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Corporate Social Responsibility in Zambian Copper Mines: An Analysis of Mining Corporations' Health Initiatives and Their Effects on Mining Communities

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Table of Contents

Abstra	act	3			
Ackno	wledgn	nents4			
Acron	yms an	d Disciplinary Jargon5			
		6			
Backg	round a	and Context7			
I.	A Brie	f History of Copper Mining in Zambia			
II.	Human Health Consequences of Copper Mining				
		11			
Litera	ture Re	view12			
I.	Barrie	rs to Implementing CSR Policy in Zambia			
	A.	Multinational Corporations			
	B.	The Government			
	C.	Civil Society			
II.	The CS	SR Health Claims of Zambian Mining Companies Corporation Owners			
	A.	First Quantum Minerals			
	B.	Glencore			
	C.	Barrick Gold			
		Vedanta			
Findin	igs and	Discussion			
I.	Analys	sis of CSR Health Policies			
	A.	First Quantum Minerals			
	B.	Glencore			
	C.	Barrick Gold			
	D.	Vedanta			
II.	Common Themes Across CSR Policy Analysis				
	A.	Companies are not motivated to help communities			
	B.	Zambian government is ineffective in enforcing CSR health programs			
	C.	Civil society is unable to influence CSR policies			
III.	Potential Solutions				
	A.	Incorporation of Community Collaboration			
	B.	Implementation of Government Oversight			
	C.	Barriers to Proposed Solutions			
		29			
Limita	itions	31			

Abstract

This study evaluates four mining companies' corporate social responsibility (CSR) health claims in an effort to identify the key determinants of effective company policies such that they benefit Zambian mining communities. A desk-based literature review summarizes the health initiative claims of the international corporations, First Quantum Minerals, Glencore, Barrick Gold, and Vedanta. Collectively, these companies own the five dominant copper-producing mines in Zambia. This section also identifies the theoretical framework with which to understand the barriers key stakeholders face in implementing these corporate health policies.

Information gathered from these investigations and stakeholder interviews are used to assess the effectiveness corporations' claims and identify themes across the their policies. The findings indicate that companies are not motivated to help communities, the Zambian government is ineffective in enforcing CSR health programs, and that civil society is unable to influence CSR policies. These three issues act as significant barriers to implementing CSR health policies as they limit collaboration among these stakeholders and bring progress in these policies to a stand still. This paper identifies increasing community involvement in CSR policy development and stronger government oversight for regulate these policies as potential solutions to combat these aforementioned barriers.

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Acronyms and Disciplinary Jargon

BSAC = British South Africa Company

CSO = Civil Society Organization

CSR = Corporate Social Responsibility

EITI = Extractive Industries Transparency Initiative

FQM = First Quantum Minerals

GDP = Gross Domestic Product

GRZ = Government of the Republic of Zambia

KCM = Konkola Copper Mines

NGO = Non-governmental organization

SO2 = Sulfur Dioxide

UN = **United Nations**

UNGC = United Nations Global Compact

UNGP = United Nations Guiding Principles on Business and Human Rights

ZCCM = Zambia Consolidated Copper Mines Limited

ZCCM-IH = Zambia Consolidated Copper Mines Investment Holdings

Introduction

Corporate social responsibility (CSR) is intended to keep multinational corporations accountable for their overall impact on people. Often times corporate entities cause unforeseeable consequences when producing the commodity that creates profit for them. Within copper mining operations, several of these inadvertent repercussions impact the health of people within surrounding copper mining communities. The destruction of agricultural land for mines and the emission of toxic chemicals cause a variety of health concerns for those surrounding mines. In Zambia there are also endemic health issues like HIV/AIDS and Malaria, which can be exacerbated by unhealthy environmental factors.

For this reason, it is essential for copper mines corporate social responsibility to encompass healthcare initiatives that address the human-felt ramifications the mines activities, as well as to support the overall health concerns of local community members. In Zambia, international corporations currently dominate the copper industry and its profits. This gives them the fiscal capability to ensure the proper implementation of health initiatives. However, because the government does not regulate any CSR and these international organizations have little pressure to respond to the negative impacts they have on community wellbeing, the copper mining communities in Zambia suffer.

Current literature on copper mining CSR often investigates corporate policies from an all-encompassing scope, analyzing the efficacy of every branch of a corporation's CSR policy. This study narrows the scope to specifically analyze CSR health initiatives and how they affect mining communities. Healthcare around Zambian copper mines is particularly crucial to investigate considering the adverse human health consequences of these operations and the general health issues already present in the region.

There is no agreed upon definition for CSR, as scholars have found that company programs differ too greatly across industries, countries, and legal frameworks. For the purposes of this study, health CSR will be defined as any initiatives that are meant to support the health of the people who coexist with the mines, both inside and around their gates. This paper focuses further on community healthcare CSR, emphasizing the healthcare strategies which serve, not only the employees of the corporations, but also the communities that surround the mines. In analyzing these community health resources, this paper seeks to determine how various stakeholders can contribute to the growth of these policies so that they are beneficial for local communities.

