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Adapting social impact assessment to address a project's human rights impacts and risks[☆]

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ABSTRACT

We address the weaknesses inherent in the social risk assessments undertaken for business, especially in the extractive industries. In contrast to the conventional approach that considers consequence to the company rather than to impacted communities, conformance with the *United Nations Guiding Principles on Business and Human Rights* requires that consequence to affected communities has precedence. In order for social risks to be properly assessed, we consider that: companies need to know and understand the human rights impacts of their activities; contemporary approaches to project impact and risk assessment need to be adapted to consider human rights; and environmental impact assessment (EIA) and social impact assessment (SIA) methods need to be adapted to give greater attention to impacts on human rights. Using an example from the mining, oil and gas sector, we provide a method that differentiates social risks from business risks, and we position impact assessment as an instrument that actively facilitates the improved identification, analysis and management of social risks. Practical adaptations to SIA activities and risk assessment processes are provided. Taking human rights impacts into account and using the dimensions of gravity, extent, vulnerability and remediability, we nominate criteria to assess the significance of negative social impacts.

1. Introduction

The responsibility of business to respect human rights was outlined in the *United Nations Guiding Principles on Business and Human Rights* (usually abbreviated UNGP) (United Nations, 2011). The UNGP has heightened industry awareness of 'rights-holders' and 'duty-bearers', and has facilitated a shift in how companies are encouraged to address harmful impacts to human rights from the 'naming and shaming' of negligent companies by third party observers (e.g. NGOs or regulatory bodies) to companies 'knowing and showing' how they take responsibility for their human rights impacts and manage their human rights risks effectively (Kemp and Vanclay, 2013; Götzmann et al., 2016).

While consideration of human rights should be central to the impact assessment and risk assessment practices of business (van der Ploeg and Vanclay, 2017a, 2017b), dominant industry practice has been to not explicitly consider human rights (Kemp and Vanclay, 2013). Arguably, the reason for this is not that companies are opposed to human rights,

but rather it is unclear what they actually have to do to address human rights issues. We contribute to the literature by showing how an integrated approach to impact assessment practice can be enhanced to enable industry conformance with the UNGP in relation to their obligations to affected communities. To do this, we start from three premises:

- Conformance with the UNGP requires that companies understand and address the human rights impacts of their activities;
- Contemporary approaches to project risk assessment need to be adapted in order to properly consider human rights risks; and
- Social impact assessment (SIA) has a key role to play, however, impact assessment methods and company management systems need to be adapted to take the impacts on human rights into account.

The arguments in our paper derive from our experiences as social

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practitioners in different institutional settings (including a social consulting firm, university, and a national human rights institution). We have project experience across a range of cultural settings and industries, especially in the extractives and energy sectors. Our approach has been iteratively developed since the release of the UNGP in 2011. It draws on our reflections on our professional practice and on our discussions about social performance and how human rights can be implemented into corporate practice. It also draws on our extensive discussions about what human rights means for SIA (Esteves and Vanclay, 2009; Esteves et al., 2012; Götzmann et al., 2016). In addition to the UNGP (United Nations, 2011), our approach also incorporates perspectives from a range of other published sources and models, including: the AAAQ Framework (Holst Jensen et al., 2014); the SIA guidance document from the International Association for Impact Assessment (Vanclay et al., 2015); the Social Framework for Projects (Smyth and Vanclay, 2017); and the Human Rights Sphere (van der Ploeg and Vanclay, 2017a). Our approach includes a tool for assessing the significance of social impacts, which was initially developed for training purposes in 2010. Following the release of the UNGP in 2011, it was adapted to take human rights into account. The revised version was pilot-tested in 2014 in a workshop with social performance representatives from various companies in the extractives industry operating around the world. The tool was further enhanced and tested in 2016 by applying it to the site operations of a specific multinational mining company.

Following a summary of the weaknesses in current research and practice regarding social risk management, we offer suggestions about how these weaknesses can be addressed and specifically how human rights risks can be considered alongside social risks. We differentiate social risk from business risk, and we position SIA as an instrument for the improved identification, analysis and management of social and human rights risks. We provide practical adaptations to SIA and to the processes associated with ongoing risk assessment as implemented in environmental and social management systems.

We consider that impact assessment means ‘integrated impact assessment’, and is an approach that takes into account all the social, cultural, economic, health, environmental, and human rights impacts, as well as expert and stakeholder views on an ongoing basis (Esteves et al., 2012; Vanclay, 2015a). Throughout this paper, we use ‘social impacts’ as an umbrella term that includes human rights impacts on affected communities. A specific contribution of this paper to the field of impact assessment is the provision of a tool for assessing the significance of negative social impacts that takes into account relevant human rights.

2. Limitations in how social risk is conceptualised

The International Organization for Standardization (2009) defines risk in the ISO 31000 standard (Clause 2.1) as the “effect of uncertainty on objectives”. Although this standard perhaps provides the most frequently cited definition of risk, its definition is rather limited (Hanna et al., 2016a; Kemp et al., 2016). By comparison, in the social sciences risk tends to be defined along the lines of uncertainty about and severity of the consequences (outcomes, events) of an activity, especially in terms of what humans and their institutions value (Aven and Renn, 2009; Mahmoudi et al., 2013; Graetz and Franks, 2016). Risk is generally considered to have two components: probability, which refers to the likelihood that a risk will eventuate; and consequence, which refers to the severity of the impact. Strictly speaking, while risk and impact are similar, in the risk assessment discourse, impact is only the consequence whereas risk is consequence together with likelihood. In reality, the experience of social impact is complex, and is discussed in greater detail in later sections of this paper.

A risk management system is a standard component of contemporary project management. The system records information about the process of decision-making and the implementation of actions in

response to known risks, and is regularly updated. Risk responses are typically tracked in a risk register. Many companies employ risk managers who have responsibility for facilitating the identification and assessment of risk and ensuring that agreed actions for managing risk are implemented (Barclay et al., 2009). To identify risks, these risk managers tend to engage other internal departments of a company. In our experience, it is unusual for risk managers to deal with external stakeholders, as they typically rely on information from the individuals within the company who are responsible for external stakeholder relations.

Risk assessment involves the identification, analysis and evaluation of risk at different levels. The levels and classifications vary according to purpose, and tend to be overlapping, however the categories frequently used include (Jaafari, 2001; Barclay et al., 2009; Graetz and Franks, 2016; Hanna et al., 2016a):

- General business risk, which covers topics such as: financial (cash flow, return on investment); strategic/commercial (earnings, capital and competitive advantage); health and safety (employees/contractors); legal/compliance (aspects constraining ability to comply with existing legislation/standards, risk of changing regulations); marketing (demand for product and time to market); and reputation (stakeholder perceptions).
- Technical risks that arise from design and engineering, manufacturing, technological processes and test procedures.
- Environmental risk, which refers to potential negative impacts on the environment, e.g. air quality (emissions, noise pollution, dust), water quality, soil quality, and biodiversity.
- Non-technical risk, which tends to be an umbrella term for the external factors encompassing the social, political and institutional issues (including stakeholder opposition, Hanna et al., 2016b) that create uncertainty for the project.

Miller and Lessard (2001, p. 439) highlighted the importance of stakeholder engagement in reducing non-technical risks, and introduced the notion of ‘social-acceptability risks’ as “the likelihood that sponsors will meet opposition from local groups, economic development agencies and influential pressure groups”, in effect what is currently known as social licence to operate (Thomson and Boutilier, 2011; Jijelava and Vanclay, 2017). In a similar vein, Lynch (2008) and Barclay et al. (2009) considered ‘social risk’ to be a form of business risk, and specifically as the range of potential impacts on a project that might result from its interaction with communities and stakeholders. Risk communication is promoted by them as a means by which to engage external stakeholders and bridge the divide between expert and non-expert perceptions of risk in order to promote fuller understanding and, where appropriate, acceptance of the risks associated with social and environmental harms.

In contrast, Franks et al. (2014) position social risks as risks to society, social groups, or individuals, and differentiate these from business risks, which are risks to the business. They emphasise that social risks do not always translate into conflict, which they argue has a real cost implication to the business. Conflict is interpreted as ranging from “low level tension to escalated situations involving a complete relationship breakdown or violence” (Franks et al., 2014, p. 7576). In their analysis, in cases where social conflict did lead to business risk, this was triggered by factors such as the “failure of companies to respond to expressed concerns about risk, company engineers dismissing community perceptions of risk as unfounded and ‘unscientific’, the presence of organizations that heighten awareness and perception of risk and present them in stark form, and the failure of government to mediate these different perceptions of risk in ways deemed impartial” (Franks et al., 2014, p. 7578).

Social risk is given less attention than other forms of risk in project risk assessments. In a review of the literature on social risk in the mining sector, Kemp et al. (2016) observed numerous inconsistencies in

interpretation of the term ‘social risk’. Kemp et al. differentiated between techno-scientific approaches to risk – with their roots in engineering, statistics, actuarial studies, epidemiology and economics and expressed through mathematical functions of probability and harm – and social scientific approaches, which also consider qualitative factors and accept ambiguity in interpretations, such as individual perceptions of harm and its likelihood, and social constructions of risk. According to Kemp et al. (2016), confining risk to an objective mathematical equation of probability and consequence fails at two levels: (i) the broader social context in which risk is constructed; and (ii) the differing values of people who are tasked with measuring risk. The differing value base tends to lead to differences in perceptions over the severity and probability of risks, the appropriateness of risk management techniques, and the acceptability or otherwise of risk mitigation measures. Perceptions of risk (including risk identification, assessment and management) can be influenced by a range of factors, including the level of control people feel they have over the degree of risk they face.

