 5) Mitigation
- 6) Limitations
- 7) Risks
- 8) Environmental and Social
- 9) Engagement
- 10) Assessments
- 11) Standards

Table of Contents

DECLAR	ATIO	N OF ORIGINALITY	. 1
ACKNO	NLED	OGEMENTS	. 2
ABSTRA	СТ		. 3
LIST OF	ACRO	DNYMS	. 4
KEYWOI	RDS .		. 4
CHAPTE	R 1 -	INTRODUCTION	. 8
1.1.	Bac	kground	8
1.2.	Aim	s and Objectives	10
1.3.	Res	earch questions	10
1.3.	1.	Primary	10
1.3.	2.	Secondary	10
1.4.	Prop	posed methodology	11
1.4.	1.	Methodology	11
1.4.	2.	Parameters	11
1.4.	3.	Limitations	11
1.5.	Rele	evance of the study	11
1.6.	Cha	pter overview	12
СНАРТЕ	R 2 –	KEY MINING ACTIVITIES AND COMMUNITY-RELATED RISKS	13
2.1.	Intro	oduction	13
2.2.	Key	Activities that Characterise the Life of Mine	13
2.2.	1.	Prospecting	14
2.2.	2.	Exploration	15
2.2.	3.	Development	15
2.2.	4.	Exploitation	17
2.2.	5.	Mine Closure: Reclamation and Rehabilitation	18
2.3.	Con	nmunity-Related Risks	19
2.3	1.	Ok Tedi Mining Limited (OTML). Papua New Guinea	20

2.3	.2.	Yanacocha Mine, Peru	.21
2.3	.3.	Island Copper Mine, Canada	. 21
2.4.	Con	clusion	.22
СНАРТЕ	R 3 –	EQUATOR PRINCIPLES AND COMMUNITIES	24
3.1.	Intro	oduction	.24
3.2.	Hist	orical Development and Aims of the Equator Principles	. 25
3.3.	Con	textualisation	. 27
3.3	. 1.	Environmental and Social Assessment	. 28
3.3	.2.	Applicable Environmental and Social Standards	. 28
3.3	.3.	Environmental and Social Management System (ESMS) and EPs Action P.	lan
3.3	.4.	Stakeholder Engagement	. 29
3.3	.5.	Grievance Mechanism	.30
3.4.	Арр	licability of the Equator Principles to Community Risk	.31
3.4	.1.	Failure to Acknowledge Legal Rights	.31
3.4	.2.	Environmental Impact that Leads to Loss of Community Resources	.32
3.4	.3.	Uneducated with regards to the Community Resource	.32
3.4	.4.	Mistrust from the Community	.32
3.4	.5.	Company Negligence that Leads to Health Concerns for the Community	.33
3.5.	Con	iclusion	.33
СНАРТЕ	R 4 –	LIMITATIONS OF THE EQUATOR PRINCIPLES	35
4.1.	Intro	oduction	.35
4.2.	App	lication of the Principles to the Respective Case Illustrations	.35
4.2	. 1.	Ok Tedi Mining Limited (OTML), Papua New Guinea	.35
4.2	.2.	Yanococha Mine, Peru	.39
4.2	.3.	Island Copper Mine, Canada	.41
4.3.	Limi	itations of the Applicability of the Equator Principles	.44
4.4.	Con	clusion	.47

CHAPTER 5 – CONCLUSION AND RECOMMENDATIONS					
BIBLIO	GRAPHY	. 53			
1.1.	Articles	53			
1.2.	Books	54			
1.3.	Journals	54			
1.4.	Legislation, Conventions, Declarations	55			
1.5.	Online Articles and Internet Sources	55			

CHAPTER 1 - Introduction

1.1. Background

The Equator Principles (hereafter the 'EPs') are a "risk management framework" that was established to aid financial institutions in identifying, analysing and appropriately dealing with the environmental and social risks experienced in various types of projects across most industries. The main objective of the EPs is to offer a minimum standard for "due diligence and monitoring" to support responsible decision-making when it comes to the risks that projects are faced with.¹

The EPs are acknowledged on an international level boasting 94 Equator Principles Financial Institutions (hereafter 'EPFIs') in 37 countries that have formally embraced the EPs.²

The EPs have drawn a significant amount of attention to the community standards and responsibilities, with strong focus on those standards for indigenous communities as well as local communities.³

Aside from the EPs, there are other standards and frameworks that aim to achieve similar, if not the same, objectives. The International Council on Mining and Metals (hereafter 'ICMM') provide ten principles that members are required to adopt and implement. These principles, briefly mentioned, include the following:

• Sustainable development incorporated into decision-making processes;⁴

¹ The Equator Principles III: A financial industry benchmark for determining, assessing and managing environmental and social risk in projects (June, 2013). Available at: http://equator-principles.com/wp-content/uploads/2017/03/equator_principles_III.pdf (accessed 20 July 2018) (hereinafter 'EPIII').

² These countries include South Africa, the Netherlands, Egypt, Nigeria, Australia, Spain, Togo, Brazil, and *inter alia*, Uruguay. "EP Association Members & Reporting" *The Equator Principles III: A financial industry benchmark for determining, assessing and managing environmental and social risk in projects* (June, 2013). EPIII.

³ Supra n1.

⁴ https://www.icmm.com/en-gb/about-us/member-commitments/icmm-10-principles/icmm-principle-2 [accessed 20 July 2018].

- Aim for constant improvement in relation to environmental performance⁵
 and, among many others;
- Proactively involve key stakeholders and encourage active participation in a transparent manner⁶

Furthermore, the Asian Development Bank (hereafter 'ADB') which was established around 1960, as a financial institution, aims to "foster economic growth and co-operation" in Asia. It currently consists of 67 members, of which 48 originate from the Asian-Pacific region.⁷

Despite these other sources being comprehensive, they are limited in some instances. The Organisation for Economic Co-operation and Development (hereafter "OECD") created a forum upon which governments of various democratic states were able to participate in addressing the "economic, social and governance challenges of globalization".8 In other words, the OECD identified that development of world trade was an important factor in relation to economic development of countries and overall enhancement of "international economic relations". The OECD is often indicated as the leading institution of global governance, however on the contrary, it is also often referred to as a "rich man's country club" which leads one to think that it is inaccessible. Accordingly, this research chooses to focus on the EPs because of the holistic, global view it provides to all industry sectors in addition to the focus the EPs have on the social impact on projects. The specific inclusion of the social aspect of projects and communities makes the EPs relatable and accessible for less-fortunate communities. Furthermore, the point of control is with financial institutions (as opposed to others like the OECD or the ADB, which are voluntary in nature and driven by company and country membership). This provides a more objective perspective on

https://www.icmm.com/en-gb/about-us/member-commitments/icmm-10-principles/icmm-principle-6 [accessed 20 July 2018].

⁶ https://www.icmm.com/en-gb/about-us/member-commitments/icmm-10-principles/icmm-principle-10 [accessed 21 July 2018].

⁷ https://www.adb.org/about/main [accessed 21 July 2018].

⁸ Woodward, Richard. The organisation for economic co-operation and development (OECD). Routledge, 2009.

⁹ Ibid.

financing and the mitigation of risks specific to mining projects. It is for these reasons that this research will focus on the EPs.

1.2. Aims and Objectives

The aim of this research is to evaluate the EPs' current role in mining projects obtaining finance; the relationship between the environmental and social factors in a community; the enforcement (or lack thereof) of the EPs; and the effectiveness of the EPs in mitigating community-related risks.

In order to achieve this, the research will discuss what the EPs are and how they are currently implemented. The research will identify which activities characterise a mining project and from those activities, the social risks that arise. Moreover, the research aims to achieve a modelled solution in relation to the implementation of the EPs when it comes to mining projects and the decision as to the financing thereof.

1.3. Research questions

In addressing the question of the efficacy of the Equator Principles, the research aims to answer the following primary question:

1.3.1. *Primary*

How effective are the EPs in terms of ensuring that community-related risks are mitigated or negated so as to ensure that mining projects are truly feasible and therefore worthy of financing and commensurate risk adjusted profit margins.

1.3.2. Secondary

- What are the key mining activities that are likely to characterise a mining project? Moreover, what are the community-related risks that mining projects are faced with in relation to the key activities?
- How are the Equator Principles currently applied to mining projects?
- What are the limitations of the Equator Principles and the manner in which they are applied?
- How can the Equator Principles be improved upon to facilitate the achievement of its objectives to the benefit of both financiers and mining companies?

1.4. Proposed methodology

1.4.1. Methodology

This will be a desktop study which will rely mainly on current body of knowledge and that which is available at this point in time. In completing this study, reliance will therefore be placed on publications and journal articles (as they are peer reviewed) as research will not be able to be conducted on-site, based on the fact that investigating EPs implementation in various countries would be improbable at this stage. Lastly, and in order to draw legitimate conclusions, an analysis of the sources and various comparisons will take place in order to put forward recommendations.

1.4.2. Parameters

The following parameters are placed on this study:

- Analyses conducted in relation to mining projects only;
- Financiers who have adopted the EPs;
- Focus will be drawn to five selected EPs;
- Focus is on projects that have opted for external project-financing, however not entirely excluding projects where internal/other funding is preferred.

1.4.3. Limitations

Empirical research, in the format of fieldwork, experiments, surveys and other research methodologies will not be possible given the current time constraints associated with this course. Therefore, the research will be limited to a desktop study.

1.5. Relevance of the study

Within global-economic sphere, there is a rapidly growing awareness among communities (indigenous and local) in terms of their overall rights. Those rights are either supported by domestic legislation (e.g. MPRDA¹⁰ and other tools such as FPIC¹¹) or by international treaties/conventions such as the Agreement on Co-

¹⁰ Mineral and Petroleum Resources Development Act 28 of 2002.

