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Article

Defining a reliable Planning, Monitoring and Evaluation (M&E) Framework for the implementation of a Mining Company's Social Licence to Operate (SLO): An honest approach to community development in South African mining jurisdictions.

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Abstract: The Mine Works Program (MWP), the Environmental Management Plans (EMP's) and the Social and Labour Plans (SLP's) are preconditions to be granted a mining right in South Africa. The SLP and its five year cycle presents both a good opportunity and period for the Mine and the community to collaborate towards achieving sustainable development outcomes linked to the mining project which has the potential to enable a Mine to obtain a Social License to Operate (SLO). It has however proven difficult to clearly explain what exactly a SLO is as their still fundamental gaps between academic explanations and on the ground implementation and maintenance of a SLO.

The term SLO does not refer to a formal licensing arrangement but it is merely a metaphor that has been developed to capture the principles, ideals and activities companies need to adhere to, to gain acceptance and support from society. To maintain a SLO the mining company is expected to engage with the immediate community and devise a plan on how it will meet the community's expectations. Once a community's expectations plan has been devised and agreed upon, the mining company is expected to live up to its commitment and the expectations

of the community. The community then grants the mining company a right to conduct its operations. The right or trust bestowed to the mining company by the community is the SLO. The community withdraws the right when it perceives the mining company no longer meets the community's expectations.

A SLO is important for the success of a mining project as it mitigates risks that can disturb the project. Modern day corporations rely on a social contract with their social partners to ensure their operations are accepted within society. Mining companies have started defining what is exactly meant by the term SLO as they have been forced to constantly improve their practices and benefits towards society in the form of corporate social responsibility, corporate citizenship, SLP's and sustainable development programs. It is also wise to illustrate the difference between corporate social responsibility, sustainable development, SLP and the SLO. The successful attainment of the SLP's objectives will place a Mine in favourable terms with its immediate community. Provided the SLP objectives are aligned with the community's expectations and development requirements.

In South Africa like in most matured mining jurisdictions the most difficult aspect faced by mining industry stakeholders has been to ensure the collaborative efforts made in mine community development projects yield the intended results. One of the problems is inadequate programme and project planning. Results Based Management (RBM) Monitoring and Evaluation (M&E) techniques have been identified as having an important role to play in ensuring the commitments reached by the community and a mining company are achieved as it can allow for the constant monitoring of activities against results set by both parties. This paper will illustrate the need to employ RBM methods to attain a SLO through an all-inclusive management strategy to improve management effectiveness and accountability through the employment of a transparent and participatory approach in outlining accurate expected results, monitoring progress towards the attainment of expected results, evaluating and reporting on performance and integrating lessons learned into decision making of mine community development practitioners.

**Keywords:** social license to operate, results based management, monitoring and evaluation, social and labour plan

#### 1. INTRODUCTION

Attaining a SLO is important for the success of a mining project as it can decrease stoppages emanating from an unsatisfied and aggrieved community. As illustrated by Bice (2014) modern day corporations rely on a social contract with their social partners to ensure their operations are accepted within society. To fully comprehend the SLO all stakeholders of a mining company this includes directors, financiers, fund managers, investment advisors need to ensure a Social Due Diligence (SDD) has been conducted successfully before and continuously during the life of a mine to ensure uninterrupted and successful business practise. Pike (2012) explained the basis of a SLO being premised on micro level details as opposed to a higher level approach and a need for mining companies to get a better understanding of the local environment, to ensure the fair and transparent sharing of the Mine's benefits with the local population, to have a clear understanding of land rights, to understand competing interests between illegal and artisanal miners, to be aware of the potential environmental impacts which may emanate from the mining project and to safeguard the mining company's reputation from other communities where it also has operations.

Most entities have already nestled this awareness within their businesses by establishing Sustainable Development (SD) or Corporate Social Responsibility (CSR) departments and publishing their socio economic development programs in their annual reports for society to recognise their socio-economic contribution (Bice, 2014). It is still difficult to explain what exactly a SLO is as their still fundamental gaps between academic explanations and on the ground implementation and maintenance of a SLO. It is safe to insist the term SLO is not a formal licensing arrangement but it is merely a metaphor that has been developed to capture the principles, ideals and activities companies need to adhere to, to gain acceptance and support from society. In South Africa like in most matured mining jurisdictions the most difficult aspect faced by mining industry stakeholders has been to ensure the collaborative efforts made in development projects yield the intended results. One of the problems is inadequate programme and project planning. Results Based Monitoring and Evaluation (M&E) has been identified as having an important role to play in ensuring the commitments reached by the community and a mining company are achieved as it can allow for constant monitoring of activities against results. A result can be described as measurable, observable and or describable change in a particular situation emanating from a cause and effect relationship. Indicators are used to measure factual change or to report on whether progress has taken place or not (Eke, 2014).

M & E can be employed on policies, projects, programs, strategies and activities in both the public and the private sector. Rabie and Goldman (2014) explained the prevailing feature of M & E being the emphasis on measuring results accurately. The M&E tool can be utilised to advance good governance in the management of Social and Labour Plan (SLP) projects, promote modern management practices, enable organisations to improve the way they implement their SLP projects and promote accountability. Monitoring lays emphasis on the implementation and the attainment of the intended objectives and questions whether the planned actions are being taken and whether progress is being made towards achieving the planned results. Evaluation is essentially an assessment which takes place at a specific point in time of either finished or on-going activities to ascertain the degree to which stated results are being realized and how they influence decision making (Kusek & Rist, 2004).

The SLP is a good program which can assist mining companies to contribute towards the development of its work force and the socio economic advancement of the communities in which they operate and where labour is sourced. A Mine will be placed in a favourable position with its immediate community when its SLP projects are directly linked to the developmental needs of its immediate community and are implemented successfully (Ndaba, 2010). Thobatsi (2014) explained the implementation of the SLP being a worthy attempt at ensuring the mineral resource development project provides for the current and future needs of those who are affected by the mining project, through the stimulation of employment, socio economic growth and development.

This research paper attempts to define, develop a satisfactory planning, monitoring and evaluation framework which can be useful in guaranteeing the accurate design and implementation of a mining company's SLP projects to place a mining company in a good position to achieve its SLO in line with the political economy of the South African Mineral Industry and the local socio-economic conditions where a mining operation is located. The paper does this by arguing for the use of the Result-Based M&E techniques to plan and implement a mining company's developmental intervention as positive developmental outcomes will contribute to the acceptance of a mining company's presence within a community. The paper utilises a local economic development and economic diversification intervention to explain this proposition.

