Planisa!

Gold miners' underground practices

According to **Sizwe Phakathi** underground mining relies on being adaptable. Management inefficiencies are left for the ordinary gold miner to solve with obvious implications for safety.

Ultra-deep mining with its depth, heat, fall of rocks, rockbursts and seismic events is a unique, artificially created work environment. Workers learn to deal with the uncertainties that characterise this environment and it is out of this that their occupational culture is born.

Workers must 'read' and anticipate changing conditions in their immediate geological environment and work safely in order to survive while responding to production demands. Under these conditions, workers face blockages that obstruct their day-to-day work life.

"Planisa" is a *fanakalo* (mining lingua franca) instruction, entreating miners to use their skills and ingenuity to tackle day-to-day problems posed by the uncertainties and organisational dysfunctions of mining. Planisa involves creative, self-organised improvisation and initiative on an individual and collective basis, often working around standard work rules.

Planisa is an innovative yet risky informal work practice underground which workers adopt to tackle production bottlenecks. This practice of planisa suggests that formal management methods of production with their rules and regulations are not always efficient in complex work situations.

A combination of factors compels underground workers to make a plan (planisa) or improvise around the production process either as a result of an instruction or out of the work team's self-initiated action. These include material shortages, production pressures, production bonuses and budgetary constraints.

MATERIAL SHORTAGES

I conducted participant observation research in a number of South African gold mines and this is what I found.

In response to production bottlenecks at the rock-face, particularly material shortages, the underground stope work teams made a plan by searching for material in every possible place underground including the *madala* site (previously mined area). As Philemon, a rock drill operator, remarked: "When there is no material… we look for material elsewhere or in the madala site so that we can blast. We make a plan. We take that risk…" For safety reasons, unauthorised entry to such a worksite is by law prohibited and considered a hazardous act.

I observed stope workers going to the madala site to search for materials they could use to improvise with. The miners searched for a host of material including timber packs, unused props, bolts and nuts or a piece of wire to fix equipment such as winches. As Mike, a stope worker, pointed out: "There is a problem with the material not being delivered on time... especially [timber] packs for [rock] support. Drill sticks or *amajombolo* are always in short supply, spares and pinch bars are old."

Lefa, the winch operator, had this to say: "We do run short of material for weeks or months." Sylvester, the rock drill operator, shared the same view: "We do experience delays. This can cost you a blast."

PRODUCTION PRESSURES

The pressure to meet production targets compels stope workers to make a plan underground. As Mike, a winch operator, remarked: "There is pressure on team leaders and miners to blast. They have double pressure [production and safety]. We rather blast to protect them. If you refuse to work in an unsafe area, you are badmouthed and told that you have a bad attitude."

Petros, one of the miners, echoed the same sentiment: "Sometimes people are in a dilemma of… that

Sizwe Phakathi

On their way to work, underground workers waiting for the sub-shaft cage.

attitude of forcing people to work in an unsafe area. Following the law might work against you. It can affect your [performance] record because you put safety first. For the miner not to blast [the gold bearing rock] for three days is a bad record. Five days without blasting is worse. As a miner, you should know that safety can break your record. The mine can dismiss. So you are tempted to risk for the sake of boosting your record."

Mike and Petros' remarks suggest that stope workers made a plan not only for the purpose of meeting production demands but for solidarity reasons. They needed to protect their team leaders and miners from being punished by their shift-bosses and mine captains. The team workers understood the harsh treatment they faced if they failed to impress their superiors.

In the eyes of the shift-bosses and mine captains, team leaders and miners who failed to improvise production through making a plan were incompetent. In this instance, planisa is a response to coercion. As David, a stope worker, remarked: "Team leaders who stick to the law [by refusing to make a plan] are bad-named and changed from one gang to another. They are called 'they know too much' *makhulu skop* and do not want to listen. You are being intimidated, I will charge you. You must blast that panel at all cost."