¹¹ Hanna, Philippe, and Frank Vanclay. "Human rights, Indigenous peoples and the concept of Free, Prior and Informed Consent." Impact Assessment and Project Appraisal 31.2 (2013).

operation in the Fields of Mining and Energy¹² or the OECD¹³, as mentioned above. This increased awareness is leading to an exponentially larger 'number of incidents' that have borne witness to large mining companies being prevented from operating which in turn, comes at a cost to the potential project and even, the host country. Traditional, conservative, pure financial modelling¹⁴ is no longer adequate in terms of

- 1) Identifying all project-related risks and potential mitigation thereof; and
- 2) In ascertaining the true level of viability or feasibility of said project.

1.6. Chapter overview

The research commences with background and context being provided on the EPs and why this research focuses on the EPs as opposed to other frameworks and standards. In chapter 2, the research proceeds to identify and discuss key activities that characterise a mining project as well as the community-related risks that these projects are faced with. In chapter 3, the current application and enforcement of the EPs will be discussed with the view of identifying the shortcomings of the principles or the implementation thereof, in chapter 4. Finally, after consideration is given to the abovementioned, this research will conclude by recommending ways and means of improving upon the principles or the implementation thereof.

¹² Virus, Immunodefiency, and African Union AU. "South Africa and Africa."

¹³ *Supra* n8.

¹⁴ "This is the process by which a firm constructs a financial representation of some, or all, aspects of the firm or given security. The model is usually characterized by performing calculations and makes recommendations based on that information. The model may also summarize particular events for the end user such as investment management returns." FinancialModeling https://www.investopedia.com/terms/f/financialmodeling.asp#ixzz5MlpakNL8 [accessed 18 July 2018].

CHAPTER 2 – Key Mining Activities and Community-related Risks

2.1. Introduction

Mining¹⁵ is essentially one of mankind's earliest undertakings and today society remains largely dependent on natural resources (the focus being that of minerals). Its supply is driven largely by demand, which may or may not be readily available because of the fluctuation in commodity prices. 16 To ensure there is sufficient supply to meet current demand, the resources extracted must constantly be replaced by "new reserves". However, with the world's ever-increasing population and its increase in standard of living, the future demand and current supply will probably not suffice. The implication is that new exploitable reserves need to be continually identified in order to prepare them for extraction and is usually identified from "previously assumed" and undiscovered reserves.¹⁷ However, supplying a resource in response to a demand is intricate and therefore it is important to understand mining, albeit in simplistic form, as an overall activity in relation to its life-cycle. It is vital that one understands mining as an activity that includes communities and various other stakeholders in order for the communities to be integrated into the development of mining projects. 18 Consequently, these stakeholders will also impact the success or failure of a mine by 'granting' or 'withholding' their approval. This approval is better known in the industry as a social license to operate (hereafter 'SLO').

2.2. Key Activities that Characterise the Life of Mine

Mining occurs in stages, namely, "prospecting, exploration, development, exploitation and rehabilitation." It is important that throughout each stage, the mining company elects to accumulate as much local knowledge as possible as opposed to disregarding

¹⁵ The term mining is "used in its broadest context as encompassing the extraction of any naturally occurring mineral substances from the earth for utilitarian purposes." Hartman, Howard L., and Jan M. Mutmansky. *Introductory mining engineering*. John Wiley & Sons, 2002 p1.

¹⁶ Cochrane, Glynn. "Miners Join the UN Global Compact." *Anthropology in the Mining Industry*. Palgrave Macmillan, Cham, 2017 p90.

¹⁷ Pohl, Walter L. *Economic geology: principles and practice.* John Wiley & Sons, 2011 p413.

¹⁸ *Supra* n1516 at p89.

the community-based relationships.¹⁹ Each stage consists of various activities, each with associated costs and time periods.

2.2.1. Prospecting

The prospecting stage and the exploration stage have a fine line of distinction. Prospecting entails searching for ore bodies and/or other mineral resources in various locations, which makes up the first stage of the life of mine. As nature would have it, resources can be found both above and underground which means that both direct and indirect prospecting methods can be employed. Surface deposits require the direct method of prospecting which involves "visual examination" of either the outcrop (the exposure) or the fragments thereof. Geologists gather their evidence on the location of potential ore bodies and mineral resources by using direct methods such as mapping, structural assessments and aerial photography.²⁰ On the other hand, hidden mineral deposits initially require the indirect method of prospecting which entails geophysics.²¹ These methods include the following:

- * The use of aircrafts for the purpose of scanning the earth's surface, specifically employing electromagnetic and radiometric devices to determine whether the area hosts an anomaly indicating mineral deposits;
- * The use of satellites, *inter alia*, to investigate below the surface of the earth; and
- * Geochemistry, which is used to determine the quality of water, soil and plant growth patterns in the surrounding area.²²

Prospecting can take up to three years before completion and transition to the next stage.

¹⁹ Supra n16 at p91.

²⁰ Supra at n15 but at p9.

²¹ Geophysics is "the science of detecting anomalies using physical measurements of gravitational, seismic, magnetic, electrical, electromagnetic, and radiometric variables of the earth." *Hartman, Howard L., and Jan M. Mutmansky. Introductory mining engineering. John Wiley & Sons, 2002* p9.

²² Ibid.

2.2.2. Exploration

Exploration is often viewed as the second phase in the life of a mine. This entails further in-depth investigation, and ultimately an accurate determination, regarding the size and value of the resource. The ultimate question being, is it an ore body or a mineral deposit? This phase employs very similar techniques and methods, as mentioned in the prospecting phase but the ever-so-slight difference is that exploration is more refined in nature and extent. The resultant information on the ore body is thus of a higher resolution, which allows for more accurate revenue projections. This is so because this phase looks to the surface and subsurface of the position of the resource in order to acquire an accurate image of the extent and "grade of the ore body" or mineral deposit.²³ The person investigating the location will employ methods of trenching, drilling, chipping outcrops and tunnelling, in order to verify initial prospecting results.²⁴ This will subsequently be subjected to chemical, radiometric and x-ray procedures in order to obtain accurate images of the "structural makeup", the capacity, the grade and the richness of the resource. This data allows for the estimation of the potential mining costs involved; the cost of recovering the valuable resources, the projected income as well as the cost of environmental impact and its required mitigation or correction. This stage can take up to five years and reaches completion once a decision is made whether the project should be developed or be aborted.²⁵

2.2.3. Development

Once the decision to move forward with the project has been made, the project transitions to the developmental and evaluation stage. This is when actual mining takes place, namely the accessing of the mineral deposit for financial exploitation. There are two ways of gaining access to the deposit:

²³ "The average amount contained in a tonne of gold, leaving ore expressed in grams per tonne of ore." https://www.harmony.co.za/assets/investors/reporting/annual-reports/2007/glossary.htm [accessed 20 October 2018].

²⁴ Fourie, A., and Alan Colin Brent. "A project-based mine closure model (MCM) for sustainable asset life cycle management." *Journal of Cleaner Production* 14.12-13 (2006): p1086.

²⁵ Hartman, Howard L., and Jan M. Mutmansky. *Introductory mining engineering*. John Wiley & Sons, 2002 p10.

- 1) Excavation which entails "excavating openings" from the surface to obtain deeper access to buried deposits in order to prepare for underground mining which will take place; and
- 2) Stripping which entails "stripping the overburden" in order to expose the ore that is found near the surface.²⁶

It is important to note that there are certain country-specific prerequisites that need to be satisfied prior to the abovementioned activities occurring, without which no development can take place. These include:

- ✓ securing water license/permits;
- ✓ securing mineral rights:
- ✓ ensuring there is access to land;
- ✓ successful financial arrangements;
- ✓ permit applications prepped and ready; and
- ✓ an environmental impact assessment (hereafter referred to as "EIA").²⁷

These requirements are important since they often result in provision being made for vital infrastructure such as access roads, power sources, transportation systems, offices, as well as processing and disposal facilities. It is only at this point that stripping or excavating may take place.²⁸

When it comes to underground mining, the developmental stage is usually far more intricate and expensive. The reason for this is that it entails vigilant planning regarding the layout of access points. These access points will vary from mine to mine but can be mining shafts, adits or even slopes. Extreme caution must be taken in planning these to ensure that miners and the equipment they use have safe passage. Safety is as much of a priority as "efficient mining and permanence" is to a mine. This stage reaches completion at approximately five years.²⁹

²⁶ Overburden refers to the "soil and/or rock covering the deposit." *Ibid.*

²⁷ Supra n25.

²⁸ Ibid.

²⁹ *Idem* at p11.

2.2.4. Exploitation

The mine, having been developed and extensively evaluated, is now able to transition from the developmental to the exploitation phase. The purpose of the development stage is to ensure that production can take place uninterrupted, but this may continue during the exploitation phase too. Exploitation is the phase where there is physical recovery of the mineral resource. There are various mining methods that one can utilise in order to exploit the resource which are often determined by various factors, including but not limited to:

- characteristics of the resources:
- limitations imposed by safety requirements, technology, finances and environmental impact; and
- geological state for example, the shape and strength of the resource as well as the surrounding material³⁰

The main mining methods are known to be surface mining and underground mining. Briefly explained, surface mining involves "mechanical excavation" techniques (such as open pit) as well as "aqueous" techniques (for example, "placer and solution mining"). Alternatively, there is underground mining which entails three different classes and are differentiated by the structure thereof (support of both wall and roof), namely:

- those which are supported;
- those that are unsupported; and
- that which is caving.³¹

The exploitation phase is the longest phase and depending on the quantity of the discovered resource, can last up to thirty years.

³⁰ Ibid.

³¹ Ibid.