## 2. CONTRIBUTION OF MINING AND QUARRYING TO SOUTH AFRICA'S GROSS DOMESTIC PRODUCT

South Africa is enriched with a variety of mineral resources which has enabled the country to play a significant role in world mineral reserves, production and exports. The country is also a leader in the production of a number of minerals which include Platinum Group Metals (PGM's), Manganese, Chrome, Vanadium and second best producer of Gold, Zirconium and Titanium. The domestic mineral reserves are estimated to be worth R20.3 trillion (\$2.5 trillion). In 2012 the domestic mining industry contributed 9.3% towards the Gross Domestic Product (GDP) of the South African economy which amounted to R221.7 billion (\$27.0 billion). This mineral wealth has enabled the domestic mining industry to make an unquestionable contribution to the economic and industrial development of South Africa as several towns and infrastructure came as a result of mineral development projects (DMR, 2014).

Table 1: Contribution of mining and quarrying to gross domestic product, fixed capital formation and total national exports of goods, 2003-2012 (at current prices)

CONT	RIBUTION	TO VA	LUE	CONTRIBU	JTION	CONTRIBUTION TO			
ADDED			FIXED	CAP	NATIONAL TOTAL				
				FORMATION	ON		EXPORT (	OF GOODS	
National Gross			Total Fixed						
Year Domestic From			Capital	From		Total	From		
	Product	Mining		Formation	Mining		Exports	Mining	
	R'million	R'million	%	R'million	R'million	%	R'million	R'million	%
2003	1 272 537	82 770	6.7	196 999	21 706	11.0	291 434	86 747	29.8
2004	1 415 237	91 198	6.4	226 180	226 180 17 917		310 525	89 546	28.8
2005	1 401 067	105 992	7.6	263 754	263 754 16 743		358 361	102 486	29.1
2006	1 572 319	132 301	8.4	324 083 27 715		8.6	447 690	138 878	31.8
2007	1 792 076	156 970	8.8	406 257	40 206	9.9	533 791	161 755	30.3
2008	2 033 207	196 525	9.7	520 717	58 645	11.3	704 293 219 593		30.8
2009	2 174 512	196 521	9.0	521 707	64 140	12.3	556 432 176 837		31.8
2010	2 412 490	227 117	9.4	514 004	62 431	12.1	625 359 224 956		35.9
2011	2 670 504	260 381	9.8	553 313	68 800	12.4	746 518	282 012	37.8
2012	2 835 087	221 731	9.3	604 390	74 658	12.4	767 230	269 119	35.1

(DMR, 2014)

Premised on a sustainable countercyclical methodology South Africa's fiscal framework has been effective in administering state revenue and expenditure. The South African Revenue Services (SARS) is the state organisation responsible with the collection of taxes which include Value Added Tax (VAT), income tax, corporate tax and fuel duty. The taxes employed on the domestic mineral industry include royalties, corporate income tax, withholding taxes, capex expensing and a special tax formula for gold. In 2012 the overall state revenue from the mining sector declined by 30% from R18.1 billion in 2011 to R12.8 billion as a result of both the mining strikes and overall poor performance by the domestic mining sector (DMR, 2014).

## 3. A DRIVE TO REGULATE THE MINERAL INDUSTRY FOR SUSTAINABLE OUTCOMES

The Mineral and Petroleum Resources Development Act, (MPRDA) Act No. 28, 2002 as amended by Act No 49, 2008 regulates the domestic mining industry supported by the Precious Metals Act and the Diamond Act which are confined to their respective commodities (Mngomezulu, 2016). The MPRDA is focused on the following issues; (1) Transformation of the minerals and mining industry, (2) promoting equitable access to South Africa's mineral resources, (3) promoting investment in exploration, mining and mineral beneficiation, (4) promoting socio-economic development of South Africa and (5) promoting environmental sustainability of the mining industry (DMR, 2014).

To protect the health of mineworkers and to ensure that mining activities are conducted as safely as reasonably possible the government has enacted the Mine Health and Safety Act (MHSA), of 1996. The Mine Health and Safety Council (MHSC) a government organisation was established in terms of the MHSA. The main objective of the Mine Health and Safety regulatory regime is to coerce mining companies to employ mechanisms which will promote the health and safety of employees coupled with promoting training and human resource development, enabling miners to refuse to work in dangerous environments/conditions and empowering both the miner and the employer to collaborate in identifying hazards, eliminate, control and minimize the risks relating to health and safety at mining operation (MHSA, 1996).

The domestic mining industry's performance towards the legislated requirements for transformation in the domestic mining industry as illustrated in section 100 of the MPRDA are assessed through the mining charter which looks at the following eight elements;

- Ownership: It is a requisite instrument to effect meaningful integration of Historically Disadvantaged South Africans (HDSA) into the mainstream of the economy.
- **Procurement and Enterprise Development:** It is attributable to economic transformation and growth to create opportunities for BEE entities participation in the mainstream economy.
- **Beneficiation:** This intervention is premised on the comparative advantage based on the country's endowment to meaningfully contribute towards accelerated economic growth.
- Employment Equity: Mining companies need to create and to effect a demographically representative workforce in the mining sector.
- **Human Resources Development:** To recognise the sustainable growth and development in the workplace through skills development programmes.
- **Mine Community Development:** This element obliges the mining companies to aggressively implement and support community development programmes.
- **Housing and Living Conditions:** The industry must ensure improved and sustainable living conditions for mine workers.
- Sustainable Development and Growth of the Mining Industry: It is geared towards maximizing the development and economic benefits of mining, while improving the environmental and social sustainability of the mining sector.

(DMR, 2010)

On the 15th of April 2016 the 2016 Reviewed Broad Based Black-Empowerment Charter for the South African Mining and Minerals Industry was published and circulated for comments by the Minister of the Department of Mineral Resources. The 2016 Revised Charter is a process of replacing the original 2002 charter which was effective from 2004 and later on amended in 2010. The three important themes emanating from the 2016 Revised Charter are a strong attempt to align the Mining Charter with the Department of Trade and Industry's (DTI's) Codes of Good Practice, how compliance will be measured by the regulator amidst the on-going legal review of interpretation of the once empowered always empowered 2002 mining charter principle. The 2016 revised mining charter has introduced a Skills Development Trust Fund aimed at skills development, emphasis is placed on black people participating in ownership as opposed to Historically Disadvantaged South Africa's (HDSA's) and the establishment of a Social Development Trust Fund (DMR, 2016).

