

Stakeholder consultation for a new mining project in Pakistan.



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# Managing social & environmental risk

*Fiona Cessford* outlines key environmental and social risks that finance-seeking companies should consider early on in their project development timeline

**T**he 20 years since the Rio Declaration on the Environment and Development have seen huge changes in the way the world expects environmental, and more recently, social risks associated with new projects to be evaluated.

The main driver for this change is public perceptions and expectations regarding the need for sustainable development. These in turn influence:

- the regulatory regimes imposed by governments, with most countries having made significant changes to environmental and social laws since the Rio Declaration;
- companies themselves, who are more and

more frequently volunteering to adhere to international codes or standards, or even working together to develop industry-specific guidelines such as those by the International Council on Mining and Metals (ICMM); and

- financial institutions who are subject to increasing scrutiny by non-governmental organisations, such as Bank Watch, when providing project finance.

SRK has found from its extensive work with both developers and development financiers that environmental and social risks can be broadly grouped into two categories; those posed by the project and those posed to a project.

Different disciplines involved in project development (engineers, financiers, environmental etc.) define and use the term 'risk' in different ways. This can make the process of evaluating and reporting for corporate decision-making and raising of project finance challenging.

In the case of environmental and social risks from the project, the difference between risk and impact is blurred, with many impact assessors using the concept of probability and consequence (magnitude and severity) to evaluate both.

To simplify things I suggest that an environmental or social risk (from the project) is the likelihood and consequence of a hazard materialising under a set of non-routine



Challenging environments pose risks for mining operations

circumstances. For example, a pipeline rupture leading to a spill of a toxic material or vehicle accident resulting in injury or death to a third party.

Should the identified risk actually occur it will result in an impact (a change to a receptor brought about by the activity of the developer), though impacts can also arise from the routine activities of any operation.

The traditional way to identify risks and impacts from a project is by means of an environmental (and social) impact assessment (EIA or ESIA) process. Most governments have legal requirements for EIAs when developing new projects, though the greatest changes to the way EIAs are undertaken has arisen as a result of the need for project financing. Pivotal to this has been the Equator Principles (EPs<sup>1</sup>), with 70% of debt financing in emerging markets now undertaken by financial institutions that have voluntarily signed up to EPs.

The EPs state that project funding of over \$10m. results in a requirement for an internationally acceptable impact assessment process completed in accordance with the financiers' own standards or, in default, the International Finance Corporation's (IFC) Performance Standards (for non-high income OECD countries)<sup>2</sup>.

Environmental and social risks to a project, unlike the risks from the project, can be more challenging to accurately define. Without a clear definition, the probability and consequence cannot be determined and the implications for project schedule and costs cannot be confirmed.

Some risks to a project are relatively straightforward to identify and evaluate. These are regularly addressed in project design or as part of the feasibility study with examples including:

- risk of flooding of mine workings from nearby rivers causing project downtime;
- seismic hazards affecting stability of structures;
- unionisation of the workforce resulting in extended discussions on terms and conditions, and possible strikes; and
- logistical challenges associated with ice, heat, excessive rain etc.

However, many of the risks relating to environmental and social issues involve peoples' perceptions. They are emotive and difficult to define in a quantitative way, thus becoming more of a public relations issue than a tangible threat to the project. An example might be risks

associated with changing regulatory regimes. In countries with stable governments such changes can be reasonably foreseen, often with extensive consultation prior to implementation. However in many emerging markets and developing countries, the rapidly changing political agendas make investment decisions particularly challenging.

The Ernst & Young report on *'Business Risks Facing Mining and Metals 2011-2012'*<sup>3</sup> identifies nationalisation as the number one risk facing the mining industry.

Although reportedly triggered by the current economic situation and the desire to reduce debt, at heart this move towards nationalisation is as much a social issue as protests over the need for resettlement. This is because in many cases countries want to see the benefits of resource utilisation devolving to the host community (or country) rather than corporate shareholders.

In some cases the move towards nationalisation just enables corrupt officials to line their pockets but if managed correctly and in partnership with the mining companies it can lead to real positive impacts.