Increasingly, the technical/scientific view of risk is being superseded by the consideration of feelings, trust, social equity, values, and ambiguities in determining the risks that are acceptable to the public and those that are not (Cutter, 2003). Ehrlich and Ross (2015) proposed a method to explicitly integrate the technical and social-scientific paradigms into the assessment of significance in Environmental Impact Assessments. Their method separates the prediction of the impact from the acceptability of the impact to stakeholders. It uses what they call ‘subjective informed judgment’ to explicitly consider societal values in significance determinations. Despite their good intentions, we consider their approach is limited in that it is likely to only consider the values of those who have ‘a voice’, i.e. the capacity, willingness and possibility to participate.

The conflation of social risk and business risk in the risk management literature and dominant industry approaches is problematic in that it does not adequately address the problem of potential consequences to project-affected communities when risks are not perceived to result in unacceptable costs to the business (Kemp et al., 2016). SIA is a tool that is intended to consider such consequences (Esteves et al., 2012; Vanclay et al., 2015). Social impacts can be considered as all impacts that affect human wellbeing that derive from the conception and implementation of projects (Vanclay, 2002, 2003; Vanclay et al., 2015). Smyth & Vanclay (2017, p. 73) define ‘wellbeing’ as “an all-encompassing notion that includes having one’s basic human needs met (e.g. adequate food and water), being in good mental and physical health, having the ability to pursue one’s goals and to thrive, feeling connected to and a part of one’s local community and locality, and a general feeling of being satisfied with life”.

We concur with Kemp et al. (2016) that current approaches to risk assessment do not adequately cover the costs to communities who may be living with risks acceptable to the business, such as the social impacts associated with loss of productive land, food and water insecurity, the cost of sourcing alternative land, purchasing food, transporting water, increased conflict, coping with injury and loss of life as an outcome of violence.

The UNGP requires companies to demonstrate due diligence in considering the human rights risks that stem from their activities. Conformance with the UNGP requires that all human rights impacts are effectively identified, avoided and addressed, not only those that present a risk to the business. Human rights impacts include those caused or contributed to by the business as well as those directly linked through business relationships (United Nations, 2011). We suggest that the current preoccupation with business risk is restricting sites in achieving the aspirational goals of their corporate headquarters. Therefore, in this paper we consider how companies can better deliver on their commitments to the *United Nations Guiding Principles on Business and Human Rights* (United Nations, 2011) by adopting a risk assessment approach that gives greater weight to social and human rights impacts.

The dominant approach in risk assessment is to give priority to consequence to the business, which ultimately translates into predicted losses to project Net Present Value (Espinoza and Rojo, 2017). These losses might arise from: stakeholder reaction, including protest; potential delays to the production schedule; additional compensation payouts; fines; costs of proceedings or litigation; repair of damage or destruction to private property or infrastructure; project design modifications and additional works; increased staff time spent on risk and conflict management and public relations; and/or withdrawal of support by financial or political backers (Franks et al., 2014; Hanna et al., 2016b; Vanclay, 2017). There are three underlying flaws with this approach. Firstly, projects might be located where affected people are unable to express their concerns, due to fear of intimidation (e.g. a consequence of living in a repressive political environment) or extreme vulnerability (e.g. from previous displacement, internal armed conflicts, natural disaster, and/or limited access to information and communication). Secondly, a risk that is unacceptable to the community may be acceptable to the project. Thirdly, conformance with the UNGP requires that companies address their human rights impacts irrespective of the consequence of these impacts to the business.

In the remainder of this paper, we address these weaknesses and assist projects to meet the UNGP requirements by providing a method that differentiates social risk from business risk and gives priority to social risk. We position SIA as an instrument for the early identification and improved analysis and management of social risks on an ongoing basis. First, however, we introduce the responsibility of business to address human rights impacts.

3. The responsibility of business to address human rights impacts

Human rights are “inalienable fundamental rights to which a person is inherently entitled simply because she or he is a human being” (Sepúlveda et al., 2004, p. 3). In lay terms, human rights “are widely accepted as being generally agreed values and exist to ensure human dignity and the fulfilment of basic human needs” (van der Ploeg and Vanclay, 2017b, p. 35). They are considered to be: universal and inalienable; interrelated, interdependent and indivisible; with all human rights being equal in status, and all must be equally observed (UNOHCHR, 2016). Equality and non-discrimination, participation and inclusion, and accountability and transparency constitute the key principles underpinning a human rights-based approach. Non-discrimination means that various groups of rights-holders – especially vulnerable people, women, children, Indigenous peoples, and other marginalised groups – require special attention to be able to enjoy their human rights (UNOHCHR, 2016; van der Ploeg and Vanclay, 2017a, 2017b).

With the adoption of the *United Nations Guiding Principles on Business and Human Rights* in 2011, the corporate responsibility to respect human rights was firmly established as an international norm of expected conduct. Essentially, companies must exercise due diligence to identify and address any adverse human rights impacts with which they are involved. Due diligence requires that companies: (1) have a human rights policy and appropriate procedures in place; (2) actively assess their impacts on human rights; (3) integrate the findings of the assessment into their corporate management systems, monitoring and performance tracking processes; and (4) report and communicate about the due diligence measures implemented and their effectiveness (United Nations, 2011, 2012). The adverse impacts that companies are expected to identify and address include not only impacts that the company causes or contributes to, but also any impacts that are directly linked to a project’s operations, products or services through its business relationships. Companies must not be complicit in human rights abuses by business-related third parties, and where they become aware of any human rights impacts caused by these third parties, they must exercise leverage or influence to prevent or minimize those impacts. Companies are expected to provide appropriate avenues for access to remedy for

any human rights abuses with which they are involved. At the project level, this includes having a community grievance mechanism that can effectively address any grievances that are raised by community members. A process of continuous improvement in the way companies manage their human rights impacts is also expected (United Nations, 2011, 2012; Vanclay et al., 2015).

Most if not all social impacts can be understood in human rights terms (Götzmann et al., 2016; van der Ploeg and Vanclay, 2017a, 2017b). Thus, where a project creates social impacts, it may also be in breach of its responsibility to respect human rights. This increases the importance of social impacts and the potential role of SIA in addressing human rights issues.

Principle 12 of the UNGP specifies the minimum standard for human rights observance – those rights expressed in the *International Bill of Human Rights* and the International Labour Organization *Declaration on Fundamental Principles and Rights at Work*. The *International Bill of Human Rights* comprises the *Universal Declaration of Human Rights* (United Nations, 1948), the *International Covenant on Economic, Social and Cultural Rights* (ICESCR) (United Nations, 1966a), and the *International Covenant on Civil and Political Rights* (ICCPR) (United Nations, 1966b). There are also many other human rights documents that cover various specific topics. The UNGP states that companies are expected to consider additional standards depending on the host and home contexts (United Nations, 2011). For example, where Indigenous peoples are present, the *United Nations Declaration on the Rights of Indigenous Peoples* and the principle of free, prior and informed consent will apply (Hanna and Vanclay, 2013; Rodhouse and Vanclay, 2016).

In the human rights discourse, the severity of human rights impacts are generally assessed on the basis of their scale (or gravity), scope (or extent, i.e. the number of people affected), and irremediability (or remediability) (United Nations, 2011, 2012; DIHR, 2016; Götzmann, 2017). Remediability is defined as “the ability to restore those affected to a situation at least the same as, or equivalent to, their situation before the adverse impact” (United Nations, 2012, p. 8). Special attention for vulnerable groups is also a key human rights concern. Given that there is some variation in the terms used, for clarity, we have settled on the terms: gravity, extent, vulnerability, and remediability. For us, gravity (graveness) means how serious an impact is. Extent means the number or proportion of people affected. Vulnerability means the sensitivity of people and groups to change and the extent of their capacity to cope with shock. Remediability is the extent to which the harm from an impact can be rectified.

With the proliferation of models and frameworks to assess human rights impacts, it is beyond the scope of this paper to consider them here. However, van der Ploeg and Vanclay (2017a) provide a quick overview of the leading tools. Some example applications of human rights impact assessment are provided by Salcito et al. (2013, 2014, 2015). While there is debate about the relative merits of standalone versus integrated approaches to the assessment of human rights impacts (Götzmann et al., 2016), our approach strongly advocates for an integrated approach that positions the assessment of potential human rights impacts within existing corporate procedures that address social and environmental impacts.

4. Current frameworks for analysing social impacts

Several frameworks for analysing the social impacts of large projects exist (e.g. DFID, 1999; Slootweg et al., 2001; Rossouw and Malan, 2007; Vanclay et al., 2015; Kirchherr and Charles, 2016; Smyth and Vanclay, 2017). Various standards or guidelines for considering potential social impacts apply to projects as a condition of project financing. Although each financial institution tends to have its own standards and conditions, there is growing alignment. With the utilisation of the International Finance Corporation Performance Standards (IFC, 2012) by the Equator Principles banks, the IFC performance standards have emerged

as the leading standard for social and environmental performance (Smyth et al., 2015; Vanclay, 2017).