### 3.1 The Mine Works Program, the Environmental Management Plans and the Social and Labour Plans.

The Mine Works Program (MWP), the Environmental Management Plans (EMP's) and the Social and Labour Plans (SLP's) are preconditions to be granted a mining right by the regulator. The MWP needs to be developed to prove the mineral concerned can be extracted optimally, those who are applying for a mineral right have the financial and technical capacity to mine the mineral deposit, their financial plans are aligned with the mine's life-cycle and all financial requirements are in place, the mineral development project will not have an adverse effect on the environment, financial provision has been made for the SLP and the applicant should be able to comply with the Mine Health and Safety Act number 29 of 1996 (DMR, 2004).

EMP's are developed to ensure the Mine will employ measures to manage and rehabilitate all the negative environmental impacts associated with the mineral resource development project. All mining companies need an approved Environmental Management Programme (EMPR) to conduct their activities. The SLP ensures that a mining company develops adequate Human Resources Development Programmes (HRDP's), Employment Equity Plans (EEP's), local Mine Community Development Plans (MCDP's) which also have to be implemented in a Mine's major Labour Sending Areas (LSA's) and plans that will play a role to save jobs and manage downscaling and or closure (DMR, 2010). In terms of the MPRDA all mining company's operating with new order mining rights need to have an approved SLP (UCGA, 2009). The objectives of the Social and Labour Plan are to:

- Promote economic growth and mineral and petroleum resources development in the Republic (Section 2 (e) of the (MPRDA);
- Promote employment and advance the social and economic welfare of all South Africans (Section 2 (f) of the MPRDA);
- Ensure that holders of mining or production rights contribute towards the socioeconomic development of the areas in which they are operating as well as the areas from which the majority of the workforce is sourced (Section 2 (i) of the MPRDA, and the Charter); and
- To utilize and expand the existing skills base for the empowerment of HDSA and to serve the community

#### 4. THE RATIONALE FOR A SOCIAL LICENSE TO OPERATE

The basic principles associated with the SLO includes the need for mining companies to be transparent in all their activities, to ensure the environment is protected from mining operations, the mining company should ensure its activities empower those who reside proximate to their operations (Pike, 2012; Bice, 2014). Mining companies have started defining what is exactly meant by the term SLO as they have been forced to constantly improve their practices and benefits towards society in the form of corporate social responsibility, corporate citizenship and sustainable development programs (Otto & Cordes, 2002). It is wise to illustrate what is meant by corporate social responsibility, sustainable development and the SLO. Corporate Social Responsibility and Sustainable development practises have existed for some time and their fundamental focus has largely been to garner support from the business community to ensure business's socio-economic and environmental negative impacts are disclosed. Business has to arrange with society on how they will mitigate challenges associated with their operations (Bice, 2014).

The community residing near the mineral deposit project expects to be compensated for the removal of a non-renewable resource and the destruction of their immediate environment. In order to maintain a SLO the mining company is expected to engage with the immediate community and devise a plan on how it will meet the community's expectations (Stark, 2002). Once a community's expectations plan has been devised and agreed upon the mining company is expected to live up to its commitment and the expectations of the community. The community then grants the mining company a right to conduct its operations and withdraws the right when it perceives the mining company no longer meets the community's expectations. The right or trust bestowed to the mining company by the community is the SLO (Bice, 2014).

Thomson & Boutlier (2011) went further to explain that a mining company goes through a number of community approval stages before it is granted the SLO. They argue that local community members will describe a mining company that has partially being given a SLO as being legitimate meaning that there's some level of acceptance of the mining company within the community. At this stage the Mine is still operating within an unstable and uncertain environment as the community is merely giving the Mine the opportunity to prove its credibility to the local community. Once the mine is perceived to be reliable and dependable

the community then moves to upgrade the Mine's status from legitimate to credible this is the stage where the Mine attains its SLO.

#### 4.1 Results Based Management and the Social Licence to Operate

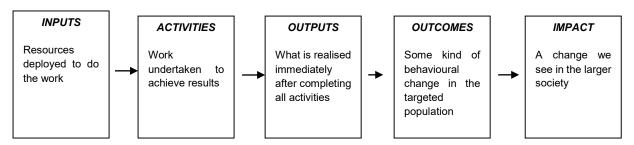
The five year cycle of the SLP presents a good period for the Mine and the community to collaborate towards achieving sustainable development outcomes linked to the mining project to assist the Mine to maintain its SLO. Thomson & Boutlier (2011) suggested that good practice towards earning and maintaining the SLO includes effective and transparent engagement, cooperation, consulting with the local community throughout the life cycle of the project to ensure the existence of good relations and partnerships to contribute towards socioeconomic development.

After reviewing a sample of fifty SLP's across different mineral commodities CALS (2016) found that the majority of the SLP assessed failed to respond directly to the needs of the community and the overall structure of the SLP inhibited long-term development planning, most of SLP's lacked agreed upon initiatives, proposed development interventions lacked targets and timeframes, the majority of the SLP's and projects within the SLP's provided no instruments to monitor and account for progress towards the implementation of the SLP projects and that the overall regulatory environment did not offer the platform to adequately evaluate the impacts of the SLP program and individual SLP projects within the mining communities.

As far back as 2009 the Unit for Corporate Governance in Africa (UCGA) noted a fundamental gap in the capacity to effectively monitor the implementation of SLP's in line with the short-lived conditions in the global, domestic and local economies (UCGA, 2009). What is equally concerning are several SLP community development projects which have tended not to yield the intended results as projects were traditionally not planned properly and were not adequately monitored and evaluated. It is therefore ideal to employ Results Based Management (RBM) as an all-inclusive management strategy to improve management effectiveness and accountability through the employment of a transparent and participatory approach in outlining accurate expected results, monitoring progress towards the attainment of expected results, evaluating and reporting on performance and integrating lessons learned into mine community development management decisions. In contrast to traditional implementation-focused M&E, Results Based M&E goes beyond focusing on inputs and outputs and lays more emphasis on outcomes and impacts. It focuses more on results rather than processes and activities. A results

chain is traditionally used in expressing the results an organisation aims to achieve and the appropriate methods to be employed to attain the desired results. Figure 1: The Results Chain.

Figure 1: The Results Chain



Adapted from Ile, Eke and Ile (2014)

Results Based M&E is also important for operational and learning purposes and can easily be applied into socio economic projects agreed by the mine and the community. The importance of M&E lies in its ability to track progress against targets and budgets, assists in the optimal allocation of resources for effective and efficient implementation of endeavours. M&E also has a very strong educational component as it allows for the identification of alterations required to improve the pilot design, recognizes lessons learned for similar future interventions or endeavours and also assesses the effectiveness of methods and processes employed for possible future replication (Eke, 2014, Cloete & Auriacombe, 2014).

