SUSTAINING SOCIAL LICENCE TO OPERATE USING COMMUNITY ENGAGEMENT: A CASE OF KONKOLA COPPER MINES - NCHANGA, ZAMBIA

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ABSTRACT

The mining industry has both positive and negative impacts on their host communities. Therefore, it is not enough for mines to only rely on the legal licence, but instead, they need to nurture a trust-based relationship with the community called 'Social License to Operate' (SLO). The main objective of the study was to examine how 'Social License to Operate' can be developed and sustained using community engagement between Konkola Copper Mines - Nchanga Mine (KCM) and the communities within 10 km radius from the mine operations in Chingola, Zambia. The conceptual and theoretical framework of the study was grounded in the 'Relative Deprivation Theory' and the 'Social Identity Theory'. The methodology of the study was qualitative and delved into a contemporary stakeholder risk issue affecting KCM. Therefore, data in the form of voice recordings and field notes was collected through 28 semi-structured interviews out of an estimated population size of over 28,000 households from five research sites, namely, Chiwempala, Nchanga North, Kapisha, Lulamba and Shimulala in Chingola that sufficiently demonstrated data saturation in the participants' responses. From data collected, analysis and interpretation, through 'Thematic Content Data Analysis', three themes emerged which were adopted as variables of 'Trust'; 'Social Infrastructure' and 'Interactional Trust' which deals with the quality and quantity of engagement while 'Procedural Fairness' looks at how the mine's stakeholder engagement and grievance mechanism procedures contributed towards building a mutual relationship with the community. Of the 28 participants, 34 per cent benefitted from the mines through access to income generation while the remainder were negatively impacted through unemployment, poor community infrastructure, high moral decay, poor social services delivery and environmental pollution. Further, 69 per cent complained of lack of engagement and only 7 per cent expressed satisfaction on how their complaints were resolved. Further 67

per cent did not share any relationship with the mine. Key findings, based on this research, were that KCM – Nchanga Mine has a mixed 'Social License to Operate' because four townships accepted the company while one township strongly felt that they do not share any relationship with the mine as they had not benefitted from the mineral wealth naturally entitled to them. The conclusion was that it is cardinal for mines to develop a highly active collaborative relationship with the community as a pathway to sustainable mining. The recommendation was that lessons learnt from this study can be adopted by other mines with legacy socio-environmental issues to build and maintain their 'Social License to Operate' through having a robust integrated community engagement system.

Keywords: *Social License to Operate; Community Engagement; Trust, Social Infrastructure; Procedural   Fairness.*

INTRODUCTION

The mining industry has both positive and negative impacts on the host communities. In this global environment, stakeholder risks are increasingly becoming prominent and demanding for proper attention to avoid disturbance of the mines' operations and future development. Social License to Operate (SLO) is defined as an ongoing and fluid level of acceptance by stakeholders at multiple levels which may be revoked at any stage of the project lifecycle based on changes in perceptions, and reflective of the relationships between a company and its external stakeholders (Franks et al., 2010; 2015; Prno and Slocombe, 2012; Thomson and Boutilier, 2011). The Business Council of British Columbia (BCBC) (2015) elaborated that SLO began as a metaphor comparing the ability of communities to stop mining projects with the ability of governments to do the same.

The Business Case of Social License to Operate

Deloitte (2016), argued that pressure from other stakeholder groups is also mounting. The current trend shows that local people are continuously seeking to benefit from the mineral resources investments failure to which they are withholding their consent. Further, Deloitte (2016) points out that mining projects with capital expenditures of between US$ 3 billion and US$ 5 billion dollars can incur weekly losses of roughly US$ 20 million due to delayed production caused by community opposition.

According to Owen and Kemp (2012), mining links social license to perceptions that locally impacted communities hold about a company's activities and the impact they have on local culture, natural resources and livelihoods. Thus, it is vital to understand that challenges of social risk are not just about opposing mining activities but based on an increasing desire for the local people to have some measure of control and participation in the development process (Joyce and Thomson, 2000).