2.2.5. Mine Closure: Reclamation and Rehabilitation

The final stage of the life of a mine, is closure, which entails both reclamation and rehabilitation.³² These are very similar in nature and ultimately achieve the same end goal. Reclamation entails the mining company removing all additions (belonging to the company) from the mine site. This would include all tools, processing facilities and plants, transportation systems and various other structures, provided that it would be of no beneficial use to the surrounding community post closure. The main aim of mine closure is to create self-sustaining³³ land which the surrounding community could utilise once the mine is no longer functioning.³⁴ Rehabilitation involves the mining company restoring the mine site, as close as possible, to the state it was in prior to development of the mine. For safety purposes, the mining company will have to seal off any shafts, slopes or adits as well as alleviate risks associated with any other structures that may cause harm to the community. In addition to the physical structures erected by the mining company, one has to mitigate and restore the following:

- the topography of the land;
- the quality of water in cases of contamination during the life of the mine;
- the quality of the soil which may have been altered due to excavation and other such activities; and
- methods and areas of waste disposal that could cause air pollution and even affect the community's ability to grow vegetation.³⁵

Generally the mine closure phase itself can be split into its own stages, namely the pre-feasibility stage, the conceptual stage, the implementation stage and lastly, the post-project analysis stage.³⁶ These stages within the closure phase are indicative of

This refers to "the process of claiming something back or of reasserting a right." https://en.oxforddictionaries.com/definition/reclamation [accessed 5 September 2018] and rehabilitation is the "the action of restoring something that has been damaged to its former condition." https://en.oxforddictionaries.com/definition/rehabilitation [accessed 5 September 2018].

³³ Sustainability refers to meeting the economic and environmental needs of the current community while ensuring that future communities are able to meet their own needs too. *Supra n25* at p13.

³⁴ Fourie, Andy, and Mark Tibbett. "VE THE D." and see also *supra* n24 at p1088.

³⁵ Supra n25 at p14.

³⁶ Ibid.

the fact that preparation for mine closure and rehabilitation must occur from the outset of the mine project and continue as the mining operation progresses. If done efficiently, all costs relating to mine closure will have been accounted for and neither the mines nor their financiers will run into unexpected expenses. This final phase usually lasts up to ten years, but ideally, it should be a concurrent process until final closure is authorised.

2.3. Community-Related Risks

Regardless of how remote a mining project is, mining companies will always interact with the surrounding community, large or small, local or indigenous. In cases where communities do not exist within close proximity, the mining operation often results in a community forming around said operation. Nevertheless, the manner in which this interaction is handled, largely determines the success of the mining project.

The risks that communities pose can be summarised it into a few main factors, namely:

- Political instability a country that is politically unstable generally results in a community that is often split in their views. This makes it difficult for the mine to gain consensus regarding their potential development in that community;
- Community unrest similarly, a community that fears or mistrusts foreign companies will present major obstacles for the mine, for example demonstrations and riots, which may lead to mine stoppages;
- Culture and religion there is a thin line between respecting a community's beliefs and adhering to basic human rights. For example, some communities do not afford women the right to vote or to share their opinion. Therefore, only the males of the community are able to negotiate, making it extremely difficult for a mining operation to assess whether consensus has been obtained or not; and
- Indigenous communities³⁷ the concept of "Free, Prior and Informed Consent" (hereafter "FPIC") recognises their "inherent and prior" rights to the land on

³⁷ Indigenous communities experience unequal access when it comes to rights intended to be universal as well as "systematic ethnic discrimination." Indigenous groups are often referred to as "fourth world" because of how immensely they suffer in comparison to non-indigenous groups (for example, high levels of infant mortality; extremely poor health conditions; denial of resources and the land it's found on). *Supra* n11 at 146.

which they reside and the resources that land provides them with. FPIC grants them the authority to have third parties (in this case, mining companies) engage with them on an "equal and respectful" level.³⁸ The struggle for mining companies arises when there are language barriers and extreme cultural differences that are virtually impossible to overcome.

Below are brief outlines of three case studies that aid in the illustration of community risks posed to mining operations.

2.3.1. Ok Tedi Mining Limited (OTML), Papua New Guinea

OTML struggled with the construction of a "tailings and waste rock storage facility" and as a result, hazardous materials were progressively released into the river.³⁹ A total of 2700 sixty-litre drums of sodium cyanide were discharged into the Fly Delta, with the statistics of recovery at a mere 117 drums. OTML remained silent on the matter until the surfacing of huge quantities of dead fish and reptiles.⁴⁰ Furthermore, Ok Tedi itself has become extremely dangerous to navigate as a result of the riverside terraces being destroyed and the back-swamps being significantly polluted. The Yonggom villagers were subsequently warned by OTML to avoid obtaining their food from the river as it would result in poisoning from the dissolved copper. While community leaders and environmental NGO's were strongly against this mining disaster, it was also argued that early closure of the mine would result in a loss of social and economic benefits. This case study is a prime example of social aspects outweighing environmental impacts in the views of some while also illustrating an "environmentally destructive, greedy multinational miner who ... was prepared to collaborate with the state to refuse democratic and legal rights to those rural Papua New Guineans who opposed them."⁴¹

³⁸ *Ibid* and Knight, Rachael., Szoke-Burke, Sam., Brinkhurst, Marena., Cordes, Kaitlin., Mebratu-Tsegaye, Tehtena. "Community-Investor Negotiation Guide 1: Preparing in Advance for Potential Investors" *Namati, Columbia Center on Sustainable Investment* (2018).

³⁹ Veiga, Marcello M., Malcolm Scoble, and Mary Louise McAllister. "Mining with communities." *Natural Resources Forum.* Vol. 25. No. 3. Oxford, UK: Blackwell Publishing Ltd, 2001 p193.

⁴⁰ Banks, Glenn, and Chris Ballard. *The Ok Tedi settlement: Issues, outcomes and implications*. Canberra, ACT: National Centre for Development Studies, Research School of Pacific Studies, The Australian National University 2017 at p99.

⁴¹ Ibid.

2.3.2. Yanacocha Mine, Peru

Newmont Mining Corporation, located in the district of Cajamarca, was viewed as the world's fourth largest gold-producing mine. The disaster arose when the employees neglected to secure their mercury flasks upon transportation. As a result of mercury flasks making contact with a chlorine cylinder, also unsecured, there was a release of 151 kilograms of "metallic mercury...from the mine site to the coast, passing through small villages." The local villagers began collecting the mercury from the pools that were formed, with the intention of gaining economic benefit. Fortuitously, the company was quick in their clean-up of the spill, thus avoiding major health and environmental concerns. The clean-up did, however, come at a huge cost to the company. This case illustrates a few things:

- The community's lack of education regarding the resources being mined and produced;
- The company's negligence, not only in respect of their safety measures during transportation, but also their negligence in educating and communicating with the community regarding the health and environmental hazards that mercury poses. ⁴² This would have aided in the community responding appropriately to the spill; and
- Mistrust in foreign companies makes it very difficult for other mining projects to be developed here in the future.⁴³

2.3.3. Island Copper Mine, Canada

This case illustrates a more holistic approach than seen in Ok Tedi. The Island Copper mine, situated on Vancouver Island, had a life span of twenty four years.⁴⁴ The mine contributed largely to the community's infrastructure which included a sewerage plant, houses, aid in the construction of a new hospital as well as other recreational activities. The downside of this mine was the 60 000 tonnes of tailings that was discharged into

⁴² The lack of education is evident in that a local school teacher offered better marks to students who were able to bring as much of the mineral as they could get their hands on, purely for economic benefit. *Supra* n39 at 195.

⁴³ Supra n39 at 195.

⁴⁴ Supra n39 at 193.

the ocean, approximately 700 feet below sea level.⁴⁵ However, since least fifty percent of the community were heavily reliant on the mine's payroll and given the manner in which the Island Copper mine handled the situation, this case is considered a success for various reasons:

- The flooded 530 acres, 1 324 foot deep pit was later utilised for the "commercial production of Atlantic salmon smolt";
- Dock facilities and other buildings were bought by the mine in order to create a business opportunity for the community, with the focus being crayfish and sturgeon production;
- Programmes were put into effect to assist employees with matters such as improving their education and job retention; and
- Various other initiatives were implemented to create "tourism, wood and fish processing" opportunities that the community could get involved in.⁴⁶

The mine considered the community throughout the life of mine and included and consulted them when it came time for closure of the mine. The community is now able to live a sustainable life post closure of the mine.⁴⁷

2.4. Conclusion

It is a risky venture trying to develop a mine in or around a community. Communities around the world are all, to a large extent, dependent on natural resources for their livelihood. As a result, it is important to continually meet the demands of these communities which means having to always search for undiscovered reserves that can be exploited. As mentioned above, the process of discovering and furthermore, exploiting these newly found reserves can be time-consuming to say the least and extremely expensive for all stakeholders involved.

⁴⁵ Supra n39 at 194.

⁴⁶ Ibid

⁴⁷ Ibid.

Based on the life cycle of a successful mine and financial contribution to its success, common practice is for the mine to ensure it obtains a social license to operate from the affected communities.

SLO is more than just a piece of paper granting the mine permission to develop and produce. It is the acceptance and support by society of a mining project being developed; it requires ongoing open dialogue, mutual respect and honesty between all parties. Throughout negotiations and dialogue between the various parties, each party should demonstrate transparency, accountability and consistency.

Loss of SLO can have various impacts ranging in scale, such as delays in the permitting procedures, community demonstrations, opposition and even mine closure.⁴⁸ The above cases illustrate how large a role the community plays, throughout the stages, when it comes to development of a mine.

The following chapter will briefly discuss what the Equator Principles are; what they aim to achieve and why they are applicable in the context of community-related risks and the mitigation thereof.

⁴⁸ Dashwood, Hevina. "The Rise of Global Corporate Social Responsibility." (2012).

CHAPTER 3 – Equator Principles and Communities

3.1. Introduction

The Equator Principles constitute a "risk management framework" with its main objective being to offer a minimum standard, a benchmark if you will, for "due diligence and monitoring". This objective is intended to support and facilitate responsible decision-making when it comes to risk mitigation for the projects that fall within the ambit of the EPs. The EPs were established with the purpose of facilitating financial institutions in ascertaining, analysing and appropriately handling the environmental and social risks experienced in projects across multiple industries, globally.