#### 4.2 The Municipal Integrated Development Plan and the Social and Labour Plan

In terms of the Municipal Systems Act 32 of 2000 the Integrated Development Plan (IDP) a five year cycle plan for a municipality needs to be developed to steer the municipality towards a sustainable developmental trajectory. The MPRDA advocates for the strict alignment of the SLP with the IDP taking into consideration that the IDP is linked to both the Provincial Growth Development Strategy (PGDS) and the National Spatial Development Strategy (NSDS) (Thobatsi, 2014). It is well known that the majority of local municipalities in South Africa face several problems which include inadequate municipal IDP's which don't always reflect the municipality's long-term developmental requirements.

The 80/20 report on local government with 80 indicators over the past twenty years indicates the lack of the required skills in local government has resulted in the poor delivery of essential services. This skills shortage is intensified as local municipalities are finding it difficult to attract critical skills which include spatial planners, chartered accountants and engineers. Skills

shortages are prevalent in rural local and district municipalities which is where most mining operations are located. The report mentions that 49% of all municipalities don't have a registered engineer with approximately 50% of technical services managers not having under graduate degrees or diplomas. The skills shortage has also been linked to the inability of most municipalities to manage municipal infrastructure or develop new municipal infrastructure which has contributed to continuous service delivery protests (IRR, 2014).

Efforts made to date by South African mining companies in collaboration with local authorities, civil society, communities and non-governmental organisations (NGO's) illustrates the willingness of the industry stakeholders to steer the mining industry towards a developmental trajectory. These efforts also illustrate how the domestic mining industry has developed from an industry that was identical with the apartheid edifice to an industry which now embraces democratic principles. While others have argued that mining companies are coerced to be familiarised with their immediate community's expectations and concerns in order for mining activities to continue without being interrupted by aggrieved members of the community (Thomson & Boutlier, 2011; Davis & Franks, 2014; Bice, 2014).

#### 4.3 The costs of mining project interruptions

All interruptions to a mining company's operations have proven to add additional unplanned costs to the mining project. These costs vary and generally fall into the following two groups, firstly those unplanned costs which result from a mining company's efforts to prevent or respond to a conflict this includes, personnel costs, risk management and security costs, secondly those costs which result from the outcome of the conflict associated with an aggrieved community these include; reputational impact, impact on capital, loss of productivity, project modification costs, redress, impacts on personnel and material damage and loss of value (Davis & Franks, 2014).

The Unit for Corporate Governance in Africa (2009) argued that the SLP is rigid from a developmental point of view in that it is too prescriptive and leaves very little room for creativity and innovation which hampers the ability of Mine's to be flexible and constantly to align with changing local circumstances over the lifecycle of the mine (UCGA, 2009). Mining industry stakeholders are in a difficult position as their collaborative efforts with local authorities may have enabled them to be granted a legal licence to operate by the mineral industry regulator as they would have adhered to the required legislative requirements. Obtaining and sustaining a SLO still poses a serious challenge and a threat to a number of

mining operations as this is a license which is given by the community and can be taken away by the community at any time.

Results Based M&E assists in projects, programme, and policy applications, internal and external applications, knowledge capital and transparency and accountability. In project, programme and policy applications information can be collected and analysed at any level to provide feedback. Assistance is provided to managers in identifying program weaknesses and adopting corrective measures (Cloete & Auriacombe, 2014; Eke, 2014). The internal and external applications relate to the identification of potential promising policies, programmes, projects or practices and their intended or unintended but useful results while enabling organisations to respond effectively to stakeholder expectations and deliver on promises. The knowledge capital element is derived from the fact that an open atmosphere is created which allows for people to learn from mistakes, make improvements and create knowledge while transparency and accountability is promoted as results are shared with stakeholders which enables stakeholders to have a clear understanding of the status of the initiatives (Eke, 2014). The failure to effectively plan, monitor and evaluate SLP projects is one of the reasons why SLP projects tend to fail to meet their intended objectives. This has contributed to most mining operations losing their SLO.

## 5. BUILDING INTERNAL PLANNING, RESULTS – BASED MONITORING AND EVALUATION CAPACITY

At the inception of the process of developing internal planning, monitoring and evaluation capacity an entity (the Mining Company) has to assess already existing performance management systems as the M&E capabilities will be structured on already existing performance management skills. Internal management capacities may have to be rejuvenated or developed comprised of a number of management disciplines which should include data analysis, financial, operations, project, program, and performance management. The capabilities of already existing data and technology systems will have to be assessed to align them with the planned M&E function coupled with the relevant training and the provision of the appropriate budget to support this initiative. The entity (the Mining Company) will then have to conduct an M&E Readiness Assessment preferably nestled within the mining company's transformation, sustainable development or community development unit (Kusek & Rist, 2004).

The readiness assessment will assist in assessing an organization's capabilities in monitoring and evaluating its projects. Organizations are cautioned from developing a Results-based M&E system without properly reviewing its internal capabilities, organisational responsibilities and the ability of their organization to maintain the Results-Based M&E system. The difference between a readiness assessment and a needs assessment is that the latter is premised on the organisation's needs whereas a readiness assessment is premised on the fact that the organisation needs the system but also needs to assess whether it is in a position to implement and sustain such a system (Kusek & Rist, 2004). The eight areas to be considered and reviewed in detail when conducting a readiness assessment are as follows:

- 1. What potential pressures are encouraging the establishment for the M&E system and why?
- 2. Who is the advocate for the M&E system?
- 3. What is motivating the champion to support such an effort?
- 4. Who will own the system?
- 4.1 Who will benefit from the system?
- 4.2 How much information do they really want?
- 5. How will the system directly support better resource allocation and the achievement of programme goals?
- 6. How will the organisation, the champions, and the staff react to negative information generated by the M&E system?
- 7. Where does capacity exist to support a results-based M&E system?
- 8. How will the M&E system link project, programme, sector and national goals?

(Kusek & Rist, 2004; pg 43 - 48).

## 6. PLANNING, MONITORING AND EVALUATION FRAMEWORK FOR THE IMPLEMENTATION OF A MINING COMPANY'S SOCIAL LICENSE TO OPERATE (SLO) USING A LOCAL ECONOMIC DEVELOPMENT (LED) INTERVENTION

#### 6.1 Introduction

A framework is a supporting structure, shape or plan for an initiative or theory. Important linkages amongst the plan or an initiative are illustrated graphically through the use of figures mainly arrows and boxes displayed horizontally or vertically. A program framework is premised on outlining the structure of a particular initiative clearly explaining how different elements within the program are logically interconnected. In socio-economic development projects frameworks depict the overall project, responsible parties, results and the mechanisms to be deployed to achieve intended results. The graphic illustrations are important as they offer a graphic outline of the project's deliverables and linkages between the different phases of the project (Kusek & Rist, 2004).

