



SOUTH AFRICA

MINE CLOSURE AND REHABILITATION IN SOUTH AFRICA

ACTIVATING COALITIONS OF THE WILLING FOR
A JUST FUTURE

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INTRODUCTION

In response to unsolicited inputs from various stakeholders and the ongoing discourse around South Africa's pathway to a just transition, WWF South Africa and Mining Dialogues 360° (MD360) co-convened two colloquiums, one in Johannesburg in November 2019 and one in Cape Town in January 2020.

The colloquiums brought together a wide range of stakeholders from academia, government departments, science councils, think-tanks and NGOs, as well as subject-matter specialists and development practitioners to share their knowledge and experience and provide insights that can inform more effective mine closure and rehabilitation.

Held under the Chatham House Rule, both colloquiums were characterised by open and frank debate and were highly successful in identifying challenges that currently constrain orderly mine closure and rehabilitation. While stakeholders did not set out to agree on a set of concrete recommendations, consensus was reached on the

need for further engagement and the possibility of creating a cross-disciplinary community of praxis that could take forward a research agenda for further inclusive dialogues. Deliberations focused on eliciting views on a number of key issues and interlinked challenges related to the colloquium themes.

This briefing paper reports on the challenges, outcomes and suggested solutions identified during the two colloquiums to find pathways to orderly and transformative mine closure and rehabilitation in the context of the just transition and the new reality likely to emerge post COVID-19.

Gavin Andersson (MD360), Khodani Mulaudzi (WWF), Reuben Masenya (Director: Mine Closure and Rehabilitation, DMRE) and Louise Scholtz (WWF) attended the colloquiums.







CONTEXT

Successful mine closure and rehabilitation remain seemingly intractable challenge in South Africa despite the existence of legislation that should ensure that outcome.

Systemic challenges, chief among which is a disjuncture between policy and legislation and the manner in which these are applied, thwart orderly mine closure and rehabilitation and the repurposing of land and infrastructure for alternative livelihood development. Even where mine closure is achieved, mineworkers and mine-host communities are often left stranded without alternative forms of employment or livelihoods when operations cease.

The results are a chain of physical decay and socio-economic degradation. In part this is a consequence of a failure by mining companies to plan for a post-mining future, or only doing so when it is too late to have a meaningful impact. To make matters worse, an estimated 6 000 derelict and ownerless (abandoned) mines pose a persistent threat to the health and safety of adjacent communities and the environment.

The onset of the COVID-19 pandemic and the contraction of economic activity resulting from the lockdown restrictions imposed to slow contagion have thrown into sharp relief the vulnerability of the South African economy to external shocks. The mining sector has been hit hard, with reduced mineral production and earnings, job losses and attendant increases in household vulnerability and food insecurity in mine-dependent communities.

Arguably, the sector faces the possibility of permanent damage. How profound this will be cannot be determined right now. It will depend, in a large part, on unknown external factors, such as:

- The likely trajectory for the recovery of demand for minerals;
- The resilience of global supply chains;
- Possible shifts in patterns of international trade.

Intuitively it seems inevitable that production levels and earnings will remain depressed for some time, that the drive for mine modernisation and automation will intensify, and that some marginal mines might not survive beyond the pandemic. Against this backdrop, the need for transformative approaches to mine closure and rehabilitation and ensuring that the transition to a “new normal” in the mining sector is just, has become more acute.

COLLOQUIUM THEMES

Discussion of the need for more effective mine closure and rehabilitation centred on two main themes.

Theme 1: The existing policy and legislative framework that regulates mine closure and rehabilitation, and ways in which this can be refined and strengthened so as to be more effective

Theme 2: The role that the rehabilitation of closed mines can play in support of a just transition

To stimulate discussion of these themes, a number of inputs were made by selected experts, including:

- An analysis of existing policy and praxis, including the systemic issues behind mine closure, rehabilitation and regeneration failure;
- A high-level snapshot of global trends and challenges in mine closure and rehabilitation practice;
- New research on bioremediation as a response to rehabilitation that can support both short- and longer-term livelihood opportunities;
- A presentation on the role of a national mine closure strategy to support an economy beyond mining;
- An account of barriers to the implementation of innovative solutions to rehabilitation;
- Inputs on a number of current initiatives being undertaken by various parties (research institutions, civil society organisations, industry bodies, etc.) in the arena of mine closure and rehabilitation.



IDENTIFYING THE KEY CHALLENGES

In South Africa, a range of systemic issues bedevils orderly mine closure and rehabilitation. As a result, non-functional end-of-life closure processes manifest as very low levels of certified closure and non-utilisation of rehabilitation funds for the purpose for which they were intended.

