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SAM TAMBANI RESEARCH INSTITUTE

NO 1 • FEBRUARY 2016

Working Paper

Union and business efforts to increase productivity in the mining sector: A critical Relection

MARTIN KAGGWA

The aim of this paper is to examine the practicality of how mineworkers, organised under a trade union, can participate in employers' productivity-increasing initiatives in a mutually beneficial way in South Africa. A critical analysis of the concept of productivity and its practical application in the mining business environment, including the aspect of relationship dynamics between mineworkers and employers is done. It is highlighted that defining productivity in the sector is subjective and characterised by information asymmetry in favour of the employers. Moreover, low productivity has frequently been used as a reason against mineworkers' quest for higher wages; as a result, the concept is viewed with suspicion by mineworkers. For a trade union to aggressively encourage its members to participate in productivity initiatives at the workplace, it needs to get some assurance that its members will benefit from the resultant increase in productivity. This will require that mineworkers and employers have a prior agreement on the definition of productivity, the parameters to measure it, and the extent to which a change in productivity will influence workers' wages and benefits. Given the precedent of mineworkers' exploitation and the existing trust deficit between parties in South Africa's mining sector, the onus lies on the side of mining businesses to demonstrate and convince unions that the productivity initiatives are not just another tool to exploit workers. Otherwise, there is no doubt that increased productivity can be beneficial for both mining businesses and mineworkers

1 Introduction

The debate on trade unions and their effect on productivity is not a recent one (Addison, 1983). It has been a subject of discussion among labour economists, unions and social policy experts. The question investigated has not been whether the existence of unions has an effect on productivity, but rather if the effect was negative or positive. Initially, most analysts hastily concluded that this effect is negative since unionised workers tend to earn high wages, and are often reluctant to partake in business initiatives aimed at increasing productivity. The strict belief that unions have a negative effect on productivity in sectors where they are active has been changing, though. The new narrative among business and labour is that unions can contribute positively to productivity depending on circumstances pertaining (Kerwell, 2013, Freeman and Modeff, 1984).

There is renewed interest in unions and productivity in South Africa, particularly in the mining sector, driven by competitiveness pressures in resource markets. It is against this background that this paper examines the practicality of how mineworkers, organised under a trade union, can participate in employers' productivity-increasing initiatives in a mutually beneficial way. The focus of discussion is strictly on labour productivity.

Productivity is an important element for competitiveness of any business or enterprise. Competitiveness refers to the ability of firms or industries to increase in size, in market share and subsequently in profitability. Clark and Guy (2000) define competitiveness as the degree to which it (an enterprise) could, under free and fair market conditions, produce goods and services that meet the test of international markets while simultaneously maintaining and expanding the real income of citizens. Clark and Guy's definition of competitiveness as driven by productivity is important to workers because it encompasses the issue of sharing benefits of competitiveness. The definition does not consider competitiveness in isolation of benefit to society and, by implication, to workers who are supposed to be the first-tier beneficiaries.

Both business and labour as represented by unions are critically aware of the importance of competitiveness. For business, competitiveness guarantees sustainable business; and for labour it reduces the likelihood of retrenchments. To be sustainable, an enterprise needs to be competitive. By being competitive, enterprises are able to sustain their businesses. Sustainable businesses support employment, a key aspect of interest for unions. One can, therefore, argue that it is in the interest of unions to support efforts aimed at improving productivity in the sectors in which they operate.

The question of what unions can do to strengthen the ability of business in South Africa to improve productivity and share the fruits thereof equitably with workers is a valid one. However, the answer to it is not straight forward. There are a number of assumptions underlying the question that need to be considered in order to deal with it in practical terms. First, it is assumed that unions have the ability to influence productivity in the workplace without any hindrances. Second, it is assumed that benefits from increased productivity will be shared, and shared equitably between employers and workers.

These assumptions are not necessarily true. For some sectors, the mind-set that unions negatively affect investment through profit reductions still exists. A case is made that reduced profitability reduces motivation to work harder and smarter, and ultimately leads to loss of productivity. It is reasoned that all these factors come together to dampen the desire to invest in sectors where trade unions are active.

In South Africa, businesses articulates the importance of productivity being dependent on labour only when it suits them. They frequently attribute low productivity to labour but tend to be silent when productivity gains are realised. When increases in productivity are mentioned, the gains are often attributed not to labour but to other factors.