Mining generally faces low credibility and social opposition because it is looked at as a dirty business (Joyce and Thomson, 2000; Thomson and Joyce, 2008). Hence, the need for mineral developers to gain SLO so as to avoid potential costly conflict and exposure to business risk especially that it has evolved from a 'good to have' to a 'must have'. Evans *et al.* (2002), groups the effects of mining as social, environmental and economic consequences. To these can be added technical, legal and political. Further, large scale mining projects encompasses the loss of productive and culturally significant land, riverine and marine environments, deforestation of sensitive, biologically rich zones, displacement of people, dependence on marginal employment, destruction of local leadership structures, degradation of cultural value systems leading to increase in alcoholism, domestic violence, child abuse and consumerism.

RepRisk (2012), indicated in 2011 that unfavourable stakeholder views are pointers that mining companies should proactively resolve the social, environmental and governance issues raised by different interest groups.

Community Engagement

In mining, the community is generally regarded as the inhabitants of the immediate surrounding areas who are affected by a company's activities (Wang et al., 2016). Dalaibuyan (2012), adds on that there is an increasing trend in the global mining industry affirming the importance of operating in accordance with a 'social license'. Apart from that, technology and people's awareness of their human rights have continued to encourage them to demand that their voice is heard, and their interests be met by the mining companies.

Community engagement should be strategic throughout the lifecycle of mining (Benchmarks Foundation, 2014). SLO is steadily gaining attention. Prno (2013), highlights the importance of understanding how the context influences SLO since it is about sustainably building relationships with communities. Further, communities around the world are demanding for involvement in decision making, equitable benefits from the mineral resources and safety assurance. On the contrary, pro-development stakeholders, including the government, do protect companies and their projects.

Theoretical and Conceptual Framework

This study is grounded in the Relative Deprivation Theory and supported by the Social Identity Theory because community complaints about insufficient community consultation and engagement translate into fears over likelihood of loss of livelihoods for the local people. Draman (2003), argued that with the end of the cold war, poverty and conflict have become the major challenges to sustainable development. Thus, stakeholder participation needs to be underpinned by a philosophy that enables equity, trust and learning to take place (Lloyd *et al.* 2013).

Relative Deprivation Theory

The Relative Deprivation Theory belongs to the larger body of social-psychology, particularly the inter-disciplinary work of the Social Movement Theory. Its origins can be traced back to the works of Samuel A. Stouffer in his book, *The American Soldier* that was published in 1949 (Flynn, 2009) where he argued that based on the experiences and grievances of the military police and soldiers, satisfaction and deprivation are not absolute because one has to compare with others in a similar situation and context. Gurr (2011, p 24), defined relative deprivation as 'actors' perception of discrepancy between their value expectations and capabilities. It is the gap between that which people believe they are rightfully entitled to and that which they think they are capable of getting and keeping.' Pettigrew (2015), defined relative deprivation as judgment that one's inner group is disadvantaged compared to a relevant referent and that this judgment invokes feelings of anger, resentment and entitlement. Runciman (1966), focused on the relationship between deprivations people were subjected to and the accompanying feelings of resentment or dissatisfaction.

The Social Identity Theory

The Social Identity Theory provides the perspective of social interactions taking place in relation to an issue such as benefits of community engagement in building trust between the community and the mines. Consequently, were there is inadequate community engagement, it is viewed by many researchers as the primary governance problem contributing to social conflict around land and resource management issues (Loyd *et al.* 2013). This theory examined the impact of community engagement and communication success or failure (Spears, 2011). Tajfel (1974), defined social identity as an individual's knowledge of his or her membership in various social groups together with the emotional significance of the knowledge. Turner and Giles (1981), elaborated that individual identity is more defined by the shared values and purpose of the group with which they are associated, hence these become determining characteristics of group behaviour.

MATERIAL AND METHODS

The study used qualitative research approach because it brings out the 'soft side' of the topic by describing the behaviour, beliefs, opinions, emotions and relationships of individuals. It also seeks to understand a research problem from the perspective of the local population so as to effectively acquire culturally-specific information about their values, opinions, behaviour and social contexts (Family Health International, 2011). It also focused on discovering the meanings that people give to events they experience (Bogdan and Biken, 2003; Denzin and Lincoln, 2000) and identified intangible factors like social norms, socio-economic status, gender roles, ethnicity and religion.

The study examined how SLO can be sustained using community engagement between KCM - Nchanga Mine and communities that lie within 10 km radius from

the mining operations in Chingola district of the Copperbelt Province in Zambia. The research used case study research design because it tried to answer the 'what' and 'how' questions (Yin, 2009).