The planning of a mining company's community development project should both be participatory and interactive with all affected stakeholders (those who affect and are affected by the project) should be offered the platform to play a role in devising project objectives, identifying project funding sources and implementation models. The development project chosen should be based on solving the root causes of the problems affecting a particular community residing proximate to a mining operation. A root cause analysis should be conducted to recognise the root causes of a particular problem, this analysis is conducted to understand the problem and the various issues concerning the problem. In this example we will use a typical problem tree technique as a tool of analysis as this tool will enable the identification of problems and related issues and cause and effect relationship. The principal or focal problem is identified along with the problems and related direct and higher level effects. This analysis will assist us in providing the appropriate developmental intervention to deal with the problem by translating the identified problem into a solution or outcome statements (Eke, 2014).

Outcome statements explain what we want to come out from the inputs and activities devoted to an intervention. Outcomes are goals set at a results level which provides the true level of what the success of an intervention should look like. A results chain or also called a logic model needs to be devised. A results chain is a map which illustrates how the program or project is performing and the reason for the performance observed at a particular point in time.

Within a results chain the logic of the programme or project is depicted visually outlining the manner in which activities will achieve outputs, outcomes and the desired developmental impact. The anticipated results from the results chain (logic model) are identified in the results based performance framework. Feasible measurable indicators are established and listed for each identified result in relation to the logic model along with the unit of measuring the indicators, the manner in which results will be defined and calculated is also identified by the results based performance framework, parties responsible with carrying out certain functions are identified along with the sources where data for performance reporting will be sourced, the process of data and information collection and the periodic intervals or frequency for the measurement of indicators is depicted within the results based performance framework (Eke, 2014).

To sequentially structure and illustrate the existing linkages between the main elements of an initiative a logical framework will have to be developed. This is a model that will define the linear connection between resources, activities and results. A logical framework is a strategic systematic planning tool as it assists in the identification of causal relationships between the various elements of a project empowering project managers to identify potential internal and external factors that can contribute towards the success or failure of a project. The first column of the logical framework assesses progress in relation to results and activities at the four levels of the hierarchy (these levels are activities, outputs, outcomes and impact), the second column provides objectively verifiable indicators which are both qualitative and quantitative measures to explain the extent in which intended results are achieved within the 4 levels of the results and activities hierarchy, the third column provides the means of verification it informs us of where we will obtain the proof about the performance being made towards the expected results. Reports, studies, field visits, project documents can be used to obtain the data to demonstrate the indicator measurement, the forth column deals with the assumed required condition that will enable the successful attainment of the cause and effect linkages amongst the different levels of the results hierarchy. These assumptions map out the pre-conditions required for the planned changes to happen (Eke, 2014).

#### 6.2 Applying Results Based M&E techniques to a mining companies LED initiative

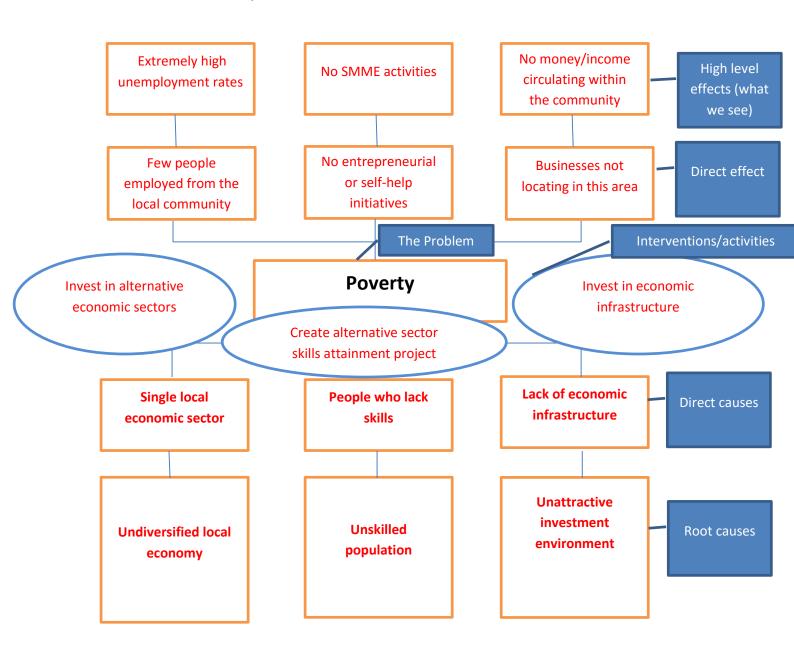
A detailed problem analysis (root cause analysis) will be conducted using the problem tree technique, a two column table will be used to illustrate the specific concerns directly related to the problem identified in the problem analysis. These concerns will then be used to develop outcome statements. A results chain will then be produced illustrating the required inputs, activities, expected outputs, intended outcomes and desired impacts. The information from the problem analysis will also be used to develop a logical framework matrix for the selected intervention. A comprehensive results-focused performance framework containing indicators and proxy indicator for the selected intervention and an indicators-data grid will be provided.

#### 6.2.1 Problem Analysis

Community ABC is situated next to a mining operation. ABC Community is poverty stricken as the Mine only employs a small portion of the local population. In order to devise an appropriate developmental intervention a problem analysis will be undertaken using the problem tree technique in 6.2.1.1.