In their justification for the need to improve productivity, businesses underplay the profit motive too. They instead use labour-related justifications to persuade unions to support their productivity initiatives. In his welcoming speech at the Mining Lekgotla 2014, for example, a mining house executive had this to say to delegates on productivity:

> *'If we are intent on building an industry for the long term, we must improve productivity. Without productivity, wage increases will become increasingly difficult to realise. On a national level, productivity can help address the inequality that the country is grappling with. We believe that major inroads can be made to our operating practices and the skills development of our people, if we have improvement in productivity levels in the mining industry and in South Africa.'*

The executive tactfully avoided articulating how previous improvement in productivity had not led to increases in wages and the narrowing of the gap between the poor and the rich in the country.

The unions' point of contention is that if previous improvement in productivity has not contributed to wage increases and reduction in inequality, what guarantees are there that this will be the case in future. The point of view expressed by the mining executive raised doubts, on the part of unions, about the sincerity of employers regarding fair share of benefits of increased productivity between business and labour in future.

The following sections draw from the experience of the National Union of Mineworkers (NUM) in attempting to answer the question of what unions can do to strengthen the ability of business in South Africa to improve productivity. In Section 2, the traditional role of unions and union members' expectations is discussed - in acknowledgment that union activities and direction are driven, mainly, by interests of their members. Unions serve interests of a particular constituency – the workers. There are limits on the extent to which the unions can deviate from their core responsibility as dictated by the constituency they serve. The desire and intention by business to partner with unions in productivity improvement initiatives has to be viewed within this context. In Section 3, practical challenges of putting productivity on the agenda of unions are discussed. Section 4 concludes the report.

2 Traditional and emerging roles of unions and union member's expectations

Unions are voluntary organisations. Workers join unions because of the anticipated benefits of being unionised. The two major reasons behind workers' desire to join unions are:

a) to seek protection against unfair dismissal and treatment at the workplace, and
b) to earn relatively higher wages as negotiated by unions.

According to Fanaroff (2003) as cited in Grobler et al. (2006), workers are motivated to join a union for, inter alia, job security, negotiating better wages and benefits, better working conditions and fair and just supervision. Other non-work and non-wage reasons such as getting a sense of belonging at work and socialising are secondary.

If a union does not practically demonstrate that it can protect its members from unfair dismissal and treatment in the work place, and that it cannot negotiate better wages for its members, that union will lose relevancy to its members. Ultimately, its membership will decline overtime. If no remedial measures are taken, this can lead to that union's demise.

Unions in South Africa are aware of the importance of remaining relevant to their existing and prospective members. They strive to ensure that members realise benefits of belonging to the union. For well-established unions like the NUM, they put in place mechanisms to enable them to keep in touch with members' sentiments and address members' concerns as they arise. In extreme cases were a union experiences unexpected loss of membership like what happened to NUM in 2013, special interventions are initiated. In this case, NUM responded to loss of members to a new rival union by launching the Qaphela project.

The Qaphela project was a multi-faceted organisational renewal undertaking aimed at coming up with and implementing strategies to maintain NUM's relevancy to its members in light of new and emerging challenges within the mining sector. The new challenges included formation of a rival union, aggressive and diversionary introduction of politics into union activities and the undermining of wage-negotiation institutions and processes previously respected by all stakeholders. The Qaphela project had a pro-active element too. It sought to understand members' needs and expectations such that appropriate interventions could be initiated in time.

There was a possibility that new focus areas could be introduced to the NUM agenda as a result of the Qaphela project. For example, if it was revealed that productivity related interventions could play a role in NUM's organisational renewal, then productivity would become a key focus area of NUM. If it did not come from members' consultation processes, then introduction of productivity on the union's agenda would have to be spearheaded by union leadership, in which case a convincing motivation would have to be provided to members within the prescribed structures.

The operational agenda of unions is, by and large, set by members - from shop stewards who interact directly with workers on the ground, to the general assembly that approves union's activities for a particular period. As alluded to previously, it is possible that union leadership may initiate new agenda items for the unions but these have to be presented and consented to by members before they are adopted, if deemed beneficial by the majority of members.

When NUM was formed in 1982, its initial focus was on fighting against workers exploitation that manifested itself through the offer of very low wages, fighting racism and for general improvement of miners' working and residence conditions. These were the critical aspects of interest for the mineworkers at the time.