This qualitative study utilised semi-structured interviews to collect the data that was mainly not numerical but narrative. It was detailed and open ended comprising of direct quotations of people's feelings, experiences, opinions and knowledge. The primary data collection was done in five communities namely; Nchanga North, Lulamba, Kapisha, Shimulala and Chiwempala that are all located in Chingola District of the Copperbelt province. A total of 28 participants (16 women and 12 men) out of about 28,000 households were purposively identified and selected to take part in the semi-structured interviews. Maxwell (2005), defines purposive selection as a strategy in which particular settings, persons or activities are selected deliberately in order to provide information that cannot be gotten as well from other choices. Purposive sampling techniques enabled large amounts of data to be generated from small samples (Stake, 1994; Patton, 1990).

A total of 28 semi structured interviews, lasted a total of twenty-eight and half hours which and ranging from one hour to one and half hours were conducted face to face with the participants. Upon getting approval from the participants, the site researcher audio recorded the interviews and took notes of the catching issues. The transcription was done in verbatim mode while listening attentively to the recording to ensure accuracy within two days of carrying out the interview. The participants were informed of the purpose of the study and its intended use, as well as assurance of confidentiality. It is worth noting that some participants from all the study sites preferred to be interviewed in groups of twos and threes to being alone. This was because of two reasons firstly, they feared to be accused by others of selling certain discrete information to the mine considering that the researcher an employee of the mine and, secondly, others claimed that the information would only be correct if they were in the company of their peers as they would correct each other. It being a semi-structured interview approach, a uniform group of open-ended questions were asked in English and Icibemba languages to which the participants freely, openly and honestly responded.

DATA ANALYSIS

Qualitative study generates numerous amounts of non-numerical data (Burnard et al., 2008) making analysis and presentation of qualitative data to be a confusing aspect of research, time consuming and labour intensive. This study used the inductive approach to analyse the qualitative data because the coding framework was directly derived from the data that was collected and transcribed. However, there was a list of expected codes that was made but had very little influence on the analysis process. It is interesting to note that a qualitative researcher commences data analysis almost

immediately the initial data is collected as this gives an indication to any change required in the data collection process.

The twenty-eight semi structured interviews were transcribed using Microsoft Word software. Thereafter, the site researcher thoroughly read the transcription verbatim to get an overview of the interviews. This was followed by inputting the data into Microsoft Excel to facilitate the process of knowing the frequency of occurrence of responses, phrases and words which also contributed to identifying the outstanding themes. While reading through, the researcher wrote down the notes either in the margin or right on top of the sentence of important points as part of the initial process of coding. The themes were picked from the data and categorised through content analysis and grouped into categories.

Goodness and trustworthiness of the data was achieved through triangulating the primary data with documents and people. Confirming the data with the participants was not done for fear of endangering the lives of the participants because some of them were suspiciously seen as informants by other members of the community.