The miners, shift-bosses and mine captains were also under pressure to produce. Hence they tended to instruct their charges to make a plan to resolve blockages to production. This usually meant non-adherence to formal work standards and adoption of alternative informal work practices. As Kau, a rock drill operator, pointed out: "They [shift-bosses and mine captains] would tell you drill, *tshaya* and blast, *tshisa*. You will then make a plan to please them. If you do not you would be asked so many questions as if they did not know that you did not have the necessary material and equipment."

Petros shared the same view: "If you happened not to do it on another day, the shift-boss might ask you why you did not make a plan."

PRODUCTION BONUSES

The desire to increase bonus earnings by all means perpetuated the work practice of planisa: "Workers make a plan in order to blast and get a productivity bonus." Manolo, the winch operator, commented. To meet the production target and qualify for the bonus, "we [stope workers] do make a plan by stealing or searching for material from other sections and cross cuts," Petros said.

Themba, the team leader, remarked: "We borrow the material from the neighbouring panels. Miners do it." The miners and shift-bosses improvised production through planisa because they were also paid bonuses when their crews achieved the production target.

BUDGETARY CONSTRAINTS

As noted earlier, the informal work practice of making a plan takes

place at worker level and also at supervisory level. In response to budgetary constraints, shift-bosses made a plan amongst themselves. One day, Lee, the shift-boss, remarked to me while underground overseeing production: "You end up having to make a plan or steal material. We do also assist each other. For example, the other shift-boss asked me to loan him some money from my budget to buy material because he does not have the money in his budget. I loaned him R500 [about $70]. I know he will help me with something in future."

DOUBLE-EDGED SWORD

The reality is that making a plan has pros and cons for stope workers. If they engage in planisa, they bypass formal work standards including their right to refuse to work in unsafe areas as promulgated by the South African Mine Health and Safety Act of 1996. As Billy, the team leader, commented: "Planisa is… about taking chances. It is out of mine standards."

Planisa only appealed to shift-bosses and mine captains if it did not result in injuries and accidents. They praised their charges. However, in the event of injury or accident, the stope workers were blamed by their bosses. So planisa is a double-edged sword.

Planisa constitutes two sides of the same coin – admiration on the one side and condemnation on the other. The following remark made by Benson, the team leader, emphasised this point: "Making or trying a plan is only good when it does not result in accident. But if your plan was successful you are good men, *madoda*. You can make a plan, but once there is a mistake, you are in trouble."

Ironically, in the event of injury or accident resulting from making a plan, the role of mine management, especially the shift-bosses and mine captains was overlooked. Mine management tended to blame stope workers for taking shortcuts. They often failed to consider a host of organisational factors that compelled workers to make a plan.

Nevertheless, Koos, the rock engineering manager in one of the gold mines, pointed out that the blame cannot be attributed solely to the "poor guy [worker at the rock-face], but probably, it is a broken winch that could not be fixed on time. The shift-boss did not plan for it and the mine captain did not do his part."

CONCLUSION

The informal work practice of planisa reveals the manner in which underground gold miners resolved complex production blockages which administrative or formal methods of management could not resolve. Apart from its unsafe aspects, the work practice of 'getting by' underground is actually an innovative work practice in that it enhances productivity. It is a 'science of management' to use Charles Lindblom's words, a science of 'muddling through' in the daily running of the production process down the mine. Shift-bosses and mine captains not only recognise planisa, but consistently order workers to make a plan, effectively instructing workers to create their counter-plans to get things done.

This occurs particularly in circumstances of organisational dysfunctions such as lack of supplies and in the event of unforeseen accidents. It is the informal rules and norms of mining that constitute the central organising principles of the workplace without which mining would not take place.

While planisa is an essential part of mining practice, the challenge is to harness the miners' capacity to exercise these occupationally learned skills, while eliminating its unsafe aspect. Any strategy to improve the safety and productivity of mineworkers must draw on these experiences. LB

Sizwe Phakathi is a senior researcher at the Gauteng City-Region Observatory (GCRO) at the universities of the Witwatersrand and Johannesburg.

Sizwe Phakathi

Shaft with production material, often in short supply, in the foreground.