Mining in Africa: managing the impacts

A transparent and inclusive mining sector that is environmentally and socially responsible…which provides lasting benefits to the community and pursues an integrated view of the rights of various stakeholders…is essential to addressing the adverse impacts of the mining sector and to avoid conflicts induced by mineral exploitation. Public participation in assessing the environmental and social impacts and the enforcement of impact assessment requirements is important in tackling these challenges
—The Africa Mining Vision

The adverse impacts of mining need to be addressed if development starting from mineral exploitation is to bring long-term benefits. Unless the environmental and social impacts of mining are managed, the considerable disruption to livelihoods and to the social fabric of communities adjacent to mines can negate any positive contribution that mining makes.

Although negative impacts from mining activities are inevitable, many can be avoided during the mining cycle (during the pre-development, development and post-development stages) if appropriate prevention and mitigation measures are established.

From the perspective of mining companies, reducing impacts and risks eventually translate into lower costs of doing business—and provide opportunities for building relationships with local communities. Better community relations reduce the chances of conflict between the mining industry and those who work in or live nearby mining opeartions. Poor community relations can even lead to the militarisation of the mining site and draw the company into wider conflict.

Good mine-community relationships should develop in the context of transparent and participatory governance processes at all levels. This includes enforcing human rights, labour and environmental norms and standards.

Environmental impact
It is well known that the extractive sector—including mining—has adverse environmental impacts. Mining can radically alter the natural environment by stripping away the ground, and it can add chemicals and other toxic substances to rivers and wells. Mining, particularly opencast mining, is invariably associated with deforestation, soil erosion, land degradation, air pollution and ecosystem disruption.

The effects of mining extend beyond the mine itself: farming and fishing and the lived environment around the mines are all changed. Environmental impacts thus become economic and social issues as livelihoods are disrupted.

Environmental impacts continue well after the mine has been exhausted, so it is local communities that bear the long-term burden of mining. The environmental legacy of mining in Africa is generally that of large unfilled holes and abandoned artisanal mining sites.

Social impacts
Adverse social impacts can include:
- displacement of communities and disruption of livelihoods as mines are opened up, land use is changed and new people arrive;
- increased poverty through damage to subsistence agriculture;
- increased internal inequalities within communities between those who benefit directly from the mine and those who do not;
- economic dependency making local communities vulnerable when the mines closes or scale down its operations.

Large influxes of outsiders or immigrant miners not integrated into the local community or subject to its social norms can destabilise internal community power relations and this can exacerbate social tensions.

Experience in the Niger Delta shows how youth violence and the existence of militias can be attributed to feelings of loss of community assets and perceptions of exclusion from natural resources development.

Relocation of communities to make way for mining operations is common. This can easily lead to tension between the mine, farmers and local communities. Unmet expectations for compensation for disruption and resettlement can be a permanent source of tension between communities and project developers.

Regulation: managing the problem
Evaluating the social and environmental costs of mining has evolved significantly over the last 20 years. Internationally accepted tools such as Environmental Impact Assessments (EIAs) and Social Impact Assessments (SIAs) have enabled mining companies to factor in environmental and social considerations to their investment decisions.

International finance institutions have developed methods to ensure that mineral industry investors adequately account for environmental and social impacts in the project evaluation framework. But the twin challenges are lack of compliance by some mining operators and the capacity of government to enforce these requirements.

In government applying the instruments for impact assessment has progressed but remain partial – for example, surface environmental impacts are more easily identified than contamination of groundwater. Similarly attention usually focuses on the immediate impact of a project rather than its broader ramifications.

Building a cadre of professionals with the broad range of skills required remains a challenge. As well as conducting impact assessments and generally monitoring compliance, they also need to deal with such diverse issues as developing discharge and emission standards, long term health impacts and post-closure issues as well as assessing the adequacy of compensation packages for local disruption to lives and livelihoods.

Although provisions for protecting the environment often are in place in African legal systems, it is not always the case that communities are fully aware of the impacts mining will have on their livelihoods. Free access to information regarding mining impacts is therefore essential.

Ultimately though, it is the responsibility of the mining companies themselves to make sure that environmental damage is repaired in line with the EIA and that communities are properly and fairly compensated for negative social consequences of mining.

Public Participation
Public participation can help keep the onus on mining companies to stay within national and international environmental and social regulations. Participation is especially valuable at the critical stage of deciding whether a project should proceed or not.

Participation at an early stage has two key benefits: first local knowledge about the neighbourhood often provides information about the environment and social issues that is often missed by experts. Secondly, community participation helps legitimise the project and so reduces in advance social tensions between communities and mines.

It is now standard to include a public participation component when conducting EIA and SIAs, but public hearings that review the assessments should be properly constituted. This includes making assessment reports easily accessible to local communities and making sure that the consultation process is not short-circuited for fear of adverse criticism.

Lenders to mining projects increasingly require that project sponsors commit to and implement public participation processes.

Valuable work has been done to assist in planning and implementing effective public participation processes. The International Finance Corporation's manual, *Doing Better Business through Effective Public Consultation and Disclosure* contains, for example, guidance notes for identifying consultation possibilities at different stages of a project, a checklist of objectives and actions for improving consultation and another checklist of "Techniques for Public Consultation and Information Disclosure". They provide a range of tools from which a selection can be made for application to specific situations.