RESULTS AND DISCUSSION

The twenty-eight semi-structured interviews brought out extensive textual data through which three themes emerged and were adopted as variables of 'Trust'; 'Social Infrastructure' addressed impacts of mining on the host community, 'Interactional Trust' dealt with the quality and quantity of engagement while 'Procedural Fairness' looked at how the mine's stakeholder engagement and grievance mechanism procedures contributed towards building a mutual relationship with the community (Figures 1 and 2).
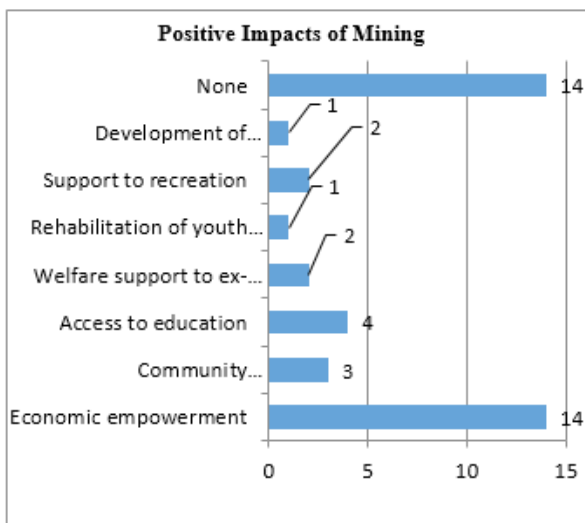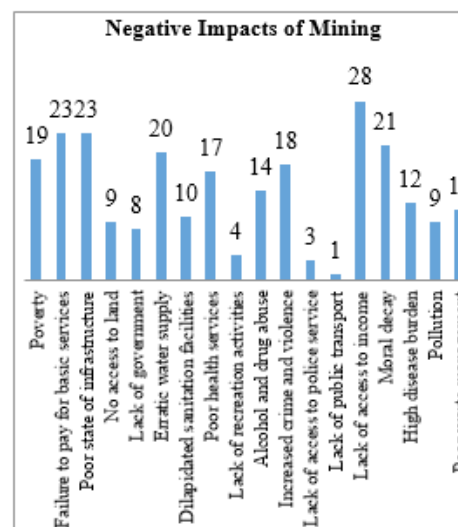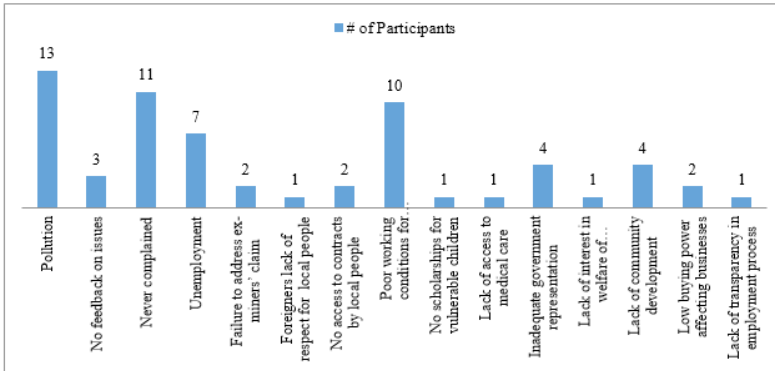
Social Infrastructure

Figure 1

Figure 2

Procedural Fairness

Figure 3: Types of Community Complaints

As much as the mines have systems and procedures to resolve the grievances from the community, the bar chart in Figure 3 highlights the socio-environmental issues that results in community complaints. Figure 3 shows that despite the community having complaints, majority have not utilised the grievance mechanism. Figure 4 shows that half of the community does not have information or rely on mine workers and non-mine media to know what is happening at the mine.

Interactional Trust

The participants elaborated on the manner in which they engage or relate with the mine and how they get information concerning the operations at the mine as indicated in Figures 4, 5 and 6.
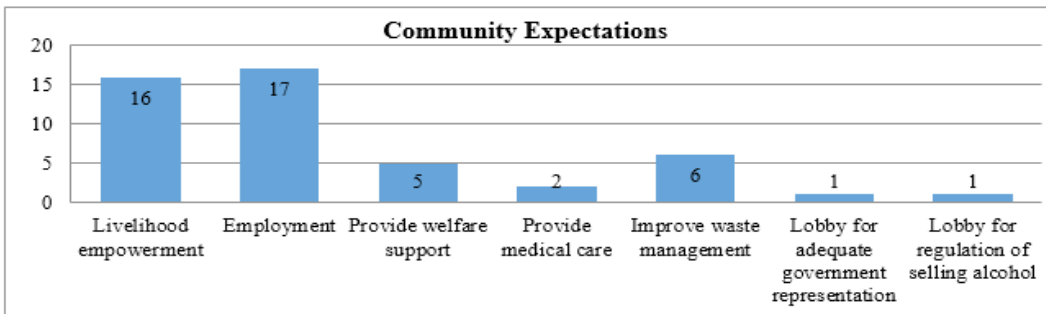
Figure 4: Types of Community Expectation

