On a knife edge

Outcomes from the 2015 Joburg Indaba will paint a picture of how the future mining industry will be defined and what stakeholders are prepared to action. Mining Prospectus is proud to be a media partner in this process.

The Indaba set to take place at the Inanda Club, Johannesburg from 14—15 October, aims to talk to a positive narrative in overcoming industry challenges and progress to a better future and cross over the bridge into the 'promised land'.

Tackling important factors such as remuneration, social licence to operate, sustainability, resource rents and delivering shareholders returns, running a mining operation that is profitable and rewarding for all stakeholders, remains hugely challenging.

Founder and CEO Paula Munsie says: “The Joburg Indaba has over the past years been hugely privileged in bringing together some of the industry’s most respected CEOs, government representatives, investors, key decision makers and independent thought leaders who have hotly debated some of the key challenges facing the mining industry. “We have succeeded in hosting bold dialogues on some of the most challenging and sensitive issues, however the success of any conversation we facilitate is entirely dependent on the outcomes. This year, we ask participants to speak to some of the benchmarks established at the 2014 Joburg Indaba and how we as an industry are measuring up against this index.

“Were are delighted to welcome some of the industry’s leading CEOs once more this year including Mark Bristow of Randgold Resources, who will share how he managed to build a successful business, navigating both a bull and bear market and buck the trend to deliver real shareholder returns in a challenging environment,“ says Paula.

No matter in which jurisdiction they operate in, rising costs and low commodity prices remain ongoing challenges for all mining companies trying to squeeze a profit.

South Africa has its own set of unique challenges. Important factors defining the current state of affairs were evident at the close of last year’s Joburg Indaba. These included the three Ps—productivity, profits and positive narrative. Governance, sustainability, regulatory certainty, compliance, executive remuneration, productivity, mechanisation, lack of shareholder returns were just some of the hotly debated issues.

Sorry sight

The 2014 Joburg Indaba participants looked at this sorry state of affairs and tried to paint a picture of a future they would be happy to be part of. The scenario painted by participants depicted a huge herd of animals migrating, some even storming across the African plains, not a united bunch.

Distinctive herds representing mining companies, employees, unions, the inevitable fat cats, and BEEs are shown kicking up dust and causing confusion rather than moving forward in any harmonious way, each dreaming of a future that is theirs alone, while investors, bankers and lawyers buzz overhead.

The scene depicts scorching earth in its wake, treacherous terrain ahead, in a storm of regulatory uncertainty, unyielding communities and rising costs. And all the while the industry perhaps prays for rain in the form of a commodity price boom, but there’s no sign of that.

Bernard Swanepoel, chairman of the Joburg Indaba says: “For even one stakeholder group to drink at the legitimate, competitive, sustainable industry waterhole of the future, all stakeholders have to be there. Realising that all stakeholders need each other and belong together should frame the trade-offs and compromises that are inevitable.”

The stakeholders agreed that without partnership, the industry will die. Productivity, profitability and positive narrative are all critical and take on a new dimension in 2015 defining the future of the mining sector. This new context is modernisation and it is the bridge to a new mining future.

“One to change the narrative of a 100+ year old industry, in a way that unleashes potential and inspires hope requires that we actually have to change, and that means us!” states Swanepoel.

Plan for gold mining’s decline?

Meanwhile, as gold mining in South Africa heads into its sunset years, it is wishful to think that a ‘silver bullet’ such as mechanisation will create a sustainable future; rather, the industry’s stakeholders should be squaring up to the formidable social and environmental challenges that the inevitable mine closures will bring.

The sector’s gradual but steady decline over recent decades is a sign of its natural trajectory as operations deepen to reach...
remaining ore bodies, as grades drop and as costs rise faster than returns.

Once the world’s number one gold producer - with gold production peaking at 1000 tonnes in 1970 - SA is now in sixth position in the global rankings, producing just 150 tonnes. Employment has dropped steadily; whereas the sector employed 550,000 workers in 1987, its workforce is now only about 100,000 - of which several thousand are currently at risk at unprofitable operations.

“Mechanisation is generally not an option in most SA gold mines,” said Roger Dixon, SRK Consulting (SA) chairman and corporate consultant. “The only operations in which this really works are those specifically designed for it from the start - such as the Target, South Deep and Modder East.”

He said the deep and narrow-reef conditions in older gold mines were in any event not conducive to mechanisation, and few technological developments had been made in recent years to significantly address these constraints.

“Following gold reefs to greater depths has meant steady increases in the costs of mining, which have not been matched by improvements in either productivity or gold grades,” he said. “So it is not difficult to understand the deterioration in mine viability over the years.”

Rapidly rising electricity prices have impacted particularly harshly on deep mines, as depth boosts key energy cost factors like refrigeration and rock hoisting. “Apart from the sheer cost of electricity, the unreliability of power supply erodes mine productivity even further,” said Dixon. “Having capacity reductions or even load shedding has a hugely disruptive effect on mines, which comprise a complex set of integrated functions and may take days to fully resume efficient operational levels.”

The real issue for gold mining, he said, is how to better manage the unstoppable haemorrhage of jobs. “The income of the average mine worker supports about eight people, so the knock-on effect of every lost job is massive,” he said. “Alternative livelihoods should be a key focus of attention for all stakeholders.”
He also highlighted the looming environmental impacts of gold mine closure, which has become a source of some contention between mining companies and the state. “The full extent of environmental damage arising from gold mining may only emerge decades from now,” he said. “But as we have witnessed with the acid mine drainage around Johannesburg, the impacts and resultant costs will be substantial."

He said it was time for stakeholders to “grasp the nettle” and put to rest any unrealistic notions of SA gold mining’s imminent revival.

**Changing times for Juniors**
Meanwhile, low commodity pricing has seen bulk commodities taking the lion share of exploration spend. However with the onset of urbanisation and wealth creation in India and China, it is predicted that by 2050 there will be an additional 1.3 billion urban residents, and a significant rise in the demand for iron and coal.

World industry codes are prescriptive of juniors to be highly vigilant in the management of datasets, and to ensure that redundancy levels are put in place right from the start of any project, but there is an industry call for the codes to be more specific.

“Environmental and social plans are vital, and if implemented early on in project plans, will save juniors money, by avoiding significant delays and opportunity costs,” said MSA Group’s managing director Keith Scott at the 2015 Junior Indaba, which Mining Prospects was a proud media partner as well.

For the junior sector, conversion rates from discovery to a mine are relatively low at 1:1,000, coupled with the time required for prospecting, design to development taking up to, in some cases, 11 years, it is highly unlikely to discover and develop a mine in the same cycle.

Scott reiterated that there have been significant changes for Juniors: “There is an increase, in developed economies, in the recycling of metals, up to as much as 40% in platinum; the global change in consumer demand has seen a shift from copper and optical cables, to Wi-Fi; the use of technology is a major player in the dramatic reduction of operational costs; the hunt to store and produce power is a driver that could revolutionise this industry, and as such fracking is fast becoming an industry trend, with increased demand on photovoltaic systems (solar panels).

“Since 1995 photovoltaic system production costs have reduced significantly from $71/ watt down to today’s cost of a mere 50c/ watt in power production; improved skills and operation costs are evident in the shift towards employing contract miners, whilst burgeoning social and environmental issues are evident with the increase in artisanal mining in some African states; beneficiation in-country is a major theme, opening up opportunities, yet in some instances difficult to deliver, for example, trying to produce steel cheaper than we can import it. The bottom line is that we are seeing the creation of factors for the next bull market, and juniors need to position themselves to take advantage of the current opportunities,” stated Scott.

*Sam Sithole*