The EPs apply to four different, financial products, namely:

- ✓ Project Financing Advisory Services (total project costs amount to more than US \$10 000 000);
- ✓ Project Finance (the above amount is applicable here);
- ✓ Project-Related Corporate Loans (this is inclusive of "export finance in the form of Buyer Credit")⁴⁹; and
- ✓ Bridge Loans (the loan has a tenor less than two years and needs to be refinanced by one of the above two financial products).⁵⁰

EPFIs understand and acknowledge the importance of "climate change, biodiversity and human rights" and are acutely aware of the impact mining operations have on both the communities and their environment. EPFIs elected to adopt the EPs in order to ensure that all the projects they consider financing are socially and environmentally responsible.⁵¹ This is critical as the same communities, if ignored and disregarded, have the ability to negatively impact the proposed mining operation and the associated projected profit margin.

⁴⁹ Four criteria that must be met: 1) this is where majority of the loan relates to a single project over which the client has effective control; 2) the total loan amount exceeds US \$100 000 000; 3) the financial institution, who's adopted the EPs, commitment is at least US \$50 000 000 and lastly, 4) the loan tenor is for at least two years. *Supra* n1 at p3.

⁵⁰ Supra n1.

⁵¹ Supra n1 at p2.

3.2. Historical Development and Aims of the Equator Principles

The 1980s and 1990s saw multiple countries developing structurally so as to meet the demands of the World Bank and International Monetary Fund (hereafter "IMF"). This inevitably led to an increase in "privatisation of public and state-owned services" which includes industries such as the water, energy and resource extraction industry. Simultaneously, the World Bank (and various other public development banks) began withdrawing from costly, high-profile infrastructure operations.⁵² The reason for their withdrawal is owed to the "effective activism" by various environmental non-governmental organisations (hereafter "ENGOs"). It was at this point that private banks realised that they could play a much larger role, in global infrastructure investment, than they had done before.

Naturally, this was viewed as a disappointment by ENGOs such as Friends of the Earth and World Wildlife Foundation. ENGOs fought hard during the decade of 1980-1990 to ensure public funding institutions (such as the World Bank) would enforce clear and unambiguous social and environmental standards on the projects they chose to support. Private banks playing a larger role in the global financial market frightened ENGOs because essentially, the process would have to be repeated but without the leverage of the World Bank's official mandate.⁵³

The Collevecchio Declaration on Financial Institutions and Sustainability came about as a result of society enquiring into the financial sector's accountability and transparency and going as far as challenging the financial institution's social license

⁵² Examples include the Three Gorges Dam project, located in China as well as the Narmada Valley dams, located in India. Williams, Cynthia A. "Regulating the impacts of international project financing: the Equator Principles." *Proceedings of the ASIL Annual Meeting*. Vol. 107. Cambridge University Press, 2013.

⁵³ Williams, Cynthia A. "Regulating the impacts of international project financing: the Equator Principles." *Proceedings of the ASIL Annual Meeting*. Vol. 107. Cambridge University Press, 2013.

to operate.⁵⁴ This declaration was endorsed by over one hundred civil society organisations including Bank Watch and BankTrack.⁵⁵

Consequently, six commitments were established that all financial institutions would have to incorporate into their daily operations. These six key principles that require commitment, are:

- · commitment to sustainability;
- commitment to do no harm;
- commitment to responsibility;
- commitment to accountability;
- commitment to transparency; and
- commitment to sustainable markets and governance⁵⁶

The pressure from ENGOs and civil society led, not only to the Collevecchio Declaration on Financial Institutions and Sustainability, but later on, to the drafting of the EPs.⁵⁷

The initial meeting was convened by the IFC (International Finance Corporation) and was attended by the 'founding banks' which took place in October of 2002. The main aim of this meeting was to identify and discuss the various socio-environmental risks in the field of project-financing.⁵⁸

The IFC has and continues to provide us with the foundation of the EPs.⁵⁹ This global risk framework was first promulgated in 2003 by the following founding financial institutions:

⁵⁸ Supra nError! Bookmark not defined. at p12.

⁵⁴ Declaration, Collevecchio. "The Collevecchio declarations on financial institutions and sustainability." (2003).

⁵⁵ Wörsdörfer, Manuel. "Equator Principles–Now and Then." *The Ethical Contribution of Organizations to Society.* Emerald Group Publishing Limited, 2015. 121-160.

⁵⁶ Weber, Olaf, and Emmanuel Acheta. "The equator principles: Ten teenage years of implementation and a search for outcome." (2014).

⁵⁷ Ibid.

⁵⁹ Supra n56 at p5.

- ABN AMRO from the Netherlands;
- Barclays in the United Kingdom;
- Citigroup in the United States;
- WestLB from Germany;
- Credit Lyonnais (Calyon) in France;
- Credit Suisse from Switzerland;
- HypoVereinsbank (Unicredit) also from Germany;
- Rabobank, also from the Netherlands;
- The Royal Bank of Scotland in the United Kingdom; and
- Westpac in Australia⁶⁰

The EPs then underwent revision three years later in 2006 and again, in 2013. The adoption of the EPs commenced on the 4th of June 2003 when the abovementioned ten major banks, from several countries, announced their adoption of the risk framework. These ten banks, at the time, represented thirty percent of the global "project loan syndication market". Only a year later, the abovementioned percentage increased to seventy-five percent when fifteen other financial institutions chose to adopt the EPs.⁶¹

Contextualisation 3.3.

Mining projects that entail large infrastructural operations, more often than not, have significantly negative consequences for the environment and the communities that populate it. These operations are fundamentally intrusive and in most cases the associated impacts can only be mitigated during the operational phase and rehabilitated during the closure phase. This, naturally, involves surrounding communities, which is often a difficult process.

In an effort to improve the manner in which mining companies engage with communities, efforts are being made with regard to the development and execution of "management systems" with focus on the social aspect to mining.⁶²

⁶⁰ Ibid.

⁶¹ Amalric, Franck. "The Equator Principles: a step towards sustainability." Center for Corporate Responsibility and Sustainability (2005) at p1.

⁶² Kemp, Deanna, Richard Boele, and David Brereton. "Community relations management systems in the minerals industry: combining conventional and stakeholder-driven approaches." International journal of sustainable development9.4 (2006): p392.

EPFIs use the EPs to facilitate the identification, assessment and management of the impacts and therefore the risks that major mining operations inevitably evoke. There are currently ten principles that assist EPFIs in ensuring the projects they choose to fund are operated responsibly in every aspect. All these principles are important in their own right, however, focus will be drawn only to the principles that aid in the illustration of the potential link between the EPs, community risks and engagement processes that lead to good relations between the mining company and the community.⁶³ The following principles are therefore presented in light of the potential link mentioned above.⁶⁴

3.3.1. Environmental and Social Assessment

The EPFI involved will require its client to conduct an assessment in order to determine the environmental risks, social risks and consequences of the intended operation. It is vital that this assessment is an accurate and impartial analysis of the identified risks, regardless of whether it is prepared by the client (the mine) or external experts.

This principle makes provision for "specialised studies" that may need to be embarked upon, depending on the nature of the operation. Furthermore, with regards to high-risk operations, it may be necessary for the person conducting this assessment to do so while having regard to "specific human rights due diligence."

The assessment should include, over and above the identification of such risks, ways to mitigate and perhaps compensate for the negative impact of the mining operation. These methods of mitigation will differ from project to project as it needs to be both relevant and appropriate in relation to the "nature and scale" of the operation.⁶⁵

3.3.2. Applicable Environmental and Social Standards

This principle can be tricky because the applicable standard will differ from country to country. Financial institutions function in diverse locations of which some locations will have strong environmental and social legislation as well as the institutions to implement such whereas, others have weak governance or lack-lustre legislation. EPFIs will request that an analysis on the compliance with the applicable standards, be conducted.⁶⁶

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⁶³ Ibid.

⁶⁴ Supra n1 at p2.

⁶⁵ Supra n1 at p5.

⁶⁶ *Idem* at p6.

For example, "designated countries" (which refers to industrial or OECD countries) require compliance with the host country's legislation and regulations that concern environmental and social issues.⁶⁷ On the other hand, in "non-designated countries", the applicable standards are deemed to be the IFC performance standards in addition to the "Environmental, Health and Safety Guidelines" applicable to the sector in which the operation falls.⁶⁸

It is important to note that the standards to be followed, constitute the minimum standard to be met. All EPFIs have the discretion to enforce additional conditions and standards that they require.⁶⁹

3.3.3. Environmental and Social Management System (ESMS) and EPs Action Plan

EFPIs will expect an ESMS as well as an Environmental and Social Management Plan (ESMP) to be drafted. The aim is to deal with the consequences and risks identified in the prior assessment and integrate activities and tasks necessary for compliance with the abovementioned applicable standard.⁷⁰

Circumstances in which the applicable standards are not being satisfied, the mine as well as the chosen EPFI(s) will convene a meeting where an "Equator Principles Action Plan" (EPAP) is prepared, jointly.⁷¹ The main objective with the EPAP is to identify gaps, as well as commitments made, in order to satisfy the requirements of the EPFIs involved, while remaining in line with the applicable standard of the country in which the project takes place.⁷²

3.3.4. Stakeholder Engagement

There is an increasing need to ensure that communities are included and are able to freely participate in discussions and decision-making processes when interacting with other stakeholders.⁷³

While there is a limitation to the extent to which decision-making influence is allowed, this principle demands an all-encompassing and ongoing stakeholder engagement process.

68 Supra n56 at p6.

⁶⁷ Idem at p5.

⁶⁹ Supra n1 at p6.

⁷⁰ *Idem* at p7.

⁷¹ Supra nError! Bookmark not defined. at p7.

⁷² Supra n1 at p7.

⁷³ Supra n 62 p392.