#### 6.2.1.1 Problem analysis using the problem tree technique.

**Equation: Poverty** = f (undiversified local economy, unskilled population and unattractive investment environment)



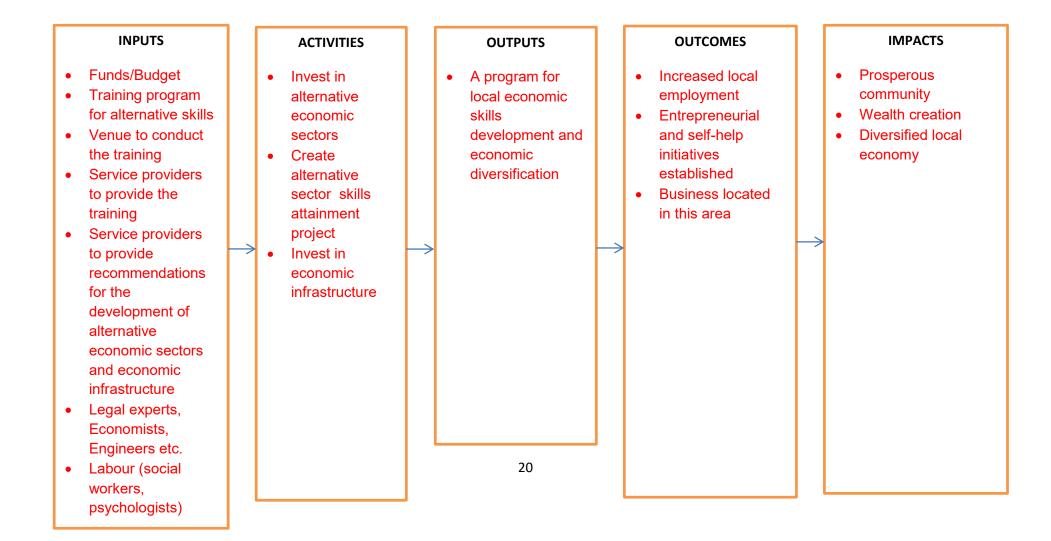
#### 7. OUTCOME STATEMENTS

Using a 2-column table the three primary concerns outlined in the problem tree will be reformulated to become three outcome statements.

	CONCERNS			OUTCOME
		n the local	1.	Increased local employment
communit	У			
2. No ent	epreneurial or	self-help	2.	Entrepreneurial and self-help initiatives
initiatives				established
3. Businesse	not locating in	this area	3.	Business located in this area

#### 8. RESULTS-CHAIN

A detailed results-chain for the intervention which illustrates the necessary inputs, required activities, expected outputs, intended outcomes and desired impacts is presented.



#### 9. A LOG-FRAME MATRIX

A log-frame matrix will be developed for the selected intervention based on the problem analysis from the problem tree technique earlier undertaken.

RESULTS	SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
	<ul> <li>Wealth creation</li> <li>Diversified local economy</li> </ul>	<ul> <li>Household wealth</li> <li>Households assets         <ul> <li>Number of households owning a particular asset</li> </ul> </li> <li>Percentage increase in total business revenue</li> <li>Gross regional product</li> </ul>	<ul> <li>Stats SA Census community employment data</li> <li>Local IDP data on local economy</li> <li>Reports (e.g. Stats SA)</li> <li>Local municipality business register</li> </ul>	
	<ul> <li>Increased local employment</li> <li>Entrepreneurial and selfhelp activities established</li> <li>Businesses located in this area</li> </ul>	Percentage of the community members employed  Number of SMME's operating within the community  Number of economic sectors established within the community  community	<ul> <li>STATS SA household profiles         <ul> <li>Sources of income for households</li> <li>Monthly household expenditure category</li> </ul> </li> <li>Municipal Integrated Development Plans         <ul> <li>Sources of income for households</li> <li>Annual household expenditure category</li> </ul> </li> <li>Municipal Integrated Development Plans         <ul> <li>Section on Spatial Economy and Economic Sectors</li> </ul> </li> <li>Regional business reports and magazines/publications</li> </ul>	<ul> <li>Majority of locals are working and earning a decent income to meet all their daily needs</li> <li>There SMME's are fully operational and are making profit</li> <li>Money stays and is circulated and invested within the local economy</li> <li>Different economic sectors are successfully imbedded within the community</li> </ul>

OUTPUTS	A programme for local economic skills development and economic diversification	Percentage of community members who are aware and participate in the programme	<ul> <li>Community surveys</li> <li>Roundtable with community representatives</li> </ul>	<ul> <li>Alternative sector employment opportunities are created and offered to locals</li> <li>Locals are equipped with entrepreneurial skills, self-help skills and resources to start their own small enterprises</li> <li>Businesses are offered investment incentives to relocate to the community</li> </ul>
ACTIVITIES	<ul> <li>Invest in alternative economic sectors</li> <li>Create alternative economic sector skills training projects</li> <li>Invest in economic infrastructure</li> </ul>	<ul> <li>Number of investment projects into alternative economic sectors</li> <li>Amount invested in alternative economic sectors</li> <li>Number of alternative economic sector skills/training projects established</li> <li>Number of economic infrastructure projects established</li> <li>Amount invested in economic infrastructure projects</li> </ul>	<ul> <li>STATS SA household profiles         <ul> <li>Sources of income for households</li> <li>Monthly household expenditure category</li> </ul> </li> <li>Municipal Integrated Development Plans         <ul> <li>Sources of income for households</li> <li>Annual household expenditure category</li> </ul> </li> <li>Municipal Integrated Development Plans         <ul> <li>Section on Spatial Economy and Economic Sectors</li> </ul> </li> <li>Regional and local business reports and magazines/publications</li> <li>Local enterprise register</li> </ul>	<ul> <li>Investment is made towards alternative economic sectors</li> <li>Alternative economic sectors skills training projects are created</li> <li>Investment is made towards the required infrastructure</li> </ul>

#### 10. RESULTS-BASED PERFORMANCE FRAMEWORK

A Results-Based Performance Framework will be constructed comprising indicators, of which one will be a proxy indicator for the selected intervention outlining a results measurement matrix and an indicators-data grid.

#### 10.1 A results measurement matrix

RESULTS	INDICATORS	BASELINES	INTERIM TARGETS	TARGETS	
IMPACTS	Number of households	Household assets in the	Household assets in the	Household assets in the	
Wealth creation		year of	year of	year of	
	owning a particular	2016: 1000 worth R100	2020:5000 worth R 500	2024: 100 000 worth R 1	
	asset	000	000	000 000	
Diversified local economy	Growth Rate	In 2016 the regional growth rate is -5%	In 2020 the regional growth rate should be 5%	In 2024 the regional growth rate should be 15%	
<ul> <li>OUTCOMES</li> <li>Increased local employment</li> <li>Entrepreneurial and self-help activities established</li> </ul>	<ul> <li>Percentage of the community members employed</li> <li>Number of SMME's operating within the community</li> </ul>	<ul> <li>In 2016 only 20% of the working age population of the local community is employed</li> <li>In 2016 only 5 SMME's are operating within the community</li> </ul>	<ul> <li>In 2018 60% of the working age population of the local community is employed</li> <li>In 2018 40 SMME's are operating within the community</li> </ul>	<ul> <li>In 2022 100% of the working age population of the local community is employed</li> <li>In 2022 80 SMME's are operating within the community</li> </ul>	

Businesses located in this area	Number of economic sectors established within the community	economic sector	In 2018 their 4 economic sectors established with the community		
A programme for local economic skills development and	Percentage of community members who are aware and participate in the programme	In 2016 only 20% of the community is aware and participates in the programme	In 2017 60% of the community is aware and participates in the programme	In 2020 100% awareness and participation in the programme by the members of the community	
economic	Number of	In 2016 they were 15	In 2017 they were 5	No unemployment	
diversification	unemployment protests	unemployment protests	unemployment protests	protests in 2020	