Overtime, the scope of the union's focus areas has grown. This can be attributed, in part, to new challenges that have emerged. These challenges include but are not limited to socio-economic conditions of mining communities that limit mineworkers' children accessing quality pre-tertiary and tertiary education, high levels indebtedness and a low saving culture. From a long term perspective, the unions came to realise that they have to engage pro-actively with national policies that have a bearing on workers' welfare. In this regard, NUM contributed to formulation of the mining charter and a range of national policies aimed at accelerating transformation in the mining, energy and construction sectors of the South African economy.

In the last two decades, apart from being active in negotiating better wages for its members and for being a vanguard against work place discrimination, the NUM agenda has expanded to include previously non-core union activities. Providing supplementary social services to members, expansion of external cooperation, and the forging of new partnerships with other governmental and non-governmental entities sharing the same interests were some of the new items on the union's agenda.

The NUM experience reveals that unions can be robust in their operations. They can embrace new challenges, and may expand their operational agenda if they deem it necessary. But not all new challenges can be taken on by the unions. There is always a risk that through unchecked embracing of new agenda items, unions may be distracted from their core mandate of looking after the interest of their members. Moreover, some of the new agenda items may not have immediate and visible benefits to members. Such items may not be easily justifiable to union membership.

Thus far, the issue of labour productivity has not featured prominently on the agenda of many unions in South Africa. In terms of ranking, it is not at the top of the list. Unions are still jittery about the concept. The situation is not helped by the fact that whenever job losses or retrenchments have happened, a process that business creatively refers to as restructuring, low productivity has been presented as one of the justifications.

As part of evolving roles of unions in the modern working environment, there is space to introduce new focus areas like productivity. While acknowledging this, it is important to note that the roles that unions can effectively take on, and what they can put on their operational agenda, are not infinite. For productivity to be recognised as a key aspect of interest for unions, union members need to be convinced that it will serve their interests.

In a nutshell, productivity is one of those aspects that union leadership can consider marketing to its members and pro-actively pursue, but only to the extent that members are convinced that this will benefit them. Asking trade unions to actively engage with business productivity initiatives means introducing a new agenda item to unions' core mandate. Although increasing labour productivity can be potentially beneficial to workers, benefits therefrom are highly conditional. Moreover, precedent within some sectors, like the mining sector, indicates that the issue of productivity has been used against workers' interests by the employer. As things stand now, a lot needs to be done to convince unions to embrace business-led productivity initiatives.

The following section is devoted to the practical challenges of putting productivity on the agenda of unions, assuming unions and business agree in principle to work together on the subject.

3 Embracing productivity as part of unions' agenda

3.1 The problem of defining productivity

If it was automatic that benefits of increased productivity translate directly to improved welfare of workers via higher wages and other non-pecuniary benefits, then the question of unions embracing productivity would not be an issue. But this is not the case. Achieving higher productivity within a particular sector does not guarantee that benefits therefrom will reach the workers. The transmission of productivity benefits from the employers to workers is constrained by both theoretical and practical factors. From a theoretical perspective, the definition of productivity is a major factor.

Productivity is commonly defined as the ratio of total value of output to the total cost of input used in the production of the output. In defining productivity, a distinction is often made between partial productivity and total factor productivity. Partial productivity measures the amount of output attributable to a single factor of production used in the production process in isolation of other factors. So partial productivity of labour would refer to output attributable to labour alone. Total factor productivity is productivity attributable to all factors of production combined. It is a generic measure of a change in total production due to a change in all factor inputs.

The partial productivity definition is closely related to the marginal product of labour (MPL) concept. Marginal product of labour is defined as the increase in total output that results from using an additional unit of labour. In other words, what does the extra person employed add to the existing output level. Productivity is considered to have increased if MPL has increased.

Partial productivity is a useful parameter when making management decisions on factor mix in the production process. Total productivity, on the other hand, is useful in making strategic decisions pertaining to a firms' competitiveness in particular markets. In reality, partial and total productivity are not mutually exclusive. Partial productivity is a contributing factor to total productivity, although conclusions cannot be drawn on total productivity based on partial productivity.

Productivity, whether partial or total, can be increased either through production cost reduction while maintaining the value of output, or through increase in value of output, holding the cost of production constant, or when both the value of output and production costs increase but with the increase in former being higher than the latter.