Communities that are affected, directly or indirectly, by mining operations in addition to various other stakeholders, must be afforded the right to information and engagement.⁷⁴

After the assessments have been conducted and the project has been identified as one that would have significant negative consequences on the surrounding community, it is vital that an "Informed, Consultation and Participation" process be undertaken.⁷⁵

It is important to ensure that such an engagement process must be conducted in a culturally appropriate manner, dependant on the type or community the operation is occurring in. This is especially important when it comes to indigenous communities, where the principle of FPIC is applicable.⁷⁶ FPIC affords the indigenous community the right to consent or withhold their consent for the approval of the potential project.

The mining company, in cases where the community is not indigenous, should adapt their engagement processes based on the identified risks of the operation, the stage of development the operation is in at the time, the language and literacy levels, the hierarchy and decision-making processes as well as the needs and rights of any disadvantaged groups within the community.⁷⁷

During engagements and negotiations, communities should be informed of and educated on the assessments that were conducted and the results concluded. It is important to uphold honesty and transparency from the second the engagement process commences as this would only lead to honest feedback from the community, which is a key part of the engagement process.⁷⁸

3.3.5. Grievance Mechanism

The EPFIs will request, as part and parcel of the ESMS, that a grievance mechanism be drafted to aid the resolution of various disputes that may arise between stakeholders. The primary user of such mechanism, in protection of their rights, should be the communities.⁷⁹

⁷⁴ Supra nError! Bookmark not defined. at p7.

⁷⁵ Supra n1 at p7.

⁷⁶ Supra n56 at p6.

⁷⁷ Supra n1 at p7.

⁷⁸ Supra n1 at p7.

⁷⁹ Supra n1 at p8.

The grievance mechanism, naturally, cannot be a one-size-fits-all. Therefore, it needs to be designed in such a way that factors such as the nature and extent of the project and affiliated risks, are taken into consideration.⁸⁰

The design of such grievance procedure needs to be communicated, in the preferred language, to the community at large.⁸¹ Naturally, this mechanism is aimed at speedy resolution of disputes, using an understandable and honest process of consultation, appropriate to the culture of the community. Access to this grievance mechanism needs to be readily available, with no cost to the members of the community and without punishing he who chooses to utilise such mechanism.⁸²

3.4. Applicability of the Equator Principles to Community Risk

Historically, communities were often found to be "under-resourced" with regards to exploitation and production-related facilities and were, consequently, disregarded. Engaging with members of the community was often closely associated with the "self-promotion and protection" of the mining companies. Going forward, however, the focus should be placed on growing with and the creation of a sustainable community.⁸³

Chapter two provided three case studies illustrating decisions that were well implemented in addition to problems that were mismanaged or overlooked. By looking at each case study again, after having a better idea of what the EPs are, it will become evident as to why the EPs are applicable to communities and the risks associated with the communities. In summary, the EPs were designed to take into consideration, largely from a business perspective, the issues and therefore the risks, that communities might raise in response to any project within their area of influence. The following risks often arise when dealing with communities and need to be considered in light of the EPs' intended objectives.

3.4.1. Failure to Acknowledge Legal Rights

The non-existence of or the failure to acknowledge the legal rights of the community, as seen in the case of Ok Tedi, often leaves the community with no recourse against mining companies. It is therefore important, regardless of the legislative provisions of a country, for EPFIs to ensure that mining companies have a grievance mechanism and process designed

⁸⁰ Ibid.

⁸¹ Supra n56 at p6.

⁸² Supra nError! Bookmark not defined. at p8.

⁸³ *Supra* n73.

appropriately for the community they will be dealing with. This fall-back position in conjunction with community engagement should therefore be used as an effective manner of communicating what the grievance mechanism is and how it will function within the community.⁸⁴ Grievance procedures are also important for the community's interaction with all stakeholders, not just the mining company as these mechanisms aid in the creation of trust within the community.

3.4.2. Environmental Impact that Leads to Loss of Community Resources

The EPs, if applied appropriately, insist on EIAs being conducted before any project commences. It is for this reason that the EPs, with its inherent consideration of potential environmental impact, can be applied when dealing with communities, namely to mitigate the risk of community's losing the resources found on the land upon which they reside. Often local communities, especially indigenous communities, rely heavily on their surrounding resources. Mining activities, however economically sound, will always pose a threat to the environment the community relies on for ongoing survival. EPFIs use the EIA to ensure that they are not enabling the destruction of the environment that allows a community to live sustainably.

3.4.3. Uneducated with regards to the Community Resource

Effective and ongoing stakeholder engagement is an important tool for mining companies to employ as it avoids problems such as the mismanagement of the community resource (as seen in the Yanacocha Mine illustration). If the community is informed regarding which resource is being exploited and the health and other hazards related to that resource, the community is better prepared should there be any mishaps such as a chemical or other related spills. When consulting the community regarding important information in relation to the resource, mining companies must ensure that it is done in a culturally appropriate manner and that communities are assisted in understanding the issues in the proper context. This means that the language best understood by the community should be used, even if it requires the help of an interpreter.

3.4.4. Mistrust from the Community

Mistrust from a community is one of the biggest risks that mining companies could be faced with. This could very well lead to community demonstrations and even operational stoppage

85 Supra n39 at 195.

⁸⁴ Supra n1 at p8.

⁸⁶ Supra n1 at p7.

or early mine closure as seen in the Bougainville Rebellion in Papua New Guinea.⁸⁷ Once a community loses trust in one mining company, it makes it difficult for any mining company, thereafter, to try and develop an operation in the same area due to the precedent set by the former. The EPs allow for a holistic view of a potential mining project, and if implemented appropriately, could alleviate the mistrust the community has with mining companies. The EPs promote transparency and constant review of methods used and evaluations conducted. It is the characteristic of remaining thorough and transparent throughout the life of mine that brings about trust in the mining company again.

3.4.5. Company Negligence that Leads to Health Concerns for the Community

Negligence can occur in various forms, in all mining operations. While mining companies have their own mechanisms in place to ensure that health and safety guidelines are available and followed, the EPs could take it a step further which would extend the courtesy to the broader community as well. Standards for health and safety will differ from community to community. It is for this reason that the EPs should ensure that the guidelines and policies of the mining company are, to an extent, flexible so as to accommodate any possible scenario. This flexibility will allow for adaptations to ensure the community is protected from harm and to ensure that the mining company themselves are stringent when it comes to their actions and subsequent reactions.

3.5. Conclusion

A mining project, once deemed feasible and therefore approved to go ahead, can cost an inordinate amount of money. However, if the preliminary exploratory work is done and the resource is proven to a satisfactory level of resolution, then that investment is likely to be met with a commensurate and sought after profit margin. Both financiers and mining companies alike will be ecstatic with the returns associated with such operations, which is probably why so many mining operations are initiated.

It should however, be noted that the overall picture is not always as rosy as just depicted as there are several case studies that seem to indicate that risks often manifest at an advanced stage in the mining process, which can either stop the operation or at the very least delay it. Either way, these risks, which are typically associated with the natural environment and the

⁸⁷ The constant armed clashes during the Bougainville Rebellion resulted in the protests against the mining company further being an act of rebellion against the state's authority. Filer, Colin. "The Bougainville rebellion, the mining industry and the process of social disintegration in Papua New Guinea." *Canberra Anthropology* 13.1 (1990): 1-39.

host community, are best not ignored as they can severely affect the purely financially based feasibility assessment of a mining operation.

As previously mentioned, the EPs were designed to identify and mitigate the risks that both financiers and mining companies potentially face when initiating mining operations, which include those related to communities, their environment and the interaction between them. Community risks are unpredictable and vary from community to community. However, regardless of its format, these risks can and will affect a mining operation and could potentially have significant financial implications. The utilisation of the EPs, if done appropriately can assist in mitigating these risks. As demonstrated above, the current EP design can be applied in such a way so as to aid the communities in addition to other stakeholders. That is, provided the EPFIs are and remain aware of the fact that having a holistic EPs-premised view on mining projects is the only way to ensure that a project runs smoothly. This means that profit cannot be the sole focus of a project and consideration must be given to both the environment as well as the inhabitants of the said environment.

Finally, which will be interrogated in more detail later, incorporating the EPs into the total process and using it as a means to foster trust-relationships is critical in order to ensure that a win-win situation results and perpetuates between the mining company in question and its host community.

CHAPTER 4 – Limitations of the Equator Principles

4.1. Introduction

The application of "conventional management systems" in the extractive industry is usually focused on risks and the mitigation thereof as the central element of the system. Consequently, mining companies have progressively started to include the consideration of social risks and the relationship between the community and the mining company in addition to the conventional risks that businesses face.⁸⁸ Private companies have over the past twenty years, on a global scale, made efforts to encourage a holistic approach to corporate social responsibility (CSR).⁸⁹

There is a growing need for management systems that make provision for both "rational control" as well as a "value-based focus". The objective behind management systems of this nature would be constant innovation.⁹⁰ The EPs currently create an opportunity for mining companies to develop management systems that find this balance by employing methods such as conducting of assessments and drafting of dispute resolution procedures.

This chapter will briefly analyse the previously mentioned case illustrations in order to determine whether the EPs are effective and represent a useful tool in support of a mining company's development and growth in terms of community relations. Therefore, the brief analysis below will identify how each case measured up to each of the principles mentioned in chapter three and whether there is room for the EPs to generate improvement in communities alike.

4.2. Application of the Principles to the Respective Case Illustrations

4.2.1. Ok Tedi Mining Limited (OTML), Papua New Guinea

Environmental Assessment

⁸⁸ Kemp, Deanna, Richard Boele, and David Brereton. "Community relations management systems in the minerals industry: combining conventional and stakeholder-driven approaches." *International journal of sustainable development*9.4 (2006): p397 and see also, Kytle, Beth, and John Gerard Ruggie. "Corporate social responsibility as risk management: A model for multinationals." (2005).