Some frameworks focus specifically on the social impacts that arise from project-induced displacement and resettlement (e.g. Cernea, 1997; Downing and Garcia-Downing, 2009). Various frameworks exist for considering human rights impacts (e.g. BSR, 2013; Salcito et al., 2013, 2014; DIHR, 2016; van der Ploeg and Vanclay, 2017a). While the field of biodiversity research has contributed a useful framework for assessing the impacts on the ecosystem services on which communities depend (for example Landsberg et al., 2011, 2013), an over-reliance on this approach would be limited in its ability to understand impacts on society, as the ecosystem services approach ignores the role and interactions between other important aspects of social systems, e.g. land tenure, social networks, conflict, institutions, etc.

The IAIA SIA guidance document (Vanclay et al., 2015) highlighted that different approaches are required for assessing environmental and social risks. While there are overlaps between environmental and social impacts (Slootweg et al., 2001; Vanclay, 2002), social impacts tend to be more complex, as is evident in three main ways (Vanclay, 2012; Vanclay et al., 2015):

- *Social impacts can happen the moment there is a rumour* that something might happen, while environmental impacts tend only to occur when the first sod of soil is turned. Rumour can lead to speculative behaviour of many types, including in-migration or influx (also known as the honey-pot effect). Rumour may also fuel or amplify people's fears and anxieties, whether or not the rumour is true, and whether or not the project actually moves forward. Fear and anxiety are real social impacts that people experience, and they should not be dismissed, even if they do not have a factual basis. People's perceptions represent their view of reality and ‘perceived impacts’ are real impacts and need to be addressed, for example, through improved communication.
- *Social impacts can be created by false expectations* in a community, either by project personnel promising things that they don't deliver on, or through the poor management of expectations and allowing rumours to escalate. Communities can feel cheated when the benefits they expected to receive from a project are not received. This contributes to a lack of trust in the company. This creates business risks in that it could lead to communities reacting in various ways against the company, leading to further loss of trust, production delays, and increased staff time in dealing with conflict.
- *Social impacts are not simple relationships between a single root cause and a single effect*. Social impacts can be direct, indirect and cumulative. Typically, the causal pathway between a project's activities and the experience of impact is a complex web or network of interactions. Immediate impacts lead to various consequences that in turn affect all other aspects of the life, health and wellbeing of the affected individuals and community, including its physical, psychological (mental/emotional), social, economic and spiritual dimensions, and the opportunities that are available to people. Thus, health, education and wellbeing outcomes are always interlinked (Marmot and Wilkinson, 2006). Changes to habitats induced by the project can change the ecology of disease organisms, thus affecting the health of nearby communities. Reduced access to natural resources can result in reduced food security. Household strategies to cope with reduced food security can result in changes in gender roles, loss of cultural identity, school non-completions because children are sent to work, and economic disadvantage. Changes to living arrangements and lifestyles can change exposure to vector organisms, such as mosquitoes, and thus change the transmission patterns of vector-borne diseases. A change in work patterns can lead to health effects, not only to the worker, but also to the worker's spouse and children. Sleep disorders, depression, alcohol and substance abuse, and family violence are all associated with shiftwork and long roster rotations (Petkova et al., 2009).

Fig. 1. The social factors that influence the relationship between project activities and the social and human rights impacts experienced by affected communities.
Source: this paper

Fig. 1 is an example of an analytical framework from a psychosocial perspective that captures this complexity. The framework shows how social impacts are moderated by a set of social factors that affect how people experience impacts and perceive the project and the project's social licence to operate (Marques et al., 2015; Lima et al., 2011, 2012; Thomson and Boutilier, 2011; Dare et al., 2014; Moffat and Zhang, 2014; Jijelava and Vancly, 2017). These factors can be arranged into three groupings: (i) people's attitudes towards the project activity (e.g. perceived risk, legitimacy); (ii) people's attitudes towards the project proponent (e.g. perceived competence, credibility, trustworthiness); and (iii) variables relating to the geographic context (e.g. local identity, place attachment, reliance of people on that context for their livelihood). The social impacts include changes to: the resources people rely upon; their mental and physical health; and to their beliefs. The changes to their beliefs result in subsequent changes in their cognitions (e.g., approval or disapproval of the project), feelings (e.g., anxiety, stress), and actual behaviours (e.g., actual contestation or support, coping strategies).

Consistent with the language of program logic and program evaluation (Vancly, 2015b), in Fig. 1 we differentiate between impacts and outcomes. Outcomes are the ultimate consequences in terms of the goals that are intended or desired. Most social interventions seek to improve community health and wellbeing, increase resilience, and reduce vulnerability (Imperiale and Vancly, 2016). Outcomes are what eventuate. Because there are often multiple contributing factors including extraneous factors, in program evaluation the term 'impact' tends to be used to refer to that part of the outcome that can be attributable to the intervention. In the field of SIA and EIA, however, impact refers to the consequence of the project and its ancillary activities on the environment and local people: "a social impact is considered to be something that is experienced or felt in either a perceptual (cognitive) or a corporeal (bodily, physical) sense, at any level, for example at the level of an individual person, an economic unit (family/household), a social group (circle of friends), a workplace (a company or government agency), or by community/society generally" (Vancly et al., 2015, p. 2).

The IAIA guidance on SIA (Vancly et al., 2015) indicates that the systematic consideration of social impacts in impact assessment has the potential to assist projects by:

- Ensuring the achievement of benefits and the avoidance of harm. Projects can create opportunities and benefits for people, but at the same time they can also create negative effects. Typically, projects are never uniformly good or bad, and there is an unequal distribution of costs and benefits within nearby communities. People can

benefit and be harmed at the same time. Good management is needed to ensure that the benefits of projects are maximised and the negative impacts are avoided or minimised on an ongoing basis from project concept through to after the life of the project.

- Implementing proactive measures to avoid conflicts, such as the early engagement of stakeholders in impact identification and significance assessment. Involving communities in the impact assessment process and ongoing monitoring contributes to building positive, long-term relationships that create a willingness to work together to address issues as they arise. Community conflict often arises from the relationship history between a project proponent and a community, or sometimes can arise from the legacy of impacts and broken promises by previous operators.
- Identifying possibilities to enhance community wellbeing and provide sustainable benefits. Potential opportunities to address through the community investment plan can include local employment, local procurement, and company contributions to education, health, arts and culture, capacity building, environment, etc.

Building on IAIA's SIA guidance document (Vancly et al., 2015), this paper further considers the concept of risk, differentiating social risk from business risk, in order to enable conformance with the UNGP. A key presumption is that respecting human rights requires that consequences to the affected communities take precedence over consequences to the business.

5. Adapting social impact assessment to also consider human rights

This section proposes practical adaptations to the activities typically undertaken as part of SIA and ongoing operational planning processes in order to integrate stronger consideration of social and human rights impacts. While we intend the approach to be applicable to all projects, it was initially developed for a mining project. The approach builds on the 'plan-do-check-act' method generally utilised by many large-scale international mining companies every three to five years at the site level, as is articulated in their policies and standards (for example, Anglo American, BHP Billiton, Goldcorp, Rio Tinto, South32). Companies may use different terms for the activities in the SIA cycle (Fig. 2), but essentially the activities used have the same purposes: community profiling, issues scoping, baseline indicator selection, assessment, developing mitigation and enhancement strategies, and updating management plans. Ongoing engagement and reporting back to the communities is implicit in every step.

Fig. 2. Steps in the typical social impact assessment cycle showing the social elements.
Source: this paper

5.1. Adapting the community profile

The first step in the proposed approach involves gaining a good understanding of the communities actually or potentially affected by the project. This is achieved by preparing a Community Profile. Recognising that the social environment is dynamic, and the adaptive capacities and priorities of affected people change over time, a Community Profile should be updated every three to five years.

We recommend using the Social Framework (Smyth and Vanclay, 2017) to check whether the various components that influence the wellbeing of a community have been adequately described in a community profile. The eight elements of the Social Framework are: People's Capacities, Abilities & Freedoms; Community & Political Context; Livelihood Assets & Activities; Culture & Religion; Infrastructure & Services; Housing & Business Structures; Land and Natural Resources; and the Living Environment. These components influence the capacity of a community to take up the opportunities and/or to recover from the negative impacts associated with planned activities over the life of the project.

One of the objectives of community profiling is to identify vulnerability, i.e. to understand the circumstances that put people and places at risk, and the conditions that reduce the ability of people and places to respond positively to impacts. The literature on social vulnerability (e.g. Cutter, 2003) is helpful in identifying risk and hazard exposure, resilience, differential susceptibility, and recovery/mitigation.

We propose that the Community Profile should also identify the human rights setting for the project. Table 1 can serve as a prompt to identify the human rights topics that should be included in the scoping step that follows. Table 1 lists examples of research questions to address in the Community Profile that relate to the various components in the Social Framework and links these to example sources of specific international human rights legal instruments applicable for that topic (based on a number of sources including DIHR and IPIECA, 2013; DIHR, 2016; van der Ploeg and Vanclay, 2017b).

5.2. Adapting the scoping

Social issues scoping is the process of identifying the areas of concern, any potential harmful impacts and opportunities for benefits, and which stakeholder groups are likely to be affected by, or interested in, these impacts and opportunities (Vanclay et al., 2015). Scoping is a preliminary step that produces an interim list of issues to be considered that are later properly analysed in the Assessment step to determine whether an impact is likely to occur and how the impact should be managed. Inputs into scoping can come from a range of sources, including a desktop review of unresolved and recurring grievances, similar cases elsewhere, expert judgment, and suggestions from local people.