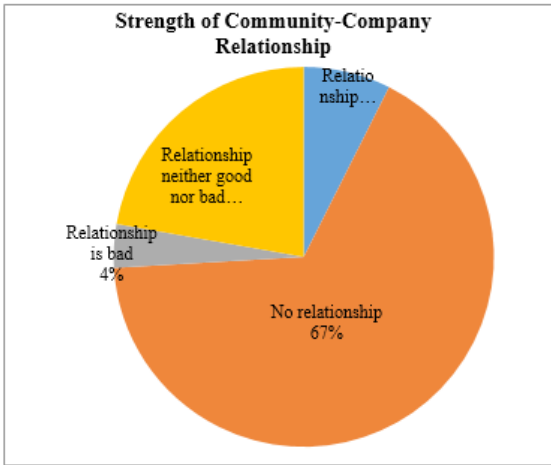**Figure 5: Company - Community Relationship**   **Figure 6: Mode of Engagement**
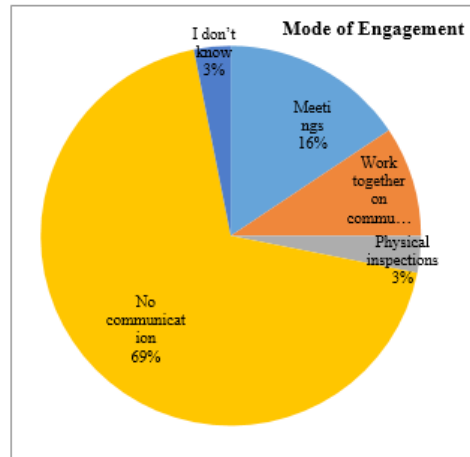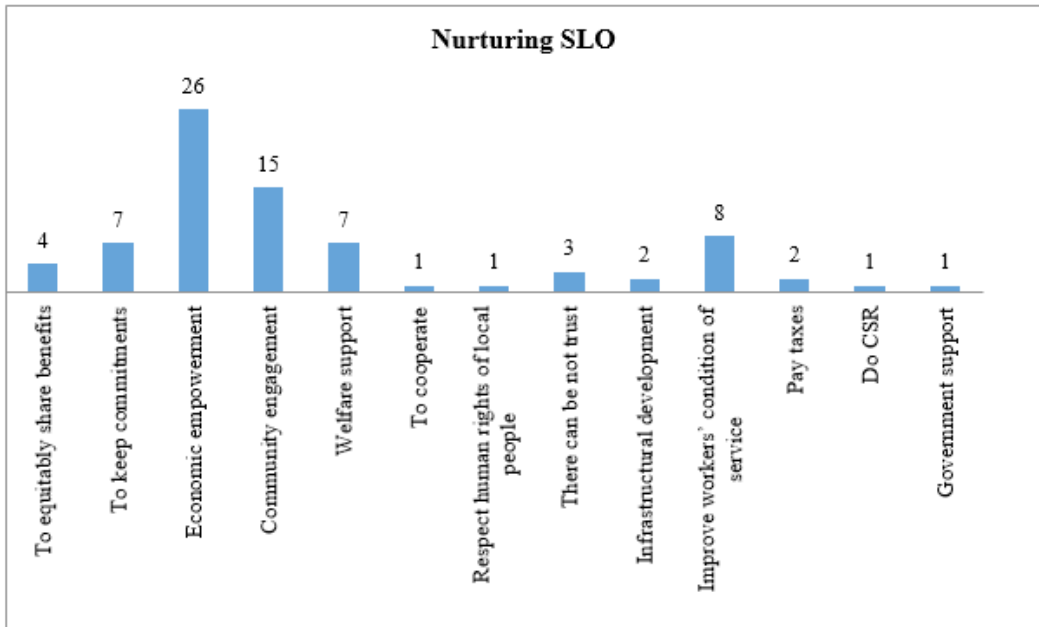

**Figure 7: Nuturing Social License to Operate**

Three main themes emerged from the study which are; social infrastructure, interactional trust and procedural fairness similar to that shown in Figure 8. This shows that it is not just about the expenditure that a mine makes in the community that affects the trust, but the quality of engagement, how the company treats and responds to community issues surrounding the mine operations.

Theme 1: Social Infrastructure

Sub-Theme: Livelihoods

Social infrastructure emerged as an important theme because it has a direct relationship with the communities' expectations of benefitting from the mines through employment, community infrastructure and welfare support (Figure 10). Mitchell and McManus (2013) reported in a study done at Northparkes Mines in New South Wales that local communities should be empowered through development and on-going management of social issues. In this study, access to income got the biggest share of influence and impact on establishing a trust based relationship between the mines and communities, as exemplified by the comment below from a respondent.