Background and Context

I. A Brief History of Copper Mining in Zambia

Copper mining in the Zambian Copperbelt Region dates back to pre-colonial rule, when people would mine copper ore to make into tools and use to trade for other goods and services (Parpart, 1983). During this time, mining operations were small and meant solely to benefit local communities; however, the British South Africa Company (BSAC), a government-sponsored monopoly that funded British colonial interests, established the Northern Rhodesian colony, present-day Zambia, in 1889 and started to build large-scale mines (Parpart, 1983). The BSAC established mining towns and opened the region to foreign investment (Parpart, 1983). In 1924, the British government took full control over the Northern Rhodesian colony. American and South African companies began to invest in mining initiatives in the Copperbelt, which led to a flourishing mining industry and economic growth for the colony (Sikamo, Mwanza, and Mweeba, 2016).

According to Sikamo et. al. (2016), when the Republic of Zambia gained independence in 1964, Zambian copper accounted for 12% of the international copper market. This study shows that, as a result of the high demand for copper during this period, Zambia averaged 5% gross domestic product (GDP) growth from 1964-1970 and was classified as a middle income country. Due to conflicts between the new government and the mining owners, the mining industry was nationalized in 1973, giving 51% of ownership of the mines to the government and significantly stunting the economic growth of the industry (Sikamo et. al., 2016). This percentage of publicly held mines continued to increase throughout the 1970s and was further consolidated under the umbrella of the Zambia Consolidated Copper Mines (ZCCM) in 1984 (Sikamo et. al., 2016). ZCCM used mining revenues to fund community development projects and acted as the main provider of health services by funding hospitals, clinics, and other healthcare initiatives, but without private-sector investment, ZCCM was unable to sustain their community services (Musasa 2010; Sikamo et. al., 2016). In the 1990s, increased inflation and unemployment lead to economic stagnation (Extractive Industries Transparency Initiative (EITI), 2018).

This economic downturn led to the majority of the industry becoming privatized around the year 2000 when Konkola Copper Mines (KCM) and Mopani Copper Mines, two of the biggest mines under the administration of ZCCM, were sold to major multinational corporations (Sikamo et. al., 2016). While the Zambian government still has shares in

some mines through ZCCM's Investment Holdings (ZCCM-IH), these corporations maintain majority ownership of most copper mines to this day (Chama 2019; Sikamo et. al., 2016). Privatization caused mass investments in the industry which, coupled with high international copper prices, sparked economic growth during the early 2000s (Sikamo et. al., 2016). Without government involvement in the mining industry, ZCCM projects were not sustainable, which led to the termination of vital social services in many mining communities (Musasa 2010).

As of the end of the 2016 fiscal year, "the mining sector remain[s] the country's major productive industry with very high contribution in exports and investment but progressively lower contribution in government revenues, GDP and employment" (EITI, 2018). The mining sector as a whole accounted for over 70% of Zambia's total export value, yet only accounts for 12% of Zambia's GDP ("How Can Zambia Benefit More from Mining?", 2016). Therefore, although the industry continues to be lucrative, the Zambian government and economy have been receiving a decreasing share of its revenues. In 2017, the Vice President of Zambia, Inonge Wina, stated that she "would like to see the contribution of the mining sector to increase from the current 12 percent to at least 40 percent of the GDP" (Namutowe, 2017).

Currently, copper production in Zambia is dominated by five mines, which are all majority owned by four international corporations. According to the table below, 84.6% of Zambian copper in 2018 was produced by five mines that are majority owned by four multinational corporations, First Quantum Minerals (FQM), Vedanta, Barrick Gold and Glencore. The remaining copper in Zambia was produced by six large-scale mines and several small-scale mines, several of which are also majority owned by corporations (Chama, 2019). As the majority of copper producing mines are owned by foreign companies, most of the profit from copper in Zambia is not going to the country itself, but rather the major corporations that control the industry.

Table One: The 2018 Major Copper Producers in Zambia and Their Owners (Chama, 2019; "Kansanshi", n.d.; "Lumwana", n.d.; "Mopani Copper Mines PLC", n.d.; "Sentinel", n.d.; "Shareholding", n.d.;)

Zambian Copper Mine	Owners, their percent ownership and Country	Zambian Mine Locations	Ownership of Zambian Copper (percent of total tons produced in 2018)*
Kalumbila Minerals Limited	-First Quantum Minerals-100%	near Solwezi	25.9%
Kansanshi Mining PLC	-First Quantum Minerals: 80% (Canada) -ZCCM-IH: 20% (Zambia and public shareholders)	between Solwezi and Chingola)	28.9%
Konkola Copper Mines PLC	-Vedanta: 79.4% (India) -ZCCM-IH: 20.6% (Zambia and public shareholders	Chililabombwe, Chingola, Central Province (near Lusaka)	10.8%
Lumwana Mining Company Limited	-Barrick Gold: 100% (Canada)	near Solwezi	11.8%
Mopani Copper Mines PLC	-Glencore: 73.1% (Britain and Switzerland) -First Quantum Minerals: 16.9% (Canada) -ZCCM-IH: 10% (Zambia and public)	Mufulira	7.2%
Total percent of Zambian copper produced by these companies in 2018			84.6%

^{*}These percentages were calculated from Chamber of Mines Website (Chama, 2019), which offered the metric tonnes calculation for copper production in 2018. They have been converted to percentages of total copper production for the year.