Scoping should be an open process to ensure that all possible impacts are considered. It must be undertaken for each of the major

Table 1

Indicative questions to assist in understanding the human rights context of an existing or potential project.

Source: drawing on DIHR, 2016 and Smyth and Vanclay, 2017.

Social Framework component	Example questions to consider in developing a Community Profile	Example human rights and relevant legal instruments ^a
The Living Environment	<p>Is there a recent history of natural disasters or of impacts from previous projects?</p> <p>Is the project already affecting the existing water supply for personal consumption and production?</p> <p>Is the project already affecting quantity, quality or access to forests, pastures, fishing or hunting grounds the people depend on for subsistence?</p>	<p>Right to health (UDHR 25, ICESCR 12)</p> <p>Right to an adequate standard of living (UDHR 25, ICESCR 11)</p> <p>Right to adequate housing (UDHR 25, ICESCR 11)</p> <p>Right to food (UDHR 25, ICESCR 11)</p> <p>Right to water (UDHR 25, ICESCR 11)</p> <p>Right to participate in cultural life (UDHR 15, ICCPR 27, ICESCR 15)</p>
People's Capacities, Abilities & Freedoms	<p><i>Discrimination against vulnerable groups, women and Indigenous peoples</i></p> <p>Are Indigenous peoples, ethnic minorities or persons who have been previously displaced currently affected by the project?</p> <p>What are the key gender issues and what is the level of gender (in) equality?</p> <p>Have vulnerable individuals and groups in the specific project context been identified and have their rights and needs been addressed?</p> <p>Is there a history of repression or reprisal against certain groups in the project context, and if so has this been addressed?</p> <p><i>Child labour</i></p> <p>Does child labour exist in this community and/or are there economic or social pressures that could enable it to occur?</p> <p>Does the government agency that is tasked with monitoring labour practices have the capacity to identify and address instances of child labour?</p> <p>Do the company and its suppliers comply with minimum age standards?</p> <p><i>Forced labour</i></p> <p>Does forced labour exist in this community and/or are there economic or social pressures that could enable it to occur?</p> <p>Does the government agency that is tasked with monitoring labour practices have the capacity to identify and address instances of forced labour?</p> <p>What are the current working and contractual conditions of the project and its suppliers/sub-contractors?</p> <p><i>Trade unions</i></p> <p>Is there a tradition and legal framework of labour unions and collective bargaining in the country?</p> <p>If independent trade unions are either discouraged or restricted in the country, does the company enable workers to gather independently to discuss work-related problems?</p> <p><i>Working conditions</i></p> <p>Does the company ensure that employment-related decisions are based on relevant and objective criteria?</p>	<p>Right to non-discrimination (UDHR 2, ICCPR 2, ICESCR 2)</p> <p>Right to equality before the law (UDHR 7, ICCPR 26)</p> <p>Right to freedom of thought, conscience and religion (UDHR 18, ICCPR 18)</p> <p>Right to participate in cultural life (UDHR 15, ICCPR 27, ICESCR 15)</p> <p>Right of the child to be protected from work that threatens his or her health, education or development (UDHR 25, ICESCR 10)</p> <p>Right to freedom from the worst forms of child labour (UDHR 25, ICESCR 10)</p> <p>Right to education (UDHR 26, ICESCR 10)</p> <p>Right to freedom from forced labour and servitude (UDHR 4, ICCPR 8)</p> <p>Right to freedom from torture and other cruel, inhuman or degrading treatment or punishment (UDHR 5, ICCPR 7)</p> <p>Right to freedom of movement (UDHR 13, ICCPR 12)</p> <p>Right to freedom of association and collective bargaining (UDHR 20, ICCPR 22, 23, ICESCR 8)</p> <p>Right to freedom of assembly (UDHR 20 ICCPR 21)</p> <p>Right to work and to just and favourable conditions of work (UDHR 23, 24, ICESCR 7)</p> <p>Right to an adequate standard of living (UDHR 25, ICESCR 11)</p> <p>Right to equal pay for equal work (UDHR 23, ICESCR 7)</p> <p>Right to privacy (UDHR 12, ICCPR 17)</p>
Community & Political Context	<p><i>Security and conflict</i></p> <p>What types of bribery and corruption risks are present?</p> <p>Is there a history of conflict, including human rights-related conflict, related to the sector or in the same area of the project?</p> <p>Are there recent cases of inappropriate use of force by police and military in the area?</p> <p>If the project uses private and/or public security are these managed in accordance with the Voluntary Principles on Security and Human Rights?</p> <p><i>Consultation and engagement</i></p> <p>Is FPIC required, due to the presence of Indigenous peoples that have specific collective and group rights?</p> <p>Do the governance structures enable people to exercise their voice?</p> <p>Is the project adequately providing access to information?</p> <p><i>Access to remedy</i></p> <p>Are there barriers to rights-holders in accessing remedy, judicial and non-judicial?</p>	<p>Right to life, liberty and security of person (including freedom from arbitrary arrest, detention or exile) (UDHR 3, 9, ICCPR 6)</p> <p>Right to health (UDHR 25, ICESCR 12)</p> <p>Right to freedom of association and collective bargaining (UDHR 20, ICCPR 22, 23, ICESCR 8)</p> <p>Right to freedom of assembly (UDHR 20 ICCPR 21)</p> <p>Right to freedom from torture and other cruel, inhuman or degrading treatment or punishment (UDHR 5, ICESCR 7)</p> <p>Right to access to information (UDHR 19, ICCPR 19)</p> <p>Rights of Indigenous Peoples (ILO 169, UNDRIP)</p> <p>Free, prior and informed consent (ILO 169, UNDRIP)</p> <p>Right to remedy (UDHR 8, ICCPR 2)</p>
Livelihood Assets & Activities	<p>Have affected communities been physically or economically displaced by the project in the past, and which livelihoods are still impacted? If so for which rights-holders?</p>	<p>Right to an adequate standard of living (UDHR 25, ICESCR 11)</p> <p>Right to education (UDHR 26, ICESCR 10)</p> <p>Right to food (UDHR 25, ICESCR 11)</p> <p>Right to adequate housing (UDHR 25, ICESCR 11)</p> <p>Right to water (UDHR 25, ICESCR 11)</p> <p>Right to participate in cultural life (UDHR 15, ICCPR 27, ICESCR 15)</p>
Culture & Religion	<p>Is there a history of discrimination against religious minorities, or conflict based on race, ethnicity or religion?</p> <p>How might the project impact cultural heritage sites, natural resources or monuments of religious or spiritual value?</p>	

(continued on next page)

Table 1 (continued)

Social Framework component	Example questions to consider in developing a Community Profile	Example human rights and relevant legal instruments ^a
Infrastructure & Services	What is the general status of public health, education and other public services? Is there any recognisable group in the community with limited access to these services? Why?	Right to an adequate standard of living (UDHR 25, ICESCR 11) Right to education (UDHR 26, ICESCR 10) Right to health (UDHR 25, ICESCR 12)
Housing & Business Structures	Have affected communities been physically displaced by the project in the past, and are some still impacted? If so which rights-holders?	Right to adequate standard of living (UDHR 25, ICESCR 11) Right to own property (UDHR 17) Right to housing (UDHR 25, ICESCR 11) Right to water (UDHR 25, ICESCR 11)
Land and Natural Resources	What land tenure systems are in place (e.g. formal, informal, land titling and registration, customary ownership) and how do they function? Are there any concerns related to the availability of adequate and sufficient replacement land and/or resources? Is the project currently affecting access to land and ecosystem services? For which rights-holders?	Right to adequate standard of living (UDHR 25, ICESCR 11) Right to own property (UDHR 17) Right to freedom of movement (UDHR 13, ICCPR 12) Right to food (UDHR 25, ICESCR 11) Right to water (UDHR 25, ICESCR 11)

Note that the wording of the questions is given for an existing project and would need to be modified for a potential project.

^a Key: UDHR = Universal Declaration of Human Rights; UNDRIP = United Nations Declaration on the Rights of Indigenous Peoples; ICCPR = International Covenant on Civil and Political Rights; ICESCR = International Covenant on Economic, Social and Cultural Rights.

project activities. Applying the Social Framework can be useful to ensure that the scoping process is comprehensive. This can be done by asking the following questions for each category of the Social Framework:

- Over the past three years, have grievances or concerns arisen in relation to this topic or the project?
- Have impacts (or lack of benefits) relating to this component been a source of conflict for the project, or other projects in the region?
- How might this planned project activity trigger change in this component of wellbeing over the next three years?
- Who might benefit from the change? How?
- Who might be adversely affected by the change? How?
- Is the change likely to affect a human right (as listed under 'Example human rights and relevant legal instruments' in Table 1)?
- Who will be most vulnerable to the change?

The scoping step is critical in supporting a project's commitment to respecting human rights and distinguishing between social risk and business risk. The conventional industry approach to analysing stakeholders is to prioritise these based on their power or influence. Vulnerable and marginalised groups tend to be left out because they lack power or influence. However, a human rights-based approach to impact assessment considers all affected people as rights-holders with legal entitlements. If the scoping exercise identifies that the human rights of any identified individuals or groups are potentially affected, it follows that the issue should be carried through to the subsequent steps of impact assessment and mitigation & enhancement. In situations where people's human rights are affected, an additional scoping question applies: Who are the duty-bearers (e.g. government agencies) with duties and responsibilities for the affected human rights and do they have capacity to fulfil their responsibilities?