Figure 8: Trust Variables(Moffat and Zhang, 2013)
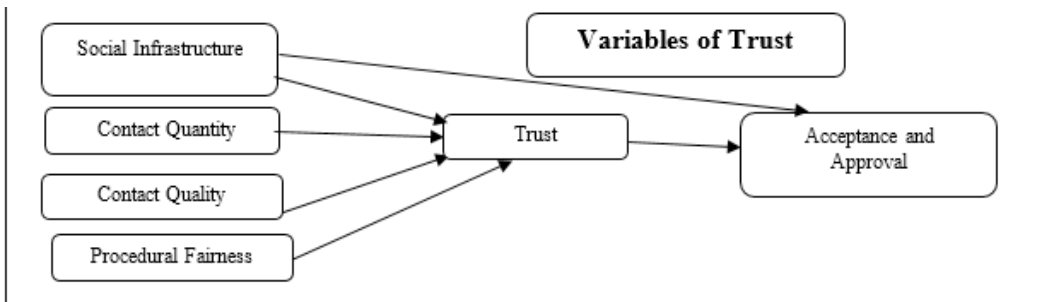
Sub-Theme: Socio-Cultural Impacts

Socio-cultural issues emerged from the study due to the economic stress and HIV/AIDS burden individuals and families were going through, compounded by the extended family structure disintegrating. This had led to people shedding off some traditional values of taking care of each other as a family and a community at large. The study brought out a silent, yet important survival dynamic for people: lack of hospitality! This value was and still is very important in the African set up. During Nchanga Consolidated Copper Mines (NCCM) and Zambia Consolidated Copper Mines (ZCCM) eras, keeping a large family was a source of pride and respect for miners because they could afford to adequately provide for their households as well as help the vulnerable in their communities.

Apart from weakening the family structures in society, the local community was experiencing an increase in crime, especially amongst the youths who had adopted it as a mode of survival together with other vices like drug abuse, early marriages, prostitution and an increase in HIV and AIDS that continued to threaten the peace of Chingola district and Zambia as a whole. Atkinson *et al.* (2016:11) argued that "rapid influx of people tends to loosen ties, with a constant population churn. New in flow of money, jobs and contracts will strengthen some families and weaken others, depending on people's spending patterns. New money may be channeled to education,

food and housing, but also to alcohol, drugs, prostitution and lead to possible increases in teenage pregnancies and HIV." The above scenario is similar to what is currently happening in the area of study and other mine towns in Zambia except that with increased poverty levels and weak social welfare services in the communities around the mines, there is an increase in the spread of HIV and AIDS and orphans with no one to help look after them.

Sub-Theme: Socio-environmental impacts

Chingola is a district that once entirely depended on Nchanga Mine for infrastructure development and service delivery of water, sanitation and waste management in the communities from the colonial days until privatisation. However, with privatisation, provision of these services was handed over to the local authorities whose capacity was not properly built. During privatisation, ZCCM's assets were split into several packages of mining operations. On the Copperbelt Province, mining companies agreed to continue running several hospitals, health clinics and schools. General municipal services, running of education and health facilities that the mine did not take over, were handed over to the central and local governments. They struggled to take on the new responsibilities acquired at privatisation and lacked the funding required for the delivery of public municipal services e.g. waste management, road and market maintenance, electricity and water supplies (ICMM, 2014).

The community complained of the poor community infrastructure and lack of welfare support. Social infrastructure involves the hard and soft infrastructure which contributes towards a company being accepted by the community. However, the current state of infrastructure in Chingola and other mining towns on the Copperbelt province are in a dilapidated state due to lack of maintenance compared to the way it was when the mines were nationalised in 1969 to the time of privatisation in 1997, and for Chingola in 2000 when KCM was born. This has persistently been an area of bad media publicity for the mines.

One would expect that environmental pollution will be top on the agenda, just as the site researcher also assumed that if most if not all participants would complain of pollution. However, only 32 per cent expressed dismay at how pollution had disturbed their livelihoods and health. The community also apportioned some blame on themselves and the local authorities with regards to ground water pollution emanating from improper waste disposal and management.

In relation to the Relative Deprivation Theory, people have expectations which they perceive as being rightfully entitled to and think they have the capability to achieve them. The findings strongly point out that the major expectation of the community is to have access to income either directly or indirectly so as to meet the basic necessities of survival. Therefore, social infrastructure has a direct influence on the community granting a Social License to Operate to a mining company.