Technically, the focus of this chapter is on partial productivity of labour rather total productivity. With this in mind, the question becomes how to apportion productivity gains given that labour does not contribute to the increase in productivity in isolation.
The emphasis on cost reduction in defining productivity may not serve the interest of unions since wages paid to labour are part of the cost of production. In an effort to reduce costs, many business enterprises tend to focus on reducing the wage bill, often through retrenchments.

From the perspective of the unions, the focus of productivity should be on the output side, and not necessarily on the cost aspect. Engagement with business on productivity should focus on increasing output per worker employed even if the cost of doing so may be increasing. It still makes business sense to allow production costs to increase as long as the increase in costs is less than the increase in resultant value of output.

Defining productivity as a ratio between output and labour costs rather than the marginal product of labour allows space to retain workers whose productivity may be lower than the average output per worker in a business. It further facilitates offer of wages higher than what marginal product of labour approach would have dictated in the interim. Adopting such a definition for productivity affords time to all concerned parties to improve productivity without loss of jobs or reduction in wages. Moreover, it eliminates complications of trying to establish the isolated contribution of labour to output per the total factor productivity theory. Hence it can be a more acceptable definition of productivity from a labour perspective.

A pre-agreement on the definition of productivity between business and unions that takes into account labour interest is important in convincing unions to come on board regarding productivity initiatives by business. It is a vital starting point on joint business-union cooperation on productivity. Without a clear and agreeable definition of what productivity is or what it means within a particular sector, its achievement, quantification and share of its benefits will be futile.

3.2 Productivity and wages

In an ideal world, labour should receive wages that reflect the value of its output, what economists refer to as the value of marginal product of labour. The reality, however, is often different. Businesses have to take into account other contributing factors to the output realised. These may include capital and entrepreneurship. Nonetheless, it should be evident that there is always a positive correlation between wages received and productivity.

Apportioning of productivity gains to different contributing factors is a complicated process. It requires unambiguous definition of productivity and detailed data on production processes. The production data should be accessible and comprehensible by both business and unions.

Experience from many sectors indicate that determination of productivity and matters pertaining thereto are not often transparently done. Businesses, as the custodian of production information, decide at their own discretion what information to share or not to share with unions. Sometimes, businesses just make a pronouncement on productivity level without providing details. Thus far, there is no tested evidence that ascertains the extent to which productivity is influencing wages. Under the existing situation of information asymmetry regarding production data, there is no fair way unions can participate in the productivity remuneration debate.

3.2.1 Productivity as a wage constraining tool

Some unions have reservation on embracing the productivity narrative because the concept has been used as a tool against interest of workers in terms of wage offer and structure.

In the mining sector, for example, employers set basic wages very low and then offer high bonuses linked to what they call productivity. Productivity, in this case, is crudely defined as achieving a specific target of output. Although seemingly a good idea, the implications to workers' well-being of this reward approach has been negative.

Motivated by the desire to get bonuses, workers have been forced to forego health and safety concerns at the work place. Workers do not report health and safety concerns to management and their respective unions if they think that by doing so it will lead to delays or result in not achieving the set bonus-earning targets. As a result, hazardous working conditions at the work place have been perpetuated despite union's vigilance to do away with such. Incidents of tension between unions and workers on this matter have been reported. By taking the position that workers' safety is paramount, the fact that workers are more concerned with earning bonuses irrespective of safety concerns has sometimes created tensions between unions and their members.

The National Union of Mineworkers has been active in monitoring and advocating for a safe work environment for its members. By not reporting safety concerns in favour of earning bonuses, the union's role in ensuring members' safety in the workplace becomes constrained.

Cases where workers have been forced to work for long hours beyond the stipulated time, or to cover up for colleagues who are sick, in order to earn the bonuses have been reported. When accidents happen, due to fatigue or other stress related factors, employers absolve themselves of responsibility arguing that the accident happened outside the stipulated working hours. In these cases, the responsibility of fighting for the workers' case is left to the unions that have to go through a torturous and sometimes expensive legal process to make employers take responsibility. Some cases may not be winnable simply because the workers made wrong decisions in trying to achieve the employer's prescribed productivity levels in order to qualify for a bonus.