⁸⁹ *Supra* n48 p1 and n16 p85.

⁹⁰ Zwetsloot, Gerard IJM. "From management systems to corporate social responsibility." *Journal of Business Ethics*44.2-3 (2003): 201-208.

It is difficult to determine, and certainly not evident in the case illustration, whether or not an EIA had been done prior to the commencement of the mine in Ok Tedi. Based on the fact that mining activities eventually commenced and in the absence of country specific legislative insight, this research assumes that some semblance of an EIA had been conducted and approved. However, if that were the case, given the benefit of the doubt, then the EIA was evidently flawed and poorly conducted as a correctly conducted EIA should have identified the problems (and the requisite mitigation) that could have arisen in relation to the construction of the "tailings and waste rock storage facility".⁹¹

The mine's assessment should have identified the potential outcomes, *inter alia*, should construction of the storage facility fail, and the required preventative and mitigation measures in the event of an incident. The mining activities had destructive impact on the environment of Ok Tedi, resulting in it being difficult to navigate due to all the pollution and riverside terraces being ruined.⁹²

This substantiates the argument that an EIA should be conducted prior to commencement, and that a management system that provides for an ongoing assessment should, as a minimum, be put in place. Therefore, environmental assessments should occur at the beginning of each phase of the life of mine but at the very least be monitored on an ongoing basis between phases. The conducting of an EIA at every phase of the life of mine would, as a minimum, ensure that previously unforeseen environmental hazards and risks are then identified and dealt with appropriately.

Environmental Standards

Each country has rules, regulations and standards especially in relation to the environmental and social impact that they permit. However, generally speaking, smaller and more remote areas usually have lower standards (especially with regard to the policing thereof) than developed mining locales, like Australia or Canada. It is not to say that Papua New Guinea (hereafter, 'PNG') had no social and environmental standards at all but rather that the standards they had in place were most likely relatively low or they lacked capacity to ensure appropriate implementation thereof.

⁹¹ Supra n39.

⁹² Ibid.

Both community leaders and ENGOs involved themselves once it became apparent that OTML were destroying the environment, which proved to be a large part of the community's livelihood and survival, of Ok Tedi. While they were opposed to the continuation of OTML, the outweighing argument was, however, in favour of the social and economic privileges the community members were receiving.

Had the environmental standards of Ok Tedi been higher, or of more importance to the community and government, the Ok Tedi disaster could, arguably, have been largely prevented. As a result, the community of Ok Tedi will be subject to decades of struggle hereafter as a result of this disaster. Ok Tedi would benefit from large scale development of the standards they have to prevent a repeat of this disaster in the future, especially if the said standards are designed to ensure a balance between much needed development (with potential impact) and the ongoing livelihoods of the community.

• Environmental and Social Management System (ESMS) and Action Plan An ESMS and action plan fall onto the list of OTML's failures. Once it was discovered that there was a struggle with the construction of the waste storage facility and that there was a progressive release of life-threatening materials into the river, OTML should have employed their already drafted ESMS or their action plan.

However, the most that was done in this regard, was the warning given to villagers to avoid the river as a means of finding food and ensuring hygiene. There was little to no resemblance of a plan to ensure that those already affected and those who could potentially be affected, were appropriately treated and further educated on what was occurring within their village.⁹³

It is therefore absolutely vital that an ESMS and an action plan are drafted and approved prior to the commencement of mining activities. This level of preparedness would prove to the community that the mine is attempting to build a trust-relationship with them. It shows the community that the mine is not there to steal from them but rather, to work hand-in-hand and facilitate the community living sustainably thereafter.

Stakeholder Engagement

⁹³ Ibid.

At face value, it appears as though there is a certain level of engagement (albeit inadequate and likely too late in the process) with the various stakeholders. Evidence of stakeholder participation on some level is apparent from the following briefly mentioned events:

- a) A mining lease was granted by the PNG government;
- Environmental NGOs raised objections due to damage caused by the destruction of the tailings dam;
- Landowners and villagers have writs issued in relation to the damages caused by the destruction of the dam; and
- d) International authorities criticise OTML and the situation in Ok Tedi.

However, at the end of the day, regardless of the varying opinions from the stakeholders, the PNG government continued to make decisions on behalf of the Ok Tedi community without meaningfully consulting them. The social and economic benefits that Ok Tedi received, as a result of the mine, were difficult to ignore on account of the environmental impacts. Eventually, the PNG government sign an agreement in an attempt to settle and prevent further damage claims being brought forward against BHP.⁹⁴

Stakeholder engagement is arguably the most important aspect of the life of mine. Communities have a far stronger bargaining position than they realise especially as the development of human rights continues on an international level. It would be wise for future mining companies to ensure that communities are allowed and encouraged to participate and contribute to the decision-making processes but on an ongoing basis as opposed to a once-off scenario.

Grievance Mechanism

As mentioned above, the community members of Ok Tedi tried their hand at every form of grievance mechanism that they were aware of. Initially, writs were issued as a result of the damages caused by the release of the tailings into their water source. Subsequently, two further writs were issued seeking similar relief.⁹⁵

Eventually, BHP was found guilty in the court a quo (Victorian Supreme Court) for their involvement with the PNG government in legislatively blocking

⁹⁴ Jantadej, Piyaratt, and P. Kent. "Corporate environmental disclosures in response to public awareness of the Ok Tedi copper mine disaster: A legitimacy theory perspective." *Accounting Research Journal* 12.1 (1999): 72-88.

⁹⁵ Ibid.

any further writs and other claims being issued. This was, however, overturned by the appeal court.⁹⁶ This highlights the need to recognise that a grievance mechanism is designed to be an alternative to the formal legislative process and should also provide communities with an alternative mechanism to resolve issues long before the Courts are needed from an involvement point of view.

4.2.2. Yanococha Mine, Peru

Environmental Assessment

In order to have reached the status of being the world's fourth largest gold-producing mine and presuming a commensurate level of corporate responsibility, one can safely assume that an EIA was conducted by Newmont. The uncertainty, however, lies with the extent to which the EIA was done.

The Newmont Mining Company, in their assessment, should have taken note of the multiple surrounding villages in the area. This is important because under ideal circumstances, the mine not only considers the environment but also the people living there and the extent to which they rely on their surrounding environment for their livelihood. Additionally, the mine has to assess the potential interaction of the resource being mined and the environment. In other words, how would the mined resource react should there be any mishaps?

More importantly, it is unacceptable to expect or assume that members of the surrounding community should be accepting of a poorly maintained environment, in exchange for a potential economic incline. That being said, there are no obvious signs of environmental neglect of any sort in this case illustration.

Environmental Standards

As previously mentioned, environmental standards differ not only from country to country but, often, also from community to community within each country. Very often, the small rural areas are found to have very low environmental standards. Mining companies tend to welcome low standards as it eases the financial burden placed on their shoulders.

The EPs have found a way of ensuring that the standards expected are as uniform as possible by categorising countries into "designated" and "non-

⁹⁶ Ibid.

designated" countries. In non-designated countries the performance standards of the IFC as well as the "Environmental, Health and Safety Guidelines" are applicable.⁹⁷

The certainty created by establishing two distinct categories removes the confusion as to whether the host country's laws and regulations are applicable or a standard higher than that which is found within the country, or community. It also implies that when in doubt, the company in question should opt for the more stringent choice so as to ensure that the best possible outcome manifests.

Environmental and Social Management System (ESMS) and Action Plan It is vital for mining companies to ensure contingency plans are in place, should anything go wrong. Without a contingency plan, or plan of action, mining companies can find themselves in precarious situations such as being faced with court actions or even early mine closure.

The Newmont Mining Company excelled in this aspect as they were quick and efficient with the recovery of the spilled mercury cylinders. The speedy response from the mine ensured that both health and environmental risks were avoided or at least contained to the largest extent.

The reaction time and success of the recovery of the majority of the cylinders prove that Newmont had the relevant plans and systems in place for emergencies. Surrounding mines would do well to follow suit in such instances. However, the only flaw in their process was their level of communication and the lack of information given to communities relating to the mercury itself.

Stakeholder Engagement

In order for the community to respond appropriately in a mining emergency it is vital for the community to have been previously informed of the resource and its properties and the associated chemicals needed to extract the resource.

The lack of information to the community resulted in the community collecting the mercury for themselves as a means of economic gain. This created an unnecessary health risk to all members of the community, which could easily have been avoided had they understood the dangers of mercury.

⁹⁷ Williams, Cynthia A. "Regulating the impacts of international project financing: the Equator Principles." *Proceedings of the ASIL Annual Meeting*. Vol. 107. Cambridge University Press, 2013.

The aim of the EPs is to have each community "informed, consulted and participating" in the process of growing the mine over the entire life of mine. By meaningfully consulting the community, the mine creates a relationship of trust and co-operation. Unfortunately, the Newmont Mine left the Peruvian villagers mistrusting all foreign mining companies thus, making future endeavours extremely difficult.

Grievance Mechanisms

The case illustration portrays no real grievance mechanism for villagers who were in need of it. The lack of grievance mechanism can also be attributed to the poorly handled stakeholder engagement as the two concepts are not mutually exclusive.

Once a mining company meaningfully consults and informs the community of their intention, the next step is to work on a dispute resolution system that is easily accessible to community members. Ideally, this mechanism should be negotiated and drafted by both the mine as well as the community leaders, elected by the community to represent them so as to improve the level of transparency and trust.

Had there been a grievance mechanism in place for stakeholders to utilise, the mine could have avoided the difficulties experienced in retrieving all the mercury that was spilled. A grievance mechanism would firstly, have preemptively flagged issues as a well-informed community would have raised issues much earlier. This in turn would have given the mine a trust-premised platform to communicate effectively, especially in relation to the spill. Being made aware at an early stage is always better as the incident is then better managed and minimised in terms of impact. Furthermore, having been negligent with regard to the mercury cylinders, the grievance mechanism would alternatively serve as a platform for any affected community member to challenge the mine and their methods and in so doing, improve the community's response to the mine.