Recognising this, the ICMM instigated its Resource Endowment Initiative to identify the factors that have allowed some countries to

<sup>1</sup> <http://equator-principles.com/resources/Frequently%20Asked%20Questions.pdf>

<sup>2</sup> <http://www.ifc.org/ifcext/sustainability.nsf/Content/PerformanceStandards>

<sup>3</sup> [http://www.ey.com/Publication/vwLUAssets/Business\\_risks\\_in\\_MandM\\_2011-2012\\_Exe\\_Sum/\\$FILE/Business\\_risks\\_in\\_MandM\\_Exe\\_Sum.pdf](http://www.ey.com/Publication/vwLUAssets/Business_risks_in_MandM_2011-2012_Exe_Sum/$FILE/Business_risks_in_MandM_Exe_Sum.pdf)

<sup>4</sup> <http://www.icmm.com/page/1409/our-work/work-programs/articles/resource-endowment-initiative>

<sup>5</sup> <http://www.icmm.com/mpdtoolkit>

benefit from their substantial resource endowments through economic growth and poverty reduction and avoid the so-called ‘resource curse’<sup>4</sup>. An outcome of this initiative is the recently published *Mining: Partnerships for Development Toolkit*<sup>5</sup>. The toolkit is currently being applied in a number of case study countries and will be reviewed and updated based on these real learning experiences.

Ernst & Young also identified maintaining a social licence to operate as number four of the top 10 risks to mining companies. In the report it states that elements such as environmental performance, land acquisition and safety issues are contributing factors affecting this social licence<sup>5</sup>.

The consideration of more than just the traditional environmental and social components when looking at social responsibility is very much in line with current international thinking.

As reflected in the IFC Performance Standards and ISO26000 Guidance on Social Responsibility, issues such as human rights, labour practices, transparency, accountability and ethical behaviour require acknowledgement and commitment from companies. Companies working in isolation, not as a good corporate citizens, with a purely profit focus are likely to be at significant risk of not receiving their social licence to operate.

Although not strictly relevant to industrial minerals, an example of where an environmental issue can affect a social licence, relates to perceptions around the use of cyanide. Risks to the environment arising from cyanide use are well known and can be managed using accepted industry practices. However, just the mention of the word cyanide is enough to influence the public (and hence the social licence to operate) and financial institutions’ decision-making processes.

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There have been too many high profile accidents in the past involving cyanide, resulting in hesitancy to invest in any project using this material. The best defence against such perceptions is a commitment to compliance with the International Cyanide Management Code<sup>6</sup>, along with evidence about how this commitment will be achieved (for example suitable management plans).

Another risk area that is often difficult to define and control relates to the involvement of third parties in project activities. This may include host governments who are often associated with stakeholder engagement or resettlement activities.

The IFC’s Performance Standard 1 states: “While the client cannot control these government or third party actions, an effective ESMS [environmental and social management system] should identify the different entities involved and the roles they play, the corresponding risks they present to the client, and opportunities to collaborate with these third parties in order to help achieve environmental and social outcomes that are consistent with the Performance Standards.”

Thus clearly documented steps towards addressing such risks will be required by project financiers. Critical to this will be the need for a robust stakeholder engagement plan.

Although no specific guidance on managing this second type of risk is provided in the IFC Performance Standards, there are numerous risk management standards including ISO 31000

and derivatives thereof used by different countries (Australia, the UK, etc.). In concept these guidelines are similar and the company should use the approach it is most comfortable with.

These risks are real, and as Vedanta Resources found out with its Lanjigarh bauxite project in India and Peabody Coal’s Black Mesa project in the USA, they can lead to projects being stopped.

To enable environmental and social risks to and from a project to be appropriately identified and addressed, SRK makes the following recommendations:

- as soon as possible identify the country, corporate and, if possible, financing requirements relevant to your project – this will enable effective planning and scheduling of the environmental and social studies associated with ongoing project development;
- undertake a comprehensive ESIA to identify, evaluate and determine appropriate management for both impacts and risks to the biophysical and social environment;
- linked to this, develop and implement an effective environmental and social management system (this does not have to be an ISO14001 type system but should involve the basic management concepts of ‘plan, do, check, and act’);
- as part of development studies include an evaluation of environmental and social risks to the project, being careful to suitably define and evaluate the risks;
- where suitable risk mitigation has been included in the design, ensure this is clearly communicated;
- where risks cannot be managed or mitigated, consider the use of sensitivity analyses to determine the possible implications of risks materialising;
- in support of all of these implement effective communication with stakeholders early in, and continuously throughout, the project’s life to assist in identifying new risks or changes to existing risks.

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Understanding pollution risks at an operational mine

<sup>6</sup> <http://www.cyanidecode.org/>