Theme 2: Procedural Fairness

Mining companies have policies and procedures that govern how they do business and relate with the communities including how they interact with the communities, the frequency of interaction and how the adverse impacts of mining are addressed. The research findings show that the case study mine has a system which allows the community to log in complaints as well as engage with the mine on various issues using different modes. The people felt that they did not have confidence in the manner in which the company addressed their complaints. However, there was a good number of participants who had never logged in a complaint despite them having issues relating to the mine operations that bother them. After probing them, they openly said that they did not know how they could communicate with the company on matters affecting them, hence they would rather keep quiet or better still complain through their local leaders.

If complaints are not properly resolved as indicated by 29 per cent of the participants, they tend to be a strong breeding ground of conflict which in most cases affects the Social License to Operate of a mine.

Theme 3: Interactional Trust

The company not only resolves complaints and issues affecting the community, it also interacts with the community in order for them to be heard and for the community to hear them out too! This is very important in building a trust based relationship between the mine and the community. In this case 69 per cent expressed disappointment that they had never communicated or engaged with the mine! This is a serious pointer as to how and why the community usually gets incorrect information or spread rumours about the company as can be seen from the data where the majority relied on the mine magazine and workers of the company.

Literature has also shown through the risk ranking by Ernest and Young (2014; 2015; 2016) that the Social License to Operate was ranked first in the copper mining industry as compared to other metals. The researcher agrees with the risk ranking because the people were well informed of their rightful expectations and benefits of hosting a mine. Hence, one would argue that they look forward to more interactions with the mine officials just as it was during the ZCCM and KCM - Anglo days when the welfare department and management would physically walk through the townships to get a feel of the living conditions of the miners. This was reported as a great initiative and people have lived to remember that and wish that it could start happening again.

A study in the Forestry industry in Australia by Dare *et al.* (2014) agrees with this study that where community members do not have contact with forest managers, then the majority of stakeholders tend to get their information on forest management from alternative sources like friends, interest groups, internet and media. Where there is inadequate community engagement, people employ social categorisation of 'them'

and 'us' as stipulated by the Social Identity Theory (McLeod, 2008). Hence, this attitude becomes a barrier to the company building a trust based relationship because the community feels left out in the decision making process, especially on issues that directly affect them for instance some participants angrily complained that they were never consulted during the construction of one of the mine infrastructure that disturbs their welfare.

Level of Social License to Operate for KCM-Nchanga Mine

Social License to Operate is dynamic and changes due to people's perception of the levels of trust between the community and the mine. This relationship and perception seems to be influenced by the quality of community engagement and to what extent the expectations with regards to social infrastructure are met. Based on the findings, 67 per cent of the participants reported that they had no relationship with the mine because they feel that the mine did not care about them in the sense that they were not economically empowered through employment or other income generation activities. Apart from that, lack of engagement between the community and the mine has turned out to be one of the key factors.

Figure 9: SLO (Thomas and Boutilier)

 Based on the Social License Pyramid in Figure 11 and the people's responses to the semi structured interviews, KCM-Nchanga mine' Social License to Operate was at acceptance level in Lulamba, Kapisha, Chiwempala and Shimulala but risks being withdrawn because the people acknowledged that they enjoyed some economic benefits since the mine was the main economic driver. Interesting enough is that, in Nchanga North Mine Township, the Social License to Operate was almost not there because the participants expressed so much anger and disdain that the poverty levels were on the increase, family structures were breaking due to economic stress, increased crime and moral decay, poor infrastructure and environmental pollution are constantly negatively affecting them.

CONCLUSION

A total of twenty-eight semi-structured interviews were used to collect data which was transcribed, coded and analysed through thematic content analysis in this qualitative case study. The study was grounded in the Relative Deprivation Theory and Social Identity Theory because social license to operate is about how people perceive their trust based relationship with the mine. The research concluded that:

(i) KCM – Nchanga Mine generally has a Social License to Operate that oscillates between the legitimate boundary (withheld/withdrawn) and credibility boundary (acceptance) of the Social License to Operate Pyramid. This is because the research observed that the SLO is at acceptance level in Chiwempala, Shimulala, Lulamba and Kapisha while it is at withdrawal level in Nchanga North Mine Township;

(ii) Lack of employment opportunities for the local people, deplorable state of infrastructure and inadequate community engagement between the mine and the people weakened the relationship with the mine;

(iii) The local communities are willing to build a relationship based on trust with the mine through a participatory approach; and

(iv) The top challenges adversely affecting the SLO revealed by the study are lack of access to income generation and community engagement.

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