4.2.3. Island Copper Mine, Canada

Environmental assessment

Canada's EIA has transitioned into what is now a fairly complicated "sociopolitical phenomenon" that involves far-reaching administrative support systems.⁹⁸ These extensively developed systems, however, are of concern because the scientific effects and consequences thereof have not received the same level of attention.⁹⁹ However, it has been established that ecological considerations depict merely a portion of the variety of factors involved in an EIA and since environmental assessments are legally required in Canada, there are various aspects of this case illustration that indicate an EIA had been conducted.¹⁰⁰ The Island Copper Mine also took into consideration the various ecosystems within the surrounding community and made sure that the infrastructure they contributed, would be functional and fitting for post-closure utilisation.

For example, dock facilities that were bought by the mine were transformed into businesses that focussed on the production of crayfish and sturgeon; the flooded acres and the deep pit were later used for the production and commercial trading of salmon smolt. This strongly indicates that extensive consideration was given to the environment. Island Copper Mine did extremely well to identify how they had found the environment as well as how they would leave it for the community post closure of the mine.

Environmental standards

There is a large variety of acts and regulations covering a broad spectrum of topics, both provincial and federal, that govern the mining industry in Canada. For example, the Species at Risk Act, Fisheries Act and the Canadian Environmental Protection Act.¹⁰¹

Canada boasts high environmental standards for companies to adhere to which, at face value, could discourage investment from foreign companies as it can be construed to be a barrier of entry. However, it also

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⁹⁸ Beanlands, Gordon E., and Peter N. Duinker. *An ecological framework for environmental impact assessment in Canada*. Vol. 37. Halifax, NS: Institute for Resource and Environmental Studies, Dalhousie University and Federal Environmental Assessment Review Office, 1983.

⁹⁹ Ibid.

¹⁰⁰ "Ecology includes the study of plant and animal populations, plant and animal communities and ecosystems. Ecology is closely related to the disciplines of physiology, evolution, genetics and behavior." See http://environment-ecology.com/what-is-ecology/205-what-is-ecology.html [accessed 28 September 2018].

¹⁰¹ "Regulatory Effectiveness" see http://mining.ca/our-focus/regulatory-effectiveness [accessed 29 September 2018].

ensures that both local and foreign mining companies follow stringent requirements and conditions when developing and operating a mine. It is evident that these high standards are the reason for the success of the Island Copper Mine, which clearly saw beyond what many others would see as a barrier.

Environmental and Social Management System (ESMS) and Action Plan As mentioned previously, Island Copper Mine excelled when it came to their planning and execution of said plans. The majority of the infrastructure that was established or bought by the mine and later used for commercial purposes by the mine employees as well as members of the surrounding community. Mining is characteristically impacting but having an action plan, in situations such as tailings being discharged into the ocean, helps mitigate the consequences thereof.

Both social as well as the environmental aspects of the life of mine were considered and accommodated for in the ESMS and action plans. Therefore it is clear that mining companies that ensure these systems and policies are in place are likely to avoid disasters arising from unforeseen problems.

Stakeholder engagement

Island Copper Mine, once again, surpassed the usual expectation in this regard. In order to ensure that the facilities would remain in use and that the community would be able to contribute to the local economy, Island Copper Mine engaged with all members of the community or their elected representatives.

In order to have reached the level of success that the Island Copper Mine reached, engagement with stakeholders and community participation in decision-making would have had to be ongoing and transparent from both bargaining ends.

Grievance mechanisms

Grievance mechanisms and procedures will vary as mining companies interact with members from different communities. Each mining company should ensure that this is included in their ESMS. Ensuring that a grievance procedure is appropriately drafted and in effect, prior to the commencement

of the mine, serves to avoid further misunderstandings that arise from the lack of a procedure.

Grievance mechanisms need to be tailored to the community and it is for this reason that stakeholder engagement plays a significant role here too. Mining companies that are proficient in their consultation skills and mechanisms will find it far easier to tailor their grievance mechanisms to the community they find themselves operating in. On the other hand, mining companies that struggle with stakeholder engagement, will find it challenging to establish a grievance procedure that suits and protects both the community and the mining company.

Island Copper Mine most likely found that there was no need to utilise their grievance procedures because their continuous, transparent communication facilitated the creation of a trust-relationship between themselves and the community. However, had there been a dispute that needed resolution, it would most likely have been handled amicably as the community was able to participate freely and without intimidation from the mining company. This is a prime example of how grievance mechanisms that form an integral part of a robust and mutually beneficial engagement process, can protect both the company and the surrounding community.

4.3. Limitations of the Applicability of the Equator Principles

The adoption of the EPs has the potential to significantly improve the interaction between mining companies and the countries and communities that host them. However, while the EPs are principally sound, there are instances in which the EPs are limited in their ability to mitigate community-related risks.

When glancing back at the first principle that was discussed, the **environmental and social assessment**, there are a few oversights that need to be acknowledged. This principle acknowledges that, in situations deemed to be "high risk", a due diligence in relation to, *inter alia*, human rights (or that which impacts upon it) should take place. The problem arises in defining a high risk situation as this will differ based on the nature and scale of the mining project. It also creates a loophole for unscrupulous mining companies to skip the principle simply because they have deemed the situation to be of a low risk. Furthermore, the principle does not specify or dictate when the assessment should be conducted. Therefore, even in cases where the situation is correctly classified as being "high risk", this leaves room for mining projects to adopt a "once-off" approach to the assessment instead of, perhaps, an annual or

ongoing and regular assessment. Naturally, environmental and social circumstances are everchanging and therefore, an ongoing assessment would be ideal to maximise the efficacy of the assessments. This will in turn allow the mining company to implement corrective action more promptly so as to prevent or mitigate accordingly. An ongoing assessment would have been useful in the case of Ok Tedi. The extreme damage inflicted on the environment and the social impact thereof could have been mitigated or prevented altogether.

The principle "applicable environmental and social standards" acknowledges that initially, compliance with the legislation of the host country, is vital. The principle proceeds to differentiate between designated and non-designated countries and the different standards applicable to each. For example, non-designated countries are viewed against the backdrop of the IFC Performance Standards and the World Bank Group's Environmental, Health and Safety Guidelines.

The principle mentions "justified deviation" from the standards that should be applied to the affected community but provides little to no indication as to what qualifies as "justified". Furthermore, there is no mention under this principle as to who decides whether deviation from any specific standard is justified or not.

Moreover, another potential shortcoming to take note of is that banks do not always have the necessary skill set to understand mining operations. Therefore making provision for adding criteria to satisfy is likely an indication (i) that they are not confident that the EPs are adequate to begin with and (ii) it highlights a limitation in that, the absence of the requisite expertise, could seriously weaken the intended outcomes of the EPs.

This creates an opportunity for double standards to manifest as it creates a loophole for companies to apply their trade differently from country to country. This is counter-intuitive since the environment and associated community of a designated country is no different to that of a non-designated country from a human rights perspective. Therefore, despite being uniformly applied, to make such a distinction undoubtedly creates disparity in application. The critical factor to remember is that the ethical performance of a mining company should be measured against that company's performance regardless of where it operates. Therefore, the focus should remain of the company itself. If a company like OTML decides to mine in Canada or in Zimbabwe, it should always opt for the moral high ground and implement accordingly, "designation" aside. In the case of both OTML as well as the Newmont Mining Corporation, they should simply have opted for the more stringent standard as opposed to taking advantage of a country with a weaker legislative framework and community level of awareness.

There are very few limitations relating to the principle dealing with **environmental and social management systems and action plans**. It does, however, link to the first principle which means that as often as environmental and social assessments are conducted, the management systems and action plans should be updated accordingly. This is critical as such systems need to be active and "living" if they are to remain relevant and applicable to the scenario in question. Alternatively, they become paper exercises. The Newmont Mining Corporation had a quick response to the mercury spill, this is because their emergency preparedness was active and applicable. This aids in emphasising the importance of having management systems and action plans in place in order to mitigate and resolve problems, with the proviso that they be kept fully active and that they are tested regularly.

The EPs address **stakeholder engagement** competently by mentioning that engagement with all communities should be "ongoing", "culturally appropriate" and catered to suit the members of the affected community. The principle acknowledges that indigenous communities are consulted against the backdrop of FPIC however, the standard is arguably lower for local communities that do not qualify as indigenous.

This distinction in itself creates an inconsistency, however, it would not be appropriate to attempt to change the classification of these communities as the classification most likely has broader meaning and levels of applicability within other aspects of the host country. The principle also indicates that consultation should be informative and encourage participation, while ensuring that no manipulation or intimidation tactics are employed. However, one of the limitations of this principle is that it does not stipulate timing and the initiation point thereof, unlike FPIC, which requires engagement with the indigenous community prior to the commencement of the project. This prescribed early onset of consultation is critical as it sets the tone for the relationship that is being sought at an early stage. It is important for the principle to specify that consultation needs to take place, first and foremost, before project activities begin.¹⁰²

Moreover, the principle should proceed to address having a system and an agreed to process in place for the approval of the stakeholder engagement design. Island Copper mine demonstrated how the efficient implementation of an EP, being stakeholder engagement, can lead to positive and sustainable results. While it is not being proposed that the FPIC be reverted to as an alternative to the EPs, the incorporation of some of the FPIC components, and that of other relevant standards, will certainly add value to the current form of the EPs.

¹⁰² Supra n11.

Lastly, the principle that deals with **grievance mechanisms**, at face value, does not appear to be riddled with limitations. It is actually managed quite efficiently in the EPs. However, depending on who drafts this mechanism, the designing and drafting of a mechanism that is suited to the affected community should be overseen and approved by an independent party. The principle should advise those drafting grievance procedures to ensure the procedure is flexible enough for adaptation, should any drastic and unforeseen disputes arise.