These systemic issues include:

- Incoherent policy and legislation;
- Laws that do not remedy historical legacies;
- Inadequate financial provisions for rehabilitation, which compromise mine closure;
- “Pass-the-parcel” transfer of mine closure liability to increasingly marginal operators;
- Company law that conflicts with the “polluter pays” and “cradle-to-grave” principles;
- Under-resourced enforcement entities;
- Failure to acknowledge links between large-scale miners and artisanal and small-scale mining;
- The absence of a “whole of government” approach to mine closure;
- A general lack of transparency.

It is generally accepted that policy and legislation have failed to provide an effective regulatory framework for orderly mine closure and rehabilitation in South Africa. A **lack of policy coherence** has led to a disjuncture between the regulatory framework governing this process and practices on the ground. A vicious cycle of different views about what constitutes compliance, an inability on the part of the government to regulate effectively, minimal capacity for enforcement, and a lack of communication and cooperation between key actors have led to the dysfunctionality that is evident today. This has manifested in a variety of ways that is certainly retarding mine closure and rehabilitation processes and may even be facilitating dereliction by mining companies. The detrimental impact of this on government and community stakeholders is significant.

There is a clear need to strengthen legislation and make it more enabling of mine closure and rehabilitation while ensuring consequences for non-compliance.

One of the areas of regulatory uncertainty hampering effective mine closure and rehabilitation is the reported ambiguity as to what constitutes a “**sustainable end state**” as defined in the proposed Financial Provisioning Regulations to the National Environmental Management Act 107 of 1998 (NEMA), published in 2019. In particular, the need to mitigate the negative impacts of mine closure outside the mine site raises questions about the adequacy of a definition that only focuses on the bio-physical state of a mine site reaching a defined “risk threshold”.

Absolute clarity on end-state responsibility and liability is essential, including an expanded definition under a new paradigm that facilitates transformative mine closure and rehabilitation.

The fact that a variety of issues militate against the achievement of a “sustainable end state” (however that is defined) should not deter attempts to derive a more workable definition designed to incorporate the wider socio-economic considerations of sustainability.

The avoidance of mine closure and rehabilitation responsibilities is common in South Africa. The “pass-the-parcel” metaphor applied to mine closure describes a phenomenon whereby mining assets are transferred to successively more marginal operators as mineral reserves are depleted. This results in an ever-decreasing likelihood of proper mine closure and rehabilitation. Another practice that defers closure and enables avoidance is the tendency towards “perpetual mining”. In this instance, mines are placed under “care and maintenance”, the cost of which is a relatively small price to pay when compared to the real cost of achieving closure. Overly formulaic regulations for

financial provision for mine rehabilitation, which in any case typically under-provide for the real cost of this process, further complicates matters.

Regulatory reform is needed to dissuade these practices and incentivise orderly and effective processes of closure and rehabilitation.

Some of the instruments devised by the government to support transformative mine closure and rehabilitation are also deficient. Despite a heightened awareness of the need for mining companies to promote and invest in alternative livelihood development ahead of mine closure, guidelines for **social and labour plans** governing mine-community development and the management of mine downscaling have proven to be weak and ineffective. In several instances, social and labour plans have become a means by which mines are pulled into taking responsibility for municipal service delivery in the short term. This diverts resources that could have been devoted to interventions designed to ensure the long-term sustainability of mining-affected communities after the life of the mine.

For as long as social and labour plans continue to be seen as minimum conditions to be satisfied to achieve regulatory compliance, they are unlikely to meaningfully support transformative mine closure and rehabilitation.

Artisanal and small-scale mining is a key issue that is not usually included in discussions of mining closure and rehabilitation. However, the practice of “invasion” of derelict and ownerless mines and the unregulated mining practices that then follow should be of keen interest to the state. The Department of Mineral Resources and Energy (DMRE) advocates formalisation of artisanal and small-scale mines but has made little progress in bringing them into the regulatory framework. The department also provides precious little by way of institutional support to the sector.

Until such time as artisanal and small-scale mining is formalised and given institutional support, the challenge posed to mine closure and rehabilitation by this sector is unlikely to be resolved. In fact, it may intensify as rising unemployment resulting from the COVID-19 lockdown forces more people into artisanal and small-scale mining in order to survive.

FINDING SOLUTIONS

Mining houses and the state consistently fail to accurately gauge community sentiment that reflects real opinions, needs and priorities.

Consultative processes, even those prescribed in law (e.g. Integrated Development Plans and social and labour plans), are rarely sufficiently inclusive. For all intents and purposes, communities are effectively excluded from engaging in mine closure and rehabilitation planning, irrespective of whether or not it addresses support for post-mining livelihood development.