5.3. Adapting the social baseline indicator selection

The baseline is a set of indicators and accompanying values for the affected community that have been carefully chosen to represent the key issues identified in the scoping step (Vanclay et al., 2015). The baseline provides a reference point against which to measure the impacts of the project over time, and to determine the adequacy of mitigation and enhancement measures. For some social indicators, baseline data can be sourced from pre-existing data (e.g. census data), while for many indicators existing data may be unavailable, at the wrong scale, or too dated to be of much use. Adequate baselines require careful thinking about appropriate indicators for the key issues, and data collection from either primary or secondary sources.

For most indicators, appropriate benchmarks and target values will need to be determined. A benchmark value refers to an external point of comparison, such as an international standard (such as a World Health Organisation recommendation), national sector regulations and targets, industry norms, or a similar situation elsewhere such as another project or competitor. Once a benchmark is determined, a target value can be set. The target refers to what is hoped to be achieved, which may be, but does not necessarily have to be the same as the benchmark value.

The Danish Institute for Human Rights has proposed a generic framework, the AAAQ framework, that enables the setting of benchmarks and targets for each human right (Holst Jensen et al., 2014). By establishing what availability, accessibility, acceptability and quality mean in specific situations, criteria to measure the fulfilment or enjoyment of a human right can be set. An example applied to the right to water is given in Table 2.

Baseline indicators should be reviewed each time the scoping is updated. It might be necessary to add indicators for new issues that might have arisen. Indicators should be selected to allow for monitoring over the life of the project and to compare against the pre-project state.

Table 2

Generic indicators for the right to water.

Source: modified from Holst Jensen et al., 2014 pp. 36–37

Criteria	Generic indicator
Availability	
Sufficient water	Quantity of water used per person per day
Continuous supply	Number of disconnections and/or incidents of unavailability of water over a given period of time
Accessibility	
Physical	Total collection time, including waiting time Number of reports of threats/assaults Number of people/households per water outlet by geographical location
Economic	Total (direct + indirect) cost as a proportion of income
Non-discrimination	Disaggregation of indicators of accessibility (as in this table) according to the prohibited grounds of discrimination (sex, marital status, religious beliefs, etc.)
Information	All should be able to seek, receive and impart information relating to water issues
Acceptability	
Consumer	Number of complaints about colour, odour, taste
Cultural	Selection of indicator should be culturally dependent
Quality	
Safe water/water quality	As per WHO guidelines Improved vs. unimproved water source as primary water source
Waterborne diseases	Prevalence of waterborne diseases

5.4. Adapting the assessment

The scoping and baseline indicator selection steps provide an initial list of issues to be analysed, and indicators that guide the analysis. The assessment step is where the actual analysis is undertaken to determine what is really likely to happen as a result of the project activities and whether potential impacts will actually happen. The assessment of impacts needs to consider any planned changes that may happen to the project in the next three to five year planning period (e.g. mine expansion), as well as consider other projects that may develop in the same area that might contribute to cumulative impacts.

In the assessment step, consideration is given to how the various identified groups will likely respond to the impacts. Because the different groups of people will be affected in different ways, they will likely respond in differing ways to the impacts. Understanding the social response is necessary to consider the direct and indirect impacts on the community (i.e. social risk). There are many possible responses individuals and communities might take in reaction to a particular impact, depending on the way they experience the impact and whether or not they consider it to be fair and reasonable. Responses can range from acceptance and/or adaptation of their life to the changed situation, to strong objection and protest.

On investigation, some deeply-held concerns of local people may not be substantiated by the evidence. However, these issues are legitimate concerns of local women and men, and affect their feelings and behaviours and the way they relate to the project. Therefore, careful engagement needs to occur to ensure that the people who hold these concerns feel that their concerns have been seriously considered. The social scientists with the project and/or the integrated impact assessment team should identify these concerns and work closely with local people to ensure their concerns are adequately addressed.

Assessing social impacts involves four steps, described in detail below:

1. Predict social changes and impacts that may result from each project activity, relative to the baseline indicator;
2. Determine significance of the predicted changes;
3. Estimate the likelihood of the predicted consequences occurring and assign a social risk category;
4. Establish priorities for action.

5.4.1. STEP 1: predict social changes and social impacts that may result from each project activity, relative to the baseline indicator

There are three main techniques generally used to predict potential impacts (Franks et al., 2010). Mindmaps are used to understand and illustrate the pathways between the root causes of an impact and the people experiencing impacts. Scenario analysis is used to compare different alternatives for project design and how they affect the baseline indicators. Modelling is used to predict various outcomes, for example to make population projections. This is usually done for the different scenarios of project design.

With all methods, stakeholder input should be used to validate the prediction of impacts. This ensures that the prediction step considers not only project-related impacts, but also cumulative impacts. Table 3 illustrates why the assessment step is so important. Drawing on Franks (2011) and Spohr (2016), Table 3 lists some negative social impacts that are frequently observed at different stages of a mining project. Typically, there are complex pathways between each mine activity and the resultant harmful impacts.

5.4.2. STEP 2: determine significance

After the impacts have been analysed in the prediction step (Step 1), it is necessary to prioritise them for action. This involves classifying each impact on the basis of significance criteria, and then assigning an anticipated likelihood of the consequence happening (e.g. almost certain, likely, possible, unlikely, or rarely). Table 4 offers a set of criteria

for determining the significance of each social impact. Consistently with the UNGP, the proposed criteria take into account the dimensions of gravity, extent, vulnerability and remediability.

5.4.3. STEP 3: estimate the likelihood of the predicted consequences occurring and assign social risk category

Estimating the likelihood of each social impact occurring is done by using the scale: almost certain, likely, possible, unlikely, rarely. This is typically done by expert judgment. However, taking a human rights-based approach and shifting the focus more firmly on social and human rights risk requires that such analysis is supported and verified via a participatory process with impacted rights-holders. For example, an affected community can provide information on who is impacted in the event of water pollution, how and to which extent they are impacted. However, expert judgment is needed to estimate how often water pollution is likely to occur.

Once likelihood is estimated, a category of social risk is assigned using the standard risk ratings (e.g. Low, Medium, High or Extreme) as shown in Fig. 3.

5.4.4. STEP 4: establish priorities for action

Upon completion of the risk assessment, priorities for action are established. We propose the following hierarchy, which considers the consequences to affected groups instead of consequence to the business:

- *Priority 1:* All social impacts with high or extreme risk to the identified group
- *Priority 2:* All other social impacts with severe or major consequences to the identified group irrespective of the predicted likelihood
- *Priority 3:* All remaining social impacts with medium risk to the identified group
- *Priority 4:* All remaining low risk social impacts should be monitored to ensure they do not escalate

The steps above should be carried out at least twice: prior to mitigation actions have been decided and again after the actions have been put in place (in other words, assuming the desired state). Ongoing management plans are developed based on an assessment of residual impacts. Residual impacts are those impacts that still remain after mitigation action has been taken and still need to be managed. Box 1 provides an example application of Steps 3 and 4.

5.5. Adapting the mitigation and enhancement measures

Many social impacts can be mitigated by design of project layout and processes. For example, deciding to reduce the project footprint can considerably reduce impacts. The precise location of the tailings dam, the workers camp, or the routing of a road, railway line, pipeline or power line, can be very important in terms of the extent of social impacts created or mitigated. A few hundred metres can result in a huge difference to vibration and noise levels, as well as to aesthetics.

Community participation in identifying mitigation options is part of the mitigation strategy in itself (Vancley et al., 2015). In the case of human right impacts, the identification of actions to address the impacts should involve both the community rights-holders who are impacted as well as relevant duty-bearers and other relevant stakeholders (UNGP Principle 19). This leads to an awareness of the changes that might arise, and therefore to a reduction of fear and uncertainty. When people feel that they have been involved and listened to, they are more likely to accept some of the social impacts. In contrast, not to consult them about the major issues that will affect their lives will cause anger and resentment, and potentially protest actions. Visual aids such as maps, simulations and models can be used to explain different alternatives to the impacted community.

If Priorities 1 and 2 cannot be mitigated to such an extent that they

Table 3

Examples of potential negative social impacts associated with different mine phases.

Source: this paper, drawing on [Franks \(2011\)](#), [Spohr \(2016\)](#) and using the categories of the Social Framework ([Smyth and Vanclay, 2017](#)).