However, a potential limitation that can become problematic is the fact that a grievance mechanism cannot be put in place and implemented in isolation. Firstly, the host country's legal framework cannot be ignored and in instances where it is good, will often set the tone for the grievance mechanism's design. In cases where the legal framework is weak, it should at the very least act as a surrogate but to the benefit of the community and should be communicated to said community through the stakeholder engagement process so as to ensure a high level of awareness. Furthermore, the legislative framework and the grievance mechanism should work synergistically and therefore, by design, community members should opt for the latter first, with the former being their last resort. Various measures were in place, in the case of the OTML, that could have significantly helped the community. The problem with this principle is that it is so closely linked to stakeholder engagement that the intended formal grievance mechanism became lost in the ongoing talk-shop. The Ok Tedi illustration validates that grievance procedures and mechanisms need to be appropriately communicated to all members of a community.

4.4. Conclusion

There are essentially three groups of role-players involved in the case of a mining activity. These include:

- the host country;
- the affected communities; and
- the mining company itself.

In cases where a mining company is financially independent and is able to finance its own operations (assuming complete ignorance in terms of leverage and risk spreading), one would have to rely on the conscience of that company to do the right thing. However, in most companies, third party financing plays an important role since that company's debt:equity ratio is one of the factors that influence its health from an investment point of view. This implies

that they would need to approach a banking institution for funding. This is the point at which EPs become influential and the implementation thereof becomes vital.

Mining companies have become acutely aware of how the social environment of a community can affect their project. It is because of the dynamic nature of these local communities, that mining companies are including social risks as part of their risk assessment process, especially since these communities have the ability to directly affect the mining operation. More importantly, financing institutions have also noted this risk, which has resulted in the establishment of the EPs. This is essentially their way of mitigating their risk and a means of driving a specific type of behaviour in relation to the mining companies.

The EPs, while not perfect, provide a sound framework from a financing perspective that encourages the consideration of both the environmental and social aspects within a community. The EPs employ both a value-based approach while remembering the rational control that is needed in order to ensure efficiency.

As identified above, the EPs can be a useful tool that mining companies are able to employ to ensure development and growth within the communities they inhabit, even if only to comply with their respective conditions in respect of their financing agreement. However, the limitations highlighted above appear to indicate that aside from the value of the principles seen in isolation, the application of said principles can make a significant difference between success and failure on any given project. This is irrespective of the host country and its legislative framework. It is therefore evident that in order to ensure mining projects leave a community intact and sustainable, to an extent not previously evident, the other role-players need to play a more active role in the applicability and implementation thereof.

This implies that the mining company itself needs to ensure that its approach towards the implementation of the EPs goes beyond the simple meeting of financing conditions. The approach must embrace the fact that the correct implementation of the EPs can and will most likely bolster revenue generation and therefore profitability. This, of course, cannot be done in isolation of the host country and its agenda but if EPFIs and mining companies work together to continuously identify problem areas and improve the EPs where necessary, it is highly probable that there will be a resultant improved correlation between the EPs and the successful outcome of the project in question.

CHAPTER 5 – Conclusion and Recommendations

As risky a venture as mining may be, there will always be a demand for natural resources on a global scale. In order to meet that demand, mining companies have to work continuously to discover reserves (or deposits) that can be exploited, profitably. From the onset of a planned project, once a reserve is discovered and mining companies embark on the journey towards exploitation and production, they are continually faced with the challenge of engaging and consulting with the surrounding and affected communities. Historically, mining companies, being the more powerful party in the situation, have had the upper hand. However, communities have recently come to the realisation that they, too, have an interest in the matter and they have started commanding respect and consultation.

Simultaneously, mining companies have noticed that there are social factors that potentially have an impact on their projects and are fast moving towards factoring social risks into their research and assessments. SLO has become an important tool for communities in ensuring that their environment and their people are acknowledged and protected. Mining companies that lose their SLO face large financial consequences and potentially early mine closure, often due to environmental impacts and their associated liability.

Mining projects entail large financial input which mining companies deem justifiable based on the anticipated revenue and profit margin. However, project risks can often manifest further down the line, in relation to the project schedule, than previously expected. For example, losing SLO during the later stages of a project could result in additional, unforeseen expenses. Consequently, this can significantly change the financial feasibility study of that mine. Often, varying environments and scenarios are so disparate that it is extremely difficult to make any projections in terms of the potential additional expenses. This supports the "prevention is better than cure" philosophy.

These issues, however, vary from location to location, and have different levels of risk to the financier. Therefore, from a financer's point of view and in order to manage and mitigate these risks, certain assurances need to be put in place. When considering the options available in this regard, the EPs are deemed to be one of the more value-adding options and it is therefore no surprise that many banking institutions have adopted the EPs as a prerequisite for funding.

The EPs were designed as a framework that finds the balance between "rational control and a value-based approach" to mitigate both environmental and social risks (as well as the interaction between these two) on behalf of financiers as well as mining companies who opt

for financial support through an external financing process. Mining companies that utilise the EPs effectively, contribute to guaranteeing growth and development of the communities they operate within. If EPFIs adopt a holistic EPs-based view on financing mining projects, it aids in ensuring that profit margins are not the sole consideration for mining companies. The appropriate utilisation of the EPs by all stakeholders has the potential to mitigate these risks even though these risks may manifest differently from community to community.

However, the EPs do have limitations as is evidenced by the failures that have been captured in different case studies. These limitations are interrelated to the fact that the EPs are written at a principle level but need to be implemented at a project level. They include, as indicated in in chapter four, issues such as:

- lack of clarity with regard to issues like "high risk";
- frequency of assessments;
- non-stipulation of environmental and social standards, systems and plans; and
- excellent inclusion of requirements like "grievance mechanisms" but with no stipulation on what they should look like.

So, while these limitations are potentially problematic, it should be noted that they are inherent by virtue of the very design of the principles themselves. Since they are designed to be broadly applicable, they simply cannot be more prescriptive as principles. The answer to this problem therefore resides not in changing the principles but rather the manner in which they are adopted and implemented.

In light of this, the following recommendations are put forward in order to facilitate the growth of this framework and the manner in which it is utilised by stakeholders:

- * Based on the nature of the EPs (being principles) they cannot be more detailed than they currently are because they need to be used broadly and should be applied and customised on a site-specific basis. This is influenced by various factors like the applicable laws and regulations, location, communities, cultures, economic status and strength, inter alia. Therefore it is incumbent upon mining companies implementing the EPs, to evoke and formalise the value inherent in the EPs.
- * The EPs, in their current form, appear to be loosely applied on a project by project basis, which is why there are so many case studies that illustrate how some have failed while others have succeeded. This is no fault on the part of the EPs framework, except for the fact that there are inherent limitations to them as previously mentioned.

- Their application therefore needs to be tightened up by the implementer and monitored more closely by the financier.
- * Furthermore, this highlights the fact that of the role-players already mentioned in chapters three and four, the financing institution is likely not the pivotal role-player in terms of ensuring that mining operations are functioning in the most responsible manner. The mining company itself has a major role to play as it needs to decide whether compliance scrapes through to 'adequate' or whether they opt to go above and beyond. The danger of this right to choose is that inconsistency in the chosen approach may become problematic for the mining company, especially if the host community objects to the chosen approach. Therefore, mining companies should adopt and incorporate the EPs on a policy level and more importantly incorporate the EPs and the way they intend to implement the EPs into said policies and operational methodologies. This will ensure that regardless of where the company decides to mine, its EPs-premised policy will be applied consistently and without contradiction to previous projects. Mining companies therefore need to make the EPs part of the company's structure so that everyone remains on the same page and contributes towards the same objectives.
- * While there is very little chance of changing the host country, it is important to seriously consider the host country's legislative and other regulatory frameworks so as to ensure alignment, upon the premise that the more stringent requirements will always prevail. Any contradictory requirements would be fatal to the success of the systems and processes such as a grievance mechanism. Therefore the alignment becomes paramount.
- * While the EPs constitute a sound and powerful tool, they are not the quick-fix stakeholders often look for. In reality, they would require constant attention and review. The EPs do not automatically adapt to every possible scenario and their application should be reviewed as circumstances change within the industry.
- * Ideally, the EPFIs should adapt their financing methodology to incorporate a phased approach. This means that the total quantum of the finance provided should not be paid in full and upfront but rather in a phased manner that is totally commensurate with the stage of the project at a particular point in time. Therefore, money will be made available at various stages based on the level of EPs-compliance at that particular stage. This will facilitate the fostering of a trust-relationship between all current and future stakeholders. As a result, more communities will remain intact and sustainable post mine closure.
- * Finally, the success of the EPs with regard to any project is largely dependent on the synergistic efforts on the part of the financing party as well as the mining company.

The mining company needs to incorporate the EPs and instil a EPs-centric way of managing operations so that it is innate. On the other hand, the financing role-player needs to ensure, through conditional financing, that mining companies are held accountable for their agreed to outcomes but on a regular and frequent basis. It is the coming together of these two that is most likely to result in longer term success.

As a concluding remark, it should be noted that the EPs represent a sound set of principles that, naturally, have several limitations. However, these limitations do not detract from the potential that these principles have in terms of ensuring that environmental and social issues that are associated with mining operations, are either prevented, mitigated or corrected.

The inherent limitations need to be considered in conjunction with the value added by other role-players, particularly the mining company itself. If a mining company makes the decision to conduct themselves responsibly and sustainably and to set its standards in this regard by adopting and incorporating the EPs into the company's structure, then the limitations identified earlier become far less important as they fall away due to proper early onset mitigation. Finally, the true success and value of the EPs will only manifest once the EPs become an inherent physical business methodology. This, in turn, will be an easy decision on the part of mining companies once they realise that embracing the EPs and fully incorporating them into the business is a financially prudent decision that mitigates serious risks to the company as opposed to just being a cost.

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