The ICMM, in collaboration with the World Bank, has sponsored studies that focus on making participation effective for mining projects. These studies seek to relate participation processes to the activities involved in different phases of a project, the standards required by law or other applicable norms; the broad strategic objectives of the sponsoring organisations, the characteristics of the participating stakeholders, the communication strategy judged to be appropriate and the resources available.

Taken together, these and other initiatives place a requirement on international companies to mine, in an 'environmentally and socially responsible' way, as required by the AMV.

Mining and human rights

The exploitation of minerals has been associated with the violation of human rights by mining companies. It is one of the most prominent issues raised by mining-affected communities and civil society organizations working on mining issues.

Alleged human rights abuses within the extractive industry include, violation of the right to a clean environment, arbitrary detention and torture, loss of land and livelihoods without negotiation and without adequate compensation, forced resettlement, the destruction of ritually or culturally significant sites without compensation or compensation and labour rights violations. Human rights abuses are therefore often synonymous with adverse social impacts.

A 2006 UN review showed that of the 65 cases worldwide covering 27 countries, the oil, gas and mining corporate sector accounted for two-thirds of abuse cases. Thus it is not surprising that human rights protection provisions have been used to regulate how mining companies should conduct their business.

Mining countries evidently need to protect their citizens against human rights abuses and indeed many African national constitutions contain extensive provisions on human rights that are binding on all natural and legal persons operating within their jurisdiction.

At an international level, the 2008 UN framework *Protect, Respect and Remedy* provides three pillars to guide states and businesses in human rights issues. These are: the state's duty to protect against human rights abuses by third parties, the corporate responsibility to respect human rights and improved access by victims of human rights abuses to effective remedies through the law or other means.

In situations in Africa where enforcement institutions and the culture of human rights protection can both be weak, a strong commitment from powerful mining firms to human rights is essential.

Mining and employment

Large-scale mining played a pioneering role in creating an industrial labour force in mineral exporting countries such as Ghana, South Africa and Zambia. But the significance of mining employment to economies has changed following liberalisation. The break-up of state mining companies often led to many redundancies although the recent surge in mining activity in new private mines has created new jobs in their place.

However the significance of modernised large-scale mining for employment should not be overstated. The ISG Report points out that currently African manufacturing industry is 17.5 times more labour intensive than mining. Also jobs created by mining and associated businesses have to be set against jobs lost in disrupted farming, artisanal mining etc. Although new local linkages are made when a large mine opens, other productive rural economic connections are broken at the same time.

In large-scale mining itself, the trend has been towards increasingly employing contract and casual labour. For example in the Zambian Copperbelt, once the paradigm of cradle-to-grave employment and social benefits, traditional "permanent" positions now account for only half of all mining jobs in the five major mining companies, and this is where nearly 40,000 workers lost their jobs at privatisation.

While businesses have welcomed the benefits of flexible working practices, as delivering more innovation, higher productivity, higher wages and better returns to shareholders, unions have pointed out this often means that independent contractors get away with providing fewer benefits such as pensions, sick pay, paid leave, maternity benefits, medical insurance etc.

'Flexible working' can undermine the ILO's 'Decent Work' philosophy. According to the ILO "Decent work involves opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men".

It is the responsibility of the mining companies to observe the requirements of local laws and practices, and they should abide by international standards as defined by the ILO. However it has been noted that states often lack the capacity to implement international standards and are averse to challenging foreign investors over their employment practices.

Internationally, the mining industry needs to consider itself as one part of the consumption of metals in the entire economic chain. Most OECD countries have launched initiatives to promote waste prevention, sustainable materials management, integrated product policies and the three 'Rs': reduce, reuse and recycle). China has recently adopted a law on the "circular economy".

A UNEP Metal Flows working group has began publishing reports focussing on metals, which will address the recycling of metals, environmental impact of metals, information available on the virgin reserves and resources of metals, future demand scenarios for metals and critical metals and metal policy options, among others. This can contribute to the Africa Mining Vision.

Policy Implications

For mining to deliver sustainable social and economic benefits to communities, the impacts have to be deliberately considered and then managed.

This requires a multi-pronged approach, which can include designating protected areas, enforcing impact assessment requirements for all projects, enforcing regulatory standards, enforcing public consultation and public participation before project implementation and enhancing transparent access to information. Mining companies themselves need to operate in a socially and environmentally responsible way. Mining practices needs to be rooted in human rights and basic core labour standards.

There are numerous international instruments and templates that address these key developmental changes and even at the local level, legislation exists in most countries. The challenge is build capacity and consensus so that these instruments, templates and laws are followed and if necessary enforced. Even where governance is weak, private industry must take full responsibility for following international standards.

The African mineral policy architecture has to be holistic and consider the benefits (revenues, taxes, export earnings, jobs and so on) and costs (environmental and social costs). A creative approach is required in tackling environmental and social challenges to guarantee that the sector can contribute to development rather than impede it.

In the next bulletin we will look at the how Corporate Social Responsibility schemes can contribute to development.