#### 10.2 An indicators-data grid

RESULT	INDICATOR	DATA SOURCE	DATA COLLECTI ON METHOD	FREQ OF DATA COLLECTIO N	WHO WILL COLLECT DATA	FREQ OF DATA COLLATI NG	WHO WILL COLLATE DATA	WHO WILL ANALYSE DATA	DATA RELATE D COSTS	WHO WILL REPORT	WHO WILL USE
<ul> <li>IMPACTS</li> <li>Wealth creation</li> <li>Diversified local economy</li> </ul>	<ul> <li>Number of households owning a particular asset</li> <li>Growth Rate</li> </ul>	Stats SA  Local municipality	Review records	Quarterly	Mine community development practitioner	Every second quarter	Data specialist	Data analyst	R 50,000.00	Mine General Manager	CEO of a Mining Company to report on SLO activities to the board of directors
<ul> <li>Increased local employment</li> <li>Entrepreneur ial and selfhelp activities established</li> <li>Businesses located in this area</li> </ul>	<ul> <li>Percentage of the community members employed</li> <li>Number of SMME's operating within the community</li> <li>Number of economic sectors established within the community</li> </ul>	Stats SA  Local municipality	Review records	Monthly	Mine community development practitioner	Quarterly	Data specialist	Statistician	R400,000.	Mine General Manager	CEO of a Mining Company to report on SLO activities to the board of directors
• A programme for local	Percentage of community members	Local municipality	Community Survey	Weekly	Mine community development practitioner	Monthly	Data specialist	Statistician	R 150,000.0 0	Mine General Manager	CEO of a Mining Company to report

economic skills development and economic diversificati on	who are aware and participate in the programme	Mining Company's SLP									on SLO activities to the board of directors
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#### 11. CONCLUSION

Enriched with a variety of mineral resources South Africa has the opportunity of ensuring the country's mineral wealth is shared by all South Africans with a special emphasis on those who reside proximate to mining operations as they experience the direct negative impacts resulting from mineral resource extraction. The MPRDA has been developed to ensure the domestic mining industry contributes towards sustainable development with the mining charter playing a pivotal role in auditing mining companies performance against transformation and sustainable development objectives.

The SLP's five year cycle presents a good timeframe for a sustainable developmental partnership between mining operations and the community proximate to a mining operation. The development outcomes that may emerge from an honest and credible developmental partnership has the potential to steer the mining company's activities towards a sustainable developmental trajectory. A SLO is not a formal licensing arrangement but it is a right that is granted to a mining company by a community which can be withdrawn by the community when the community feels the mine hasn't lived up to its commitments and the expectations of the community.

The SLO granting process goes through various stages, the initial stage which is termed as the legitimate stage merely offers the mining company a partial SLO which offers the mining company the opportunity to prove its worthiness to the community, the SLO can be revoked if the mining company fails to satisfy the expectations of the community. If the community expectations are satisfied the mining company's SLO status moves from legitimate to credible. This is when the mining community is satisfied with the presence of the mining company within its community. Even after being granted the SLO credible status the mining community can still revoke the SLO in the future. The SLO is clearly a social contract which needs to be constantly maintained and updated based on the day to day realities throughout the life cycle of a mining project.

Several mining socio economic development projects through the implementation of the SLP have tended not to contribute or meet mining community's expectations. Improved selection, planning and implementation of mine community development projects can be improved with the employment of Results-Based M&E techniques. Employing Results Based M&E in the planning, monitoring and evaluation of a Mine's SLP will allow mining companies to meet

their SLP objectives and maintain their SLO because RBM will assist the mining company to plan their chosen developmental intervention directly responding to the developmental challenges faced by a mining community, accurately illustrate the results achieved, to organise and guarantee resources are utilised both effectively and efficiently to achieve intended results with stakeholder confidence increased as a result of improved performance and management accountability.

The establishment of an M&E system should be based on already existing performance management resources within an organisation. A readiness assessment needs to be conducted to enable the organisation to develop the required capabilities to administer an M&E system. The planning of a developmental initiative needs to be supported by the appropriate framework which will structure the important linkages and initiatives within the developmental intervention. This framework should also outline how the various elements within the developmental intervention are logically connected outlining the project, responsible parties, results and the resources to be deployed to attain the required results.

The use of Results-Based M&E technique requires the mining company to conduct a detailed root cause analysis. The results of the root cause analysis will enable the mining company to develop the developmental interventions aimed at solving the developmental challenges faced by its immediate community. The mining operation will then be able to devise outcome statements which is what the Mine envisages to be the product of their developmental intervention. These outcome statements will articulate what exactly the success of the developmental intervention should look like.

The result chain will assist in mapping out the performance of the developmental intervention being implemented depicting the linear relationship between activities, outputs, outcomes and impact. The results based performance framework must be used along with a results measurement matrix and an indicators data grid to list feasible measurable indicators for each identified result with a unit of measuring the indicators and how each result is defined and calculated, targets illustrated, coupled with the expression of all the parties who are responsible with the implementation and monitoring of the intervention and where data is sourced, the collection of the data and information along with the frequency of reporting.

#### 12. Bibliography

Boutilier, R.G, Black, L., & Thomson, I., 2012: From metaphor to management tool: How the social license to operate can stabilise the socio-political environment for business. International Mine Management 2012 Proceedings, 227-237. Melbourne, Australian Institute of Mining and Metallurgy.

Boutilier, R.G, Black, L., & Thomson, I., 2011: *Modelling and Measuring the SLO, invited paper presented at seminar entitled, "The Social License to Operate"*. The Centre for Social Responsibility in Mining, University of Queensland, Brisbane, July 15.

Bice, S., 2014: What Gives You a Social Licence? An Exploration of the Social Licence to Operate in the Australian Mining Industry. Centre for Public Policy, School of Social and Political Sciences, the University of Melbourne. Downloaded on 23 May 2015. <a href="http://www.mdpi.com/2079-9276/3/1/62">http://www.mdpi.com/2079-9276/3/1/62</a>

CALS (Centre for Applied Legal Studies)., 2016: *The Social and Labour Plan Series . Phase 1: System Design Trends Analysis Report.* University of the Witwatersrand.

Cloete & Auriacombe., 2014: *Theories of Change and Programme Logic. Evaluation Management in South Africa and Africa*. Sun Media Stellenbosch University, Stellenbosch.