Phase	Mining activities	Frequently occurring harmful social impacts
Exploration	Early stage: geophysical surveys, prospecting and geological mapping, geochemical surveys, drilling core samples, and excavating trenches. Advanced stage: small-scale underground or open pit mine workings, removal of larger amount of rock for bulk sampling, and additional drilling. Feasibility stage: preliminary planning of mine layout, ore processing design, estimating the cost of developing and operating a mine.	<ul style="list-style-type: none"> ● <i>People's Capacities, Abilities & Freedoms</i>: fear and anxiety, depression, expectations of benefits, sexual harassment, prostitution, infectious and vector borne diseases ● <i>Community and Political Context</i>: abuses by security personnel, social disorder in camps, suppression of demonstrations, targeting of activists ● <i>Livelihood Assets & Activities, Housing & Business Structures, Land & Natural Resources</i>: lack of access to resources for livelihoods from physical and economic displacement, impacts to valued ecosystems services (water, hunting and fishing grounds, pastures, forest products and regulating services) ● <i>Culture & Religion</i>: loss of land and territory affecting beliefs, customs, traditions and culture of Indigenous groups, loss of sacred sites, relics and artefacts essential to Indigenous cultures
Construction	Area clearing (including removal of vegetation, stripping and stockpiling of overburden for reclamation). Construction of mine and ore processing facilities, waste management areas, other project infrastructure, underground or surface mine workings to directly access the ore body. Other infrastructure may include: transportation facilities; roads to the project; on-project roads; and in some cases an airstrip, rail line or port facility; ore handling and processing facilities; mine waste disposal facilities; industrial water supply and wastewater treatment systems; power infrastructure, including power distribution system; and any on-project generation facilities; shops, offices, warehouses, accommodation facilities; fuel supply and storage; vehicle storage and maintenance facilities; explosives storage facility; potable water supply, distribution and treatment system; sewage and waste disposal (including incinerators); landfill and land farm to remediate contaminated land.	<ul style="list-style-type: none"> ● <i>Living Environment</i>: noise, dust from building of roads and facilities, vibration from blasting ● <i>People's Capacities, Abilities & Freedoms</i>: diseases, injury from construction activities and vehicle accidents and spills, health impacts from alcohol and substance abuse, low perceived control, pollution, interruption to traditional food supply, disproportionate experience of impact and marginalization of vulnerable groups (e.g., women, disabled, aged, ethnic minorities, Indigenous, and young), lack of equity in participation and employment, sexual harassment, sexually-transmitted diseases ● <i>Community and Political Context</i>: conflict and tensions between social groups due to in-migration, lack of social inclusion and growth of towns; corruption, domestic violence, sexual and gender-based violence, substance abuse and trafficking, prostitution, change in social norms, rapid pace of change for impacted communities, abuses by security personnel, social disorder in camps, suppression of demonstrations, targeting of activists ● <i>Livelihood Assets & Activities, Housing & Business Structures, Land & Natural Resources</i>: physical and economic displacements, loss of land and territory affecting beliefs, customs, traditions and culture of Indigenous groups, loss of sacred projects, relics and artefacts essential to Indigenous cultures; impacts to valued ecosystem services (water, hunting and fishing grounds, pastures, forest products and regulating services) ● <i>Culture & Religion</i>: change in traditional family roles, changing production and employment base, effect of cash economy, reduced participation in civil society, weakened community cohesion, sense of place, community leadership, damage to cultural heritage ● <i>Infrastructure & Services</i>: Demands on and investment in housing, skills (shortages and staff retention), childcare, health, education & training, lack of resources or basic goods due to population influx, or local inflation ● <i>Land & Natural Resources</i>: conflict over water resources ● <i>Living Environment, People's Capacities, Abilities & Freedoms, Livelihood Assets & Activities, Land & Natural Resources</i>: <ul style="list-style-type: none"> ○ damage to ecosystems services due to water and soil contamination from mercury or cyanide used in mineral processing, mine water, and seepage, spillage or collapse of tailings storage facilities, acid mine drainage when sulphide minerals are exposed to oxygen and water; ○ water extraction for mine draining or production can result in damaging of aquifers and lowering groundwater tables, drying up springs and wells needed for irrigation or for livestock and pastoralism and permanently damage fragile ecosystems services ○ ore extraction and processing plants create dust and particulate matter, affect visibility and respiration, and pollute local streams, vegetation and productive lands ○ property damage, resettlement, water contamination, fatalities caused by tailings dam failures, destabilization of the area around the mine through deforestation and poor mine construction
Operations	Ore extraction (e.g. by open pit or underground mining), processing and residue management. Valuable minerals are separated from gangue (material of no economic value) through milling and concentration. Ore processing to extract the valuable minerals includes crushing, grinding and chemical or physical separation. Physical separation is done by the use of gravity, magnetic or flotation. Chemical separation includes heap-leaching, in-situ leaching or tank-leaching with chemicals, e.g. alkaline cyanide solutions. Leach solutions are collected and pumped to the processing plant for re-use. Waste facilities are designed to control surface drainage to prevent leakage, erosion, seepage.	
Closure	Shutting down, decommissioning, remediation/reclamation and post-closure. Mine reclamation aims to return the land and watercourses to an acceptable standard, ensuring landforms and structures are stable. Reclamation involves removing hazardous materials, reshaping the land, restoring topsoil, and planting native grasses, trees, or ground cover. Post-closure includes monitoring programs to assess the effectiveness of the reclamation and identify corrective action. Long-term care and maintenance might also be required, such as ongoing treatment of mine discharge water, periodic monitoring, and maintenance of tailings containment structures.	<ul style="list-style-type: none"> ● <i>Living Environment</i>: dried-out tailings ponds lower air quality around abandoned mines and create detrimental effects on local agricultural production ● <i>People's Capacities, Abilities & Freedoms</i>: hazards from mine openings, abandoned infrastructure, and subsidence caused by the collapse of underground mine voids or entries, tailings dam failures; destabilization of the area around the mine through deforestation and poor mine construction ● <i>Community and Political Context</i>: weakened sense of community from out-migration, conflict and tensions between social groups over future land use ● <i>Livelihood Assets & Activities, Infrastructure & Services</i>: reduced income from decline of towns and economic activity; lower local agricultural production from dried out tailings ponds ● <i>Infrastructure & Services</i>: Changes to investment in housing, health, education, and other essential services

Table 4
Tool to determine the significance of a negative social impact to the community.
Source: this paper

STEP 2a: for each impact, select a level for each of the four significance criteria		
Criteria	Description of Level	Level
Gravity	Impact will cause death or adverse health effects that could lead significant reduction in quality of life and/or longevity; and/or continued exposure is generally likely to lead to long term limiting illness or disability.	G1
	Infringement of access to: <ul style="list-style-type: none"> • basic life necessities (including education, livelihood, etc.); and/or • cultural, economic, natural or social infrastructure/assets that have been identified as highly valued by identified groups or subject matter experts in the scoping and assessment steps of the impact assessment; and/or • ecosystem services identified as priority to livelihoods, health, safety or culture in scoping and assessment steps of the impact assessment process. 	G2
Extent	All other impacts > 1000 people or > 50% of identifiable group 100–1000 people or 10–50% of identifiable group < 100 people or < 10% of identifiable group	G3 E1 E2 E3 V1
Vulnerability	Will impact vulnerable people (as a group) or the entire community if the community is vulnerable to this impact because of recent trends or events (e.g. conflict, natural disasters, cumulative impacts)	V2
Remediability	Will impact other people who are not necessarily considered vulnerable in the given context	R1
	Difficult – complex technical requirements, little acceptance of remediation by the identified group, low capacity of implementation partner, no viable replacement for loss (e.g. resources, ecosystems services, cultural heritage)	R2
	Moderate – less complex technical requirements, acceptance by the identified group, implementation partner can deliver with some capacity development Easy – simple technical requirements, acceptance by the identified group, implementation partner has capacity to deliver	R3
STEP 2b: Use the level selections above to determine the consequence category		
Consequence category		Specification of conditions for assigning consequence category
Severe		G1 (regardless of any other criteria), or G2 and V1 and R1/R2 (regardless of extent)
Major		G2 and V1 and R3 (regardless of extent), or G2 and V2 and E1/E2 and R1/R2
Moderate		G2 and V2 and E3 (regardless of remediability), G3 and V1 (regardless of extent and remediability) or G3 and E1/E2 and R1/R2 (regardless of vulnerability)
Minor		G3 and E1/E2 and V2 and R3
Insignificant		G3 and E3 and V2 and R3

Fig. 3. Indicative risk matrix.
Source: this paper

can be re-assigned with a Priority 3 or 4 status, the most UNGP-conforming management decision is not to proceed with the project design under assessment. Where mitigations are designed, coordination with local authorities and service providers is important. This may require an assessment of the capacity of these local institutions to fulfil their mandate (e.g. master planning for influx management, drug and alcohol abuse prevention services, preservation of archaeological artefacts), and a corresponding decision on the role that the company will play in building institutional capacity.

5.6. Adapting the management plans

Once the key impacts and risks are prioritised, the next activity involves updating the relevant management plans within a project, e.g. environmental management plan, livelihoods restoration plan, stakeholder engagement plan, community health & safety plan. They need to be updated in relation to the required mitigation actions, responsible person(s) for carrying out the action, and timeframes for completion. Amongst other things, the management plans describe how monitoring will be carried out for each identified residual social risk, including the desired outcome for the social risk, the monitoring method, responsibility for monitoring, and frequency and timing of monitoring. The management plans also include key performance indicators (KPIs) at three levels:

- attainment of the desired outcome for the social risk;
- completion of specific action plans and 12 month operational commitments; and
- adequate response to community concerns as they arise through the site's grievance mechanism and adaptive management.

It may be necessary to establish, review and/or update governance arrangements to reflect the changes to the management plans. These arrangements may include, for example, a community monitoring panel or an Impact and Benefits Agreement (IBA). IBAs are negotiated agreements between project developers, affected communities, and

sometimes other relevant stakeholders such as government parties. Agreements typically describe the likely residual impacts, provisions for how these are to be addressed, commitments related to benefits, and governance arrangements for managing the relationship between the parties.