Truly transformative mine closure and rehabilitation processes will demand **greater community inclusion** as a prerequisite for legitimacy.

As South Africa moves to meet its climate change commitments under the Paris Agreement, imperatives for decarbonisation and a reduction of the country's dependence on coal-generated electricity are intensifying. Any shift to a low-carbon climate-resilient economy makes mine closures in coal-producing areas inevitable. The consequent large-scale job losses on the mines and coal-fired power plants they serve, as well as among the many businesses providing goods and services to the mines, will impact heavily on adjacent communities, with inevitable increases in household vulnerability and food insecurity. Ensuring that mine closure and rehabilitation are transformative will be essential for a “just transition”.

Unfortunately, South Africa has a very poor history of managing mine downscaling and mitigating the negative economic and social consequences of mine closure by effecting structural economic change. There are few examples of the successful development of substitution economic activity to sustain local economies after mine closure.

At mine level, a clear need exists for **planning for post-mining sustainable economic development** to commence earlier in the mine life-cycle, long before closure is even contemplated. The incorporation into legislation of a requirement to do so should be considered.

However, the relatively long life-span of mines and possible changes in future post-mining economic opportunity in the period between the commissioning and the closure of mines make this challenging. Regulation alone will not guarantee success and any future framework for managing and regulating more transformative mine closure and rehabilitation will have to incorporate appropriate incentive mechanisms to achieve the desired outcomes. Likewise, facilitated multi-stakeholder dialogue is key to successful outcomes.

Mining companies will have to **draw other parties into mine closure, rehabilitation and repurposing planning** as well as invest in reinforcing community capacity for effective participation in that process.

Given the foregoing, it is critical that the mine closure and rehabilitation discourse is enriched so that greater influence can be brought to bear on policymakers, practitioners and regulators, and more effective outcomes achieved. This should be underpinned by the sharing of knowledge derived through the various **research processes** in which participants have been involved.

A central repository for research into mine closure and rehabilitation could be created. There is also a need for additional research to address knowledge gaps, particularly around international best practice.

THE WAY FORWARD: FORMING “COALITIONS OF THE WILLING”

Although the colloquiums did not agree on a “roadmap” to drive improvements in the framework for mine closure and rehabilitation, this briefing paper distils the deliberations from the two colloquiums. It highlights a number of *key interventions* that should be considered in any new national strategy intended to transform mine closure and rehabilitation processes.

The COVID-19 pandemic has exposed the vulnerability of the mining sector and its stakeholders to the deleterious economic impacts that it has brought upon them. Paradoxically, in so doing it has arguably presented an opportunity to catalyse the transition to a “**new normal**” in the mining sector: one that addresses a number of long-standing challenges that have constrained the sector’s growth potential and its contribution to economic and social development at local, regional and national level. Just as the pandemic has enabled actors whose relationships and interactions were previously adversarial to come together with common purpose to address the challenge posed to human health, it is surely possible to leverage that common purpose to find the means to achieve transformative mine closure and rehabilitation.

New ways will need to be found in the aftermath of the COVID-19 pandemic to find greater coherence in the policy, legislative, fiscal and other practical means by which mine closure is managed and its deleterious impacts are mitigated. Pre-pandemic, the pressure was already mounting for a shift from a very site-focused “close-the-hole” approach to mine closure to a more comprehensive and inclusive one that can be transformative, addressing not only the bare minimum environmental requirements, but also the socio-economic needs of retrenched workers and surrounding mine-host communities.

Weaknesses exposed by the pandemic oblige mining companies to rethink their role in the communities affected by their operations and eventual mine closure.

Similarly, it should compel the state to eliminate legislative, administrative and fiscal obstacles to achieving transformative mine closure and rehabilitation. Shifting to a collaborative multi-sectoral approach that embraces **regional functional economic areas instead of single mine sites** has the added potential to unleash popular energy for development. It will also raise the prospect that the transition to a low-carbon future will be just and will not impact disproportionately on the poor and vulnerable.

While the government must take the lead in building resilient post-mining economies and less vulnerable communities, ameliorating the negative economic and social impacts of mine closure also requires collaborative action by all key actors and the formation of “**coalitions of the willing**”. Mining companies must play a greater role in convening these processes and adopt changed approaches to the development of sustainable climate-smart local and regional economies beyond mine closure. A changed paradigm for multi-stakeholder dialogue that enables greater inclusion and participation by those directly impacted by mine closure is also crucial.

Furthermore, an opportunity exists to leverage the increased traction of the just transition in government policy to achieve transformative mine closure. The COVID-19 crisis, which has forced stakeholders whose relationships were previously adversarial to find “common purpose” in combating the pandemic, must be the catalyst for these changes.

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