Davis, R & Franks, D., 2014: Costs of Company-Community Conflict in the Extractive Sector. Corporate Social Responsibility Initiative Report No. 66. Cambridge, MA: Harvard Kennedy School. Downloaded on the 23 April 2015. <a href="https://www.hks.harvard.edu/mrcbg/CSRI/research/Costs%20of%20Conflict\_Davis%20%20Franks.pdf">https://www.hks.harvard.edu/mrcbg/CSRI/research/Costs%20of%20Conflict\_Davis%20%20Franks.pdf</a>.

DMR (Department of Mineral Resources)., 1996: *Mine Health and Safety Act 29 of 1996*. *Downloaded on 11 February 2016*. www.dmr.gov.za/legislation/...mine-health-and-safety/530-mhs-act-29-of-1996.html.

DMR (Department of Mineral Resources) ., 2010 : Publication of the Amendment of The Broad-Based Socio-Economic Empowerment Charter For The South African Mining And Minerals Industry. Downloaded on 11 February 2016. <a href="http://www.gov.za/sites/www.gov.za/files/33573">http://www.gov.za/sites/www.gov.za/files/33573</a> 838.pdf.

DME (Department of Minerals and Energy)., 2004: *The Mineral and Petroleum Resources Development Act(MPRDA)*. The Department of Minerals and Energy, Pretoria.

Eke, E., 2014: Lecture Presented on Outcomes Based Implementation Monitoring and Evaluation., October 2014. University of Pretoria.

Green gazette. 2016: Reviewed Broad Based Black-Economic Empowerment Charter for the South African Mining and Minerals Industry, 2016. Publication of and invitation to comment on the Draft. Gazette No. 450 of 2016. Downloaded on 20 April 2016. <a href="https://www.greengazette.co.za/notices/reviewed-broad-based-black-economic-empowerment-charter-for-the-south-african-mining-and-minerals-industry-2016-publication-of-and-invitation-to-comment-on-the-draft 20160415-GGN-39933-00450.pd">https://www.greengazette.co.za/notices/reviewed-broad-based-black-economic-empowerment-charter-for-the-south-african-mining-and-minerals-industry-2016-publication-of-and-invitation-to-comment-on-the-draft 20160415-GGN-39933-00450.pd</a>

Ile I., Eresia-Eke, C & Allen-Ile, C. 2012: *Monitoring and Evaluation of Policies, Programmes and Projects*. Van-Schaik Publishers, Pretoria.

IFC (International Finance Corporation). , 2016: First for Sustainability; Financial Institutions: Resources, Solutions and Tools Environmental and Social Due Diligence: <a href="https://firstforsustainability.org/risk-management/managing-environmental-and-social-risk-2/">https://firstforsustainability.org/risk-management/managing-environmental-and-social-risk-2/</a>/components-of-an-esms/environmental-and-social-due-diligence/

IRR (Institute of Race Relations)., 2014: *The 80/20 Report -Local Government in 80 Indicators after 20 Years of Democracy*. Downloaded 11 February 2016. http://irr.org.za/reports-and-publications/occasional-reports/the-80-20-report-on-local-government

Kusek, J, Z & Rist, R,C., 2004: *A Handbook for Development Practitioners. Ten Steps to a Results-Based Monitoring and Evaluation System.* The International Bank for Reconstruction and Development / The World Bank. Washington DC

Mngomezulu, A.M., 2016: *A Mineral Regulatory Regime Proposition to Support the Sustainable Exploitation of South Africa's Mineral Resources*. Unpublished Masters Research Report, University of the Witwatersrand. Downloaded on 16 May 2016. <a href="http://wiredspace.wits.ac.za/jspui/bitstream/10539/20093/1/Msc%20Abe%20final%2010%20August%202015.pdf">http://wiredspace.wits.ac.za/jspui/bitstream/10539/20093/1/Msc%20Abe%20final%2010%20August%202015.pdf</a>.

Ndaba, M.B., 2010: *Mining and Local Economic Development (LED): A Case Study of the Rustenburg Local Municipality*. Unpublished Masters Research Report, University of the Witwatersrand. Downloaded on 11 February 2016. <a href="http://wiredspace.wits.ac.za/bitstream/handle/10539/8231/Research%20Report%20final%20">http://wiredspace.wits.ac.za/bitstream/handle/10539/8231/Research%20Report%20final%20</a> <a href="http://wiredspace.wits.ac.za/bitstream/handle/10539/8231/Research%20Report%20final%20">Draft%20FEB%202010%20PDF%20VERSION%201.pdf?sequence=1&isAllowed=y</a>

Otto, J & Cordes, J., 2002: The Regulation of Mineral Enterprises: A Global Perspective on Economics, Law and Policy, Rocky Mountain Mineral Law Foundation, Colorado.

Pike, R., 2012: *The Relevance of Social Licence to Operate for Mining Companies. ESG Analyst.*Downloaded on 8 December 2015.
Schroders.http://www.schroders.com/staticfiles/schroders/sites/Americas/US%20Institutional%202011/pdfs/Social-Licence-to-Operate.pdf

Rabie, b & Goldman, I., 2014: *The Context of Evaluation Management. Evaluation Management in South Africa and Africa*. Sun Media Stellenbosch University, Stellenbosch.

SAMI (South African Mining Industry). 2014: *The South African Mining Industry 2013/2014*, the Department of Minerals and Energy, Pretoria.

Stark, L., 2002: Local Communities and Mines: Mining, Minerals and Sustainable Development Project, Earthscan United Kingdom (UK), Downloaded 4 March 2016. <a href="https://www.earthscan.co.uk./Mining/Breakingnewground">www.earthscan.co.uk./Mining/Breakingnewground</a>.

Thobatsi, T & Carli Steenkamp, C., 2014: Evaluating the alignment of Social and Labour Plan (SLPs) commitments with municipal Integrated Development Plans (IDPs). International Association for Impact Assessment South African Conference 28 August 2014. School of Geo and Spatial Sciences North-West University Potchefstroom Campus

UCGA (The Unit for Corporate Governance in Africa)., 2009. Corporate governance: Social and Labour Plans in the mining sector. Corporate Governance in Africa Case Study Series: No 4. University of Stellenbosch. Downloaded on 17 December 2015. <a href="http://www.usb.ac.za/governance/Documents/pdfs/No.4\_Governance\_Africa\_case%20study%202009.pdf#search=MINING%20AND%20SOCIAL%20LABOUR%20PLANS">http://www.usb.ac.za/governance/Documents/pdfs/No.4\_Governance\_Africa\_case%20study%202009.pdf#search=MINING%20AND%20SOCIAL%20LABOUR%20PLANS</a>.