6. Conclusion

We highlighted the weaknesses inherent in the conventional approach to social risk assessment, which tends to consider consequence to the business rather than to impacted communities. We noted that conformance with the *United Nations Guiding Principles on Business and Human Rights* requires that consequence to affected communities takes precedence over consequence to companies. Careful consideration of human rights is helpful to companies, especially in terms of deepening their analysis of social impacts and identifying better mitigation measures. However, in some instances where it is not possible to avoid impeding the enjoyment of a community's human rights through alternative project design options and other measures, it might be the case that the appropriate UNGP-conforming management decision would be to not proceed with the project or ancillary activity under assessment. Unfortunately, the lack of documented cases where projects have not proceeded for this reason suggests that human rights are not currently being given proper consideration in the assessment and regulation of projects.

We demonstrated how social impact assessment can serve as an instrument that actively facilitates the early identification, improved analysis, and ongoing management of social and human rights risks when it is integrated into a project's plan-do-check-act management systems. The practical adaptations we suggested to each step of the SIA process mean that project sites should now be able to identify their human rights risks, and thereby inform their risk assessments and adaptive management processes. Specifically, we have offered tools to systematically consider human rights issues in community profiling, scoping, and baseline indicator selection. Using the dimensions of gravity, extent, vulnerability and remediability, we provided a set of

Box 1**Example application of Steps 3 and 4.**

The application of Steps 3 and 4 can be illustrated using our example multi-national mining company. Previously, the dominant corporate risk management approach in this company had been to assess social risks only from the perspective of consequences to the business in terms of predicted losses to project cash flow from stakeholder reaction. The company applied the tool in Table 4 to assess the significance of negative social impacts to the community. To make a comparison, they also assessed the consequence of each negative social impact to the business. In order to raise awareness and facilitate a shift towards a more human rights-sensitive practice, the corporate risk management unit worked with sites to develop a combined community-business risk matrix (see Fig. 4). Each identified social impact was positioned against two axes: social risk and business risk. As illustrated in Fig. 4, one mine site's assessment yielded six impact areas that presented some level of risk to the community and to the company. However, for all six impact areas, the risk to the community was assessed higher than the risk to the company:

- Impact to human health due to air quality (dust), generating complaints to both the company and government and resulting in fines
- Community health and safety impacts due to company staff and contractors speeding on main road/bridge, generating complaints to the company and resulting in increased staff management time and security costs
- Increased alcohol and drug usage in the community due to increased economic resources, generating staff leaving/avoiding work and resulting in increased staff turnover and absenteeism
- Impact to the natural resources used by the community due to water toxicity, generating petitions/complaints to the government and company, resulting in fines
- Sleep disruption caused by noise from the mine site, generating litigation and resulting in settlement costs
- Community safety issues due to trespassing on the mine concession land, generating litigation action and resulting in reputational damage

The analysis was used to advocate to senior management for the mitigation of the six impact areas and for an adjustment to the corporate risk assessment methodology to systematically consider risks to communities.

Fig. 4. Example of a combined community-business risk matrix for a specific project.
Source: this paper

criteria to assess the significance of negative social impacts, taking into account impacts on human rights. We recommend that these criteria be used as the basis for determining social risk and prioritising management actions.

Although we developed our approach using an example from the mining sector, the adaptations to SIA we have proposed will be applicable to all other sectors, including conventional and renewable energy, power transmission, roads and infrastructure, and agribusiness. However, we note that there are some limitations to our approach, primarily in that it only considers the potential harms to human rights and the negative social impacts. The topic of potential positive impacts and a project's role in contributing to the progressive realisation of human rights in impacted communities is also worthy of further examination.

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References

- Aven, T., Renn, O., 2009. On risk defined as an event where the outcome is uncertain. *J. Risk Res.* 12 (1), 1–11.
- Barclay, M.A., Franks, D., Pattenden, C., 2009. Risk Communication: A Framework for Technology Development and Implementation in the Mining and Minerals Processing Industries. Final Report. Centre for Social Responsibility in Mining, University of Queensland, Brisbane [cited 2016 Dec 28] Available from: <https://www.csr.uq.edu.au/publications/risk-communication-a-framework-for-technology-development->