Instead of playing a positive role in increasing workers' welfare, the concept of productivity has been manipulated to serve interests of the employers and to a very less extent that of workers. The status quo creates suspicion when the employers approach unions to discuss productivity.

3.3 Productivity, technology and employment

In the discussion on how unions can contribute towards business productivity, it is imperative to take into account the role of technology in increasing productivity and how this may have a bearing on the interests of workers.

It is widely acknowledged that the right technology contributes to the firm's productivity. Lengnick-Hall (1992) contends that technology is a key determinant of production efficiency, and subsequently of competitiveness. What the literature does not explicitly take into account is that technology has to be paired with the human element - that is the workers. Apart from robotic technology that minimises human involvement, most technologies augment workers' efficiencies rather than operating in isolation.

The recognition that technology needs to be paired with a human element brings to the fore the question of to whom should the increase in productivity be attributed to when a worker using appropriate technology increases a firm's productivity. The answer to this question is subjective but from the unions' point of view, a higher portion of this productivity gain should to be attributed to a worker. This point of view is often not shared by employers. It is such differences in opinion that make unions reluctant to embrace employers' productivity initiatives.

The labour displacing dimension of technology is of concern to unions. While most technologies supplement workers' productivity, technology may have a labour displacement effect through its altering of the proportions of capital and labour used in the production process. Often, it is labour that is substituted in favour of capital. Unions are reluctant to support labour replacing technology even if it enhances productivity unless there are alternative sectors that can absorb the labour that will be rendered redundant by the technology. From a unions' perspective, the issue is not about the state-of-art technology that enhances productivity but rather appropriate technology that enhances labour productivity without displacing labour in the process.

The discussion on technology, productivity and employment often misses out the element of demand-side constraints. It is assumed that whatever will be produced, will indeed be sold on the market. In other words, that there is an infinite demand for products being produced irrespective of time. In reality, demand side constraints exist and often arise. When the world economy goes into a recession like it did in 2008, the global demand of almost all products declined.

Faced with low demand, businesses adjust their production plans downwards. With higher productivity potential, businesses tend to consider retrenchment of workers since they can still produce more with less headcount. This aspect of technology, productivity and demand of products being produced by workers need to form part of the analysis of whether, and how, unions need to work with business to improve productivity.

3.4 The commodity price factor in the productivity debate

In defining and analysing productivity, the price at which products or commodities to be produced will be sold is often omitted. Yet to the extent that output as a basis of productivity is stated in value terms, commodity price is a key determinant of productivity. Productivity may reduce or decline not based on output produced but rather on market prices of commodities or products being produced. Labour may be producing the same or even higher levels of output, but based on the value of output, labour productivity may be judged to have declined because of reduced prices in product markets. Both business and workers have limited powers to influence what happens in product market.

Strict migration to productivity-based wages thus makes workers vulnerable to fluctuation in wages and benefits that may be caused by price fluctuations in commodity markets. The end result could be that despite increases in workers' productivity as measured by volume of output per worker, wages received can decline. A good example of this scenario is presented in the work of Bowden (2000) on effects of productivity-based bargaining in the Australian coal industry. He states:

'Since 1987 Australian trade unions have endorsed productivity-based bargaining at the workplace level. Their expectation was that enhanced productivity would lead to higher wages and more profitable enterprises. The application of productivity-based bargaining in the Australian coal industry has resulted in a catastrophe for all concerned. While workplace reform in this industry has resulted in dramatic gains being achieved in terms of productivity and total output, this extra product simply added to world oversupply, driving down prices and increasing the pressures for further reforms – literary pressure to retrench workers.' (Bowden, 2000:364).

It is important, therefore, that the market price element and implication thereof, as also alluded to under the technology section, be explicitly taken into account in the discussion of unions participating in business productivity initiatives. In the event of the partnership leading to unintended consequences, as it did in the Australian coal sector, it is the workers who are more likely to suffer.

3.5 Trust deficit between business and unions, and productivity aspirations

The fact that benefits of increased productivity will be shared equitably between business and workers is a fundamental factor in bringing unions on board regarding higher productivity aspiration by businesses. Trust is pivotal if unions are to work together with business to increase productivity. As already mentioned, measuring productivity gains and apportioning benefits therefrom to parties involved in the production process is a complex undertaking. It requires carefully gathering, tracking and interpretation of production data.