- and-implementation-in-the-mining-and-minerals-processing-industries.
- BSR, 2013. Conducting an Effective Human Rights Impact Assessment: Guidelines, Steps, and Examples. [cited 2016 Dec 28] Available from: https://www.bsr.org/reports/BSR_Human_Rights_Impact_Assessments.pdf.
- Cernea, M., 1997. The Risks and Reconstruction Model for resettling displaced populations. *World Dev.* 25 (10), 1569–1587.
- Cutter, S., 2003. The vulnerability of science and the science of vulnerability. *Ann. Assoc. Am. Geogr.* 93 (1), 1–12.
- Dare, M., Schirmer, J., Vanclay, F., 2014. Community engagement and social licence to operate. *Impact Assess. Proj. Apprais.* 32 (3), 188–197.
- DFID, 1999. Sustainable Livelihoods Guidance Sheets. Department for International Development, London [cited 2016 Dec 28] Available from: <http://www.eldis.org/vfile/upload/1/document/0901/section2.pdf>.
- DIHR, 2016. Human Rights Impact Assessment Guidance and Toolbox. Danish Institute for Human Rights, Copenhagen [cited 2016 Dec 28] Available from: <http://www.humanrights.dk/business/tools/human-rights-impact-assessment-guidance-and-toolbox>.
- DIHR & IPIECA, 2013. Integrating Human Rights Into Environmental, Social and Health Impact Assessments: A Practical Guide for the Oil and Gas Industry. IPIECA, London [cited 2016 Dec 28] Available from: http://www.ipieca.org/projects/default/files/publications/Integrating_HR_into_environmental_social_and_HIS_O.pdf.
- Downing, T.E., Garcia-Downing, C., 2009. Routine and dissonant cultures: a theory about the psycho-socio-cultural disruptions of involuntary displacement and ways to mitigate them without inflicting even more damage. In: Oliver-Smith, A. (Ed.), *Development and Dispossession: The Crisis of Forced Displacement and Resettlement*. School for Advanced Research Press, Santa Fe, pp. 225–253.
- Ehrlich, A., Ross, W., 2015. The significance spectrum and EIA significance determinations. *Impact Assess. Proj. Apprais.* 33 (2), 87–97.
- Espinoza, J.D., Rojo, J., 2017. Towards sustainable mining (part I): valuing investment opportunities in the mining sector. *Res. Policy* 52, 7–18.
- Esteves, A.M., Vanclay, F., 2009. Social development needs analysis: adapting SIA methods to guide corporate-community investment in the minerals industry. *Environ. Impact Assess. Rev.* 29 (2), 137–145.
- Esteves, A.M., Franks, D., Vanclay, F., 2012. The state of the art in social impact assessment. *Impact Assess. Proj. Apprais.* 30 (1), 35–44.
- Franks, D., 2011. Management of the social impacts of mining. In: Darling, P. (Ed.), *Society for Mining, Metallurgy and Exploration, SME Mining Engineering Handbook*, 3rd edn. Society for Mining, Metallurgy, and Exploration, Littleton, CO, pp. 1817–1825.
- Franks, D., Brereton, D., Moran, C., Sarker, T., Cohen, T., 2010. Cumulative Impacts: A Good Practice Guide for the Australian Coal Mining Industry. Centre for Social Responsibility in Mining, Brisbane.
- Franks, D., Davis, R., Bebbington, A., Ali, S., Kemp, D., Scurrah, M., 2014. Conflict translates environmental and social risk into business costs. *Proc. Natl. Acad. Sci.* 111 (21), 7576–7581.
- Götzmann, N., 2017. Human rights impact assessment of business activities: key criteria for establishing a meaningful practice. *Bus. Hum. Rights J.* 2 (1), 87–108.
- Götzmann, N., Vanclay, F., Seier, F., 2016. Social and human rights impact assessments: what can they learn from each other? *Impact Assess. Proj. Apprais.* 34 (1), 14–23.
- Graetz, G., Franks, D.M., 2016. Conceptualising social risk and business risk associated with private sector development projects. *J. Risk Res.* 19 (5), 581–601.
- Hanna, P., Vanclay, F., 2013. Human rights, indigenous peoples and the concept of free, prior and informed consent. *Impact Assess. Proj. Apprais.* 31 (2), 146–157.
- Hanna, P., Vanclay, F., Arts, J., 2016a. The communication and management of social risks and their relevance to corporate-community relationships. In: Crichton, J., Candlin, C., Firkins, A. (Eds.), *Communicating Risk*. Palgrave Macmillan, Basingstoke, pp. 171–188.
- Hanna, P., Vanclay, F., Langdon, J., Arts, J., 2016b. Conceptualizing social protest and the significance of protest action to large projects. *Ext. Ind. Soc.* 3 (1), 217–239.
- Holst Jensen, M., Villumsen, M., Petersen, T., 2014. The AAAQ Framework and the Right to Water: International Indicators for Availability, Accessibility, Acceptability and Quality. Danish Institute for Human Rights, Copenhagen [cited 2016 Dec 28] Available from: http://www.humanrights.dk/files/media/dokumenter/udgivelser/aaaq_issue_paper_2014.pdf.
- IFC, 2012. Performance standards on environmental and social sustainability. In: Washington (DC): International Finance Corporation. [cited 2016 Dec 28], Available from: http://www.ifc.org/wps/wcm/connect/c8f524004a73daeca09afd998895a12/IFC_Performance_Standards.pdf?MOD=AJPERES.
- Imperiale, A.J., Vanclay, F., 2016. Using social impact assessment to strengthen community resilience in sustainable rural development in mountain areas. *Mt. Res. Dev.* 36 (4), 431–442.
- International Organization for Standardization, 2009. ISO 31000 – Risk Management. International Organization for Standardization, Geneva [cited 2016 Dec 28] Available from: <http://www.iso.org/iso/home/standards/iso31000.htm>.
- Jaafari, A., 2001. Management of risks, uncertainties and opportunities on projects: time for a fundamental shift. *Int. J. Proj. Manag.* 19, 89–101.
- Jijelava, D., Vanclay, F., 2017. Legitimacy, credibility and trust as the key components of a social licence to operate: an analysis of BP's projects in Georgia. *J. Clean. Prod.* 140 (Part 3), 1077–1086.
- Kemp, D., Vanclay, F., 2013. Human rights and impact assessment: clarifying the connections in practice. *Impact Assess. Proj. Apprais.* 31 (2), 86–96.
- Kemp, D., Worden, S., Owen, J., 2016. Differentiated social risk: rebound dynamics and sustainability performance in mining. *Res. Policy* 50, 19–26.
- Kirchherr, J., Charles, K., 2016. The social impacts of dams: a new framework for scholarly analysis. *Environ. Impact Assess. Rev.* 60, 99–114.
- Landsberg, F., Ozment, S., Stickler, M., Henninger, N., Treweek, J., Venn, O., Mock, G., 2011. Ecosystem Services Review for Impact Assessment: Introduction and Guide to Scoping. WRI Working Paper. World Resources Institute, Washington DC [cited 2016 Dec 28] Available from: <http://www.wri.org/publication/ecosystem-services-review-for-impact-assessment>.
- Landsberg, F., Stickler, M., Henninger, N., Treweek, J., Venn, O., 2013. Weaving Ecosystem Services Into Impact Assessment. A Step-by-Step Method. World Resources Institute, Washington DC [cited 2016 Dec 28] Available from: <http://www.wri.org/publication/weaving-ecosystem-services-into-impact-assessment>.
- Lima, M., Marques, S., Moreira, S., 2011. 'A house in the woods': values, attitudes and behaviours towards forests. *Psychology* 2 (1), 37–51.
- Lima, M., Moreira, S., Marques, S., 2012. Participatory community involvement in the planning processes of building projects: a social psychological approach. *Umweltpsychologie* 16 (1), 68–87.
- Lynch, M., 2008. A Systematic Approach to Project Social Risk & Opportunity Management. Engineers Against Poverty, London [cited 2016 Dec 28] Available from: <http://www.engineersagainstopoverty.org/documentdownload.axd?documentresourceid=21>.
- Mahmoudi, H., Renn, O., Vanclay, F., Hoffmann, V., Karami, E., 2013. A framework for combining social impact assessment and risk assessment. *Environ. Impact Assess. Rev.* 43, 1–8.
- Marmot, M., Wilkinson, R. (Eds.), 2006. *Social Determinants of Health*, 2nd edition. Oxford University Press, Oxford.
- Marques, S., Lima, M., Moreira, S., Reis, J., 2015. Local identity as an amplifier: procedural justice, local identity and attitudes towards new dam projects. *J. Environ. Psychol.* 44, 63–73.
- Miller, R., Lessard, D., 2001. Understanding and managing risks in large engineering projects. *Int. J. Proj. Manag.* 19, 437–443.
- Moffat, K., Zhang, A., 2014. The paths to social licence to operate: an integrative model explaining community acceptance of mining. *Res. Policy* 39 (1), 61–70.
- Petkova, V., Lockie, S., Rolfe, J., Ivanova, G., 2009. Mining developments and social impacts on communities: Bowen Basin case studies. *Rural. Soc.* 19 (3), 211–228.
- Rodhouse, T., Vanclay, F., 2016. Is free, prior and informed consent a form of corporate social responsibility? *J. Clean. Prod.* 131, 785–794.
- Rossouw, N., Malan, S., 2007. The importance of theory in shaping social impact monitoring: lessons from the Berg River Dam, South Africa. *Impact Assess. Proj. Apprais.* 25 (4), 291–299.
- Salcito, K., Utzinger, J., Weiss, M., Münch, A., Singer, B., Krieger, G., Wielga, M., 2013. Assessing human rights impacts in corporate development projects. *Environ. Impact Assess. Rev.* 42, 39–50.
- Salcito, K., Singer, B., Krieger, G., Weiss, M., Wielga, M., Utzinger, J., 2014. Assessing corporate project impacts in changeable contexts: a human rights perspective. *Environ. Impact Assess. Rev.* 47, 36–46.
- Salcito, K., Utzinger, J., Krieger, G., Wielga, M., Singer, B., Winkler, M., Weiss, M., 2015. Experience and lessons from health impact assessment for human rights impact assessment. *BMC Int. Health Hum. Rights* 15 (art.24).
- Sepúlveda, M., van Banning, T., Gudmundsdóttir, G., Chamoun, C., van Genugten, W., 2004. *Human Rights Reference Handbook*, 3rd edition. University for Peace, San Jose, Costa Rica.
- Slootweg, R., Vanclay, F., van Schooten, M., 2001. Function evaluation as a framework for the integration of social and environmental impact assessment. *Impact Assess. Proj. Apprais.* 19 (1), 19–28.
- Smyth, E., Vanclay, F., 2017. The social framework for projects: a conceptual but practical model to assist in assessing, planning and managing the social impacts of big projects. *Impact Assess. Proj. Apprais.* 35 (1), 65–80.
- Smyth, E., Steyn, M., Esteves, A.M., Franks, D.M., Vaz, K., 2015. Five 'big' issues for land access, resettlement and livelihood restoration practice. *Imp. Assess. Proj. Apprais.* 33 (3), 220–225.
- Spohr, M., 2016. Human Rights Risks in Mining: A Baseline Study. German Federal Institute for Geosciences and Natural Resources and Max Planck Foundation for International Peace and the Rule of Law, Bonn [cited 2016 Dec 28] Available from: https://www.bmz.de/rue/includes/downloads/BGR_MPFFPR_2016_Human_Rights_Risks_in_Mining.pdf.
- Thomson, I., Boutilier, R.G., 2011. Social license to operate. In: Darling, P. (Ed.), *SME Mining Engineering Handbook*. Society for Mining, Metallurgy and Exploration, Littleton, CO, pp. 1779–1796.
- United Nations, 1966a. International Covenant of Economic, Social, and Cultural Rights (ICESCR) [Internet]. [cited 2016 Dec 28]. Available from: <http://www.ohchr.org/EN/ProfessionalInterest/Pages/CESCR.aspx>.
- United Nations, 1966b. International Covenant on Civil and Political Rights (ICCPR) [Internet]. [cited 2016 Dec 28]. Available from: <http://www.ohchr.org/en/professionalinterest/pages/ccpr.aspx>.
- United Nations, 2011. Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework. United Nations Human Rights Council (UN Doc. HR/PUB/11/04).
- United Nations, 2012. The Corporate Responsibility to Respect Human Rights: An Interpretive Guide. United Nations, Geneva (UN Doc. HR/PUB/12/02).
- United Nations General Assembly, 1948. Universal Declaration of Human Rights. [cited 2016 Dec 28] Available from: <http://www.un.org/en/documents/udhr/>.
- United Nations Office of the High Commissioner for Human Rights (UNOHCHR), 2016. What are Human Rights? [cited 2016 Dec 28] Available from: <http://www.ohchr.org/EN/Issues/Pages/WhatAreHumanRights.aspx>.
- van der Ploeg, L., Vanclay, F., 2017a. A tool for improving the management of social and human rights risks at project sites: the Human Rights Sphere. *J. Clean. Prod.* 142 (Part 4), 4072–4084.
- van der Ploeg, L., Vanclay, F., 2017b. A human rights based approach to project-induced

- displacement and resettlement. *Impact Assess. Proj. Apprais.* 35 (1), 34–52.
- Vancly, F., 2002. Conceptualising social impacts. *Environ. Impact Assess. Rev.* 22 (3), 183–211.
- Vancly, F., 2003. International principles for social impact assessment. *Impact Assess. Proj. Apprais.* 21 (1), 5–11.
- Vancly, F., 2012. The potential application of social impact assessment in integrated coastal zone management. *Ocean Coast. Manag.* 68, 149–156.
- Vancly, F., 2015a. Changes in the impact assessment family 2003–2014: implications for considering achievements, gaps and future directions. *J. Environ. Assess. Policy Manag.* 17 (1), 1550003 (20 pages).
- Vancly, F., 2015b. The potential application of qualitative evaluation methods in European regional development: reflections on the use of performance story reporting in Australian natural resource management. *Reg. Stud.* 49 (8), 1326–1339.
- Vancly, F., 2017. Project induced displacement and resettlement: from impoverishment risks to an opportunity for development. *Impact Assess. Proj. Apprais.* 35 (1), 3–21.
- Vancly, F., Esteves, A.M., Aucamp, I., Franks, D., 2015. Social Impact Assessment: Guidance for Assessing and Managing the Social Impacts of Projects. International Association for Impact Assessment, Fargo ND [cited 2016 Dec 28] Available from: http://www.iaia.org/uploads/pdf/SIA_Guidance_Document_IAIA.pdf.

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