When it comes to production data, there is information asymmetry in favour of business. Businesses are privy to production information and they are the one that will generate reports that will indicate gain or loss in productivity overtime. Unions are expected to use these reports to claim benefits of increased productivity for the workers. But what is the likelihood that the generated reports in a situation of information asymmetry will be acceptable by unions and be used as a reliable basis for negotiations or productivity gains apportioning? This is where the trust aspect comes into play.

The relationship between business and unions in South Africa has been characterised by low trust levels. From the National Economic Development and Labour Council (NEDLAC), a forum created for business and labour to amicably agree on national development policies, there has been a trust deficit that hampered a common stand on key national policies.

The trust deficit has cascaded down to sector level. In the mining sector, for example, it is common for mining houses to present information and reports that put them in good light in terms of their improving of workers' welfare. Most of the time this information is not supported by facts on the ground, according to union sources.

The mining charter, for example, set specific transformation targets for the mining sector to which both the employers and unions were agreeable. One of the targets under the employment equity objectives was to ensure that workplaces should be diversified to reflect the country's demographics by 2014. In particular, women participation should reach 40% at all levels of the company hierarchy. A report presented by business to the Department of Mineral Resource in 2014 simply reported that these targets had been achieved by March 2014. But union members on the ground, at the Mining Lekgotla 2014, attested that this was not true. Business in the mining sector was exhibiting an attitude that if government or unions wanted data that demonstrated achievement of a particular transformation objective, business would just generate the data and submit the way it was wanted. It is this kind of attitude that has exacerbated trust deficit between business and unions in the mining sector.

At the same Lekgotla, one mining house executive claimed that as part of his company's efforts to improve mineworkers' welfare, more than 100 houses had been built for miners. The executive had to withdraw the statement when union members from the area he mentioned asked him to indicate the exact location of the houses. If it was not for the presence of workers from the specific area that the mining executive had mentioned, his presentation could have probably received a standing ovation for demonstrating how much good business was doing for labour in the mining sector. This could have been an isolated case but there is a real possibility that the misrepresentation of facts on performance by business executives is the norm rather than the exception in many sectors of the South African economy.

It should also be acknowledged that there are soft factors that influence labour productivity that are in the power domain of the employers and are trust-related. These include genuine appreciation, encouragement and recognition, non-pecuniary benefits and setting up realistic work targets. Employers tend to down-play these factors yet they are critical; and unions can be good partners with business in ensuring their achievement (Addison, 1983).

The trust deficit has to be taken into account and addressed in any joint undertaking between business and unions in future, including the desire to use unions to promote higher productivity.

Putting productivity on the agenda of unions will have to be formally initiated by business. Unions may have to seek a mandate from their members to prioritise productivity initiatives. For this to happen, union leadership needs to have compelling reasons that specifically point out how such a move will be good for workers.

4 Conclusion

There is no doubt that increased productivity in the mining sector can be beneficial for both the employers and mineworkers. For this to happen, though, some basic elements and understanding have to be in place. Employers and workers, through their union, have to agree on the working definition of productivity and parameters to measure it and the extent to which a change in productivity will influence workers' wages and benefits. Changes in the agreed upon parameters of productivity need to be monitored by the employers and the union, and any upward shift in productivity should lead to commensurate increases in workers' benefits. If this consensus can be built between employers and unions, unions will be motivated to participate actively in all initiatives aimed at improving workers' productivity. This will increase the likelihood of a win-win situation for employers and workers.

The bottom line is that a union cannot buy into what it cannot sell to its members. For unions to buy into productivity initiatives in the mining sector, there should be clarity on what gain in productivity will entail, how it will be measured, by whom, and how benefits therefrom will be shared between the employers and mineworkers. Given the precedent of mineworkers' exploitation and the existing trust deficit that characterises the mining sector, the onus lies more on the side of mining businesses to demonstrate and convince workers through their unions that the productivity initiatives are not yet another tool to exploit workers. Otherwise, unions will continue to be reluctant to partner with business in productivity improvement initiatives.

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SATRI
SAM TAMBANI RESEARCH INSTITUTE

No 3 Rissik Street, Cnr Albert Street
Alris Building, 2nd Floor, Johannesburg 2000
PO Box 32202, Braamfontein 2017
Tel: 010 593 7238 • Fax: 011 442 0814
Email: Leratom@satri.org.za
Website: www.satri.org.za