II. Human Health Consequences of Copper Mining

Copper mining operations have many implications on human health and livelihood for their surrounding mining communities. The copper mining process includes the usage and production of chemicals and the excess of these substances are released into the surrounding environment. A study by Lindahl (2014) stated that one of the major emissions that is linked to health issues is sulfur dioxide (SO2) which is emitted from mines into the atmosphere. SO2 emitted from the mines and smelters has been linked to asthma, bronchitis, and other respiratory issues (Lindahl, 2014). Mines also cause other forms of environmental pollution which contaminate the natural resources that surrounding communities require to live. Minerals, such as lead and arsenic, have polluted rivers and the local water supply, which in turn contaminates the soil and crops (Feeney 2001).

As new operations open up across the region, these environmental impacts worsen. The lands that the mines operate on are destroyed, and the surrounding areas are also degraded (Lindahl 2014). This results in escalating consequences for local mining communities. For example, due to the strain on resources caused by increased mining operations, people have been forced to move from their homes into resettlement communities, depriving them of their land and traditional livelihoods (Lindahl, 2014; Jakobsson, 2019). This has negatively impacted the socio-economic status of several communities, as many people rely on subsistence agriculture and informal work on their land for income (Mususa, 2010). Because so many have lost their primary sources of income, people in these mining communities are left to starve (ActionAid Zambia, 2018). Certain groups among these communities are disproportionately affected by these issues. The depletion of safe resources and the failing health of communities weighs especially heavily on womens' time and energy. For example, women must walk long distances and spend more time and energy to find clean drinking water for their families (ActionAid Zambia, 2018). Finally, the burden of care work in Zambia also traditionally falls on women (Lwando, 2013). With increasing health issues in these communities, women are also more frequently called upon to care for sick family members (Lwando, 2013).

Despite the effects of copper mining on human health, most rural mining communities do not have adequate access to healthcare. As previously mentioned, the Zambian government provided many health services to mining communities before privatization, but after selling the mines, ZCCM ceased to provide these services and left a significant gap in community access to such services (Musasa, 2010). Recent consultations with mining communities establishes that many clinics existing today do not have the medications or personnel required to treat illnesses which may arise because of environmental degradation, a lack of income, and food insecurity (ActionAid Zambia, 2018). Thus, those who are most vulnerable to contracting diseases also lack adequate healthcare access and often face long-term health consequences.

In response to growing concerns over the human health consequences of copper mining, the corporations which own these mining operations have released their own policies which aim to alleviate the burden of some local health concerns. Many of these CSR programs claim to directly address health concerns by building clinics and hospitals, along with prevention care initiatives. However, these schemes have come under criticism from affected communities and civil society organizations, who claim that the corporate policies are either never implemented, or that they are wrongly implemented without the consultation of community leaders (ActionAid Zambia, 2018).

Methodology

This paper consists primarily of a literature review and a findings section. The literature review consists of two parts. The first part uses self-disclosed data and reports from the four multinational corporations that own the five main producers of copper to identify and summarize their CSR claims as they relate to healthcare. The second part of the literature review provides a theoretical analysis of the limitations in creating effective CSR policy. This section uses scholarly arguments from existing academic literature to identify the barriers that relevant stakeholders face in implementing these CSR health policies.

The findings section is comprised of qualitative interviews and investigative reports which evaluate the CSR claims detailed in the literature review. Semi-structured interviews were conducted with members of government and civil society organizations in order to provide a multifaceted perspective on CSR policy effectiveness. The questions asked were catered to their areas of expertise within the context of mining companies' CSR policies. All interviewees were given the option of anonymity. Combined with prior reports on CSR in Zambian copper mines, the information gathered from interviews is

used to compare the claims the corporations have made about their health programs and the actual realities that communities face. Based on these findings, recommendations were made with the intent of improving companies' healthcare CSR programs.

Literature Review

I. The CSR Health Claims of Zambian Mining Companies Corporation Owners

First Quantum Minerals, Glencore, Barrick Gold and Vedanta are the four multinational organizations that own the five mines that produce the most copper in Zambia. On their websites and in their reports they all claim to have some form of CSR. These companies often refer to these initiatives as "Corporate Responsibility" or "Sustainability". Some additionally consider their Occupational Health and Safety policies to be part of their CSR strategy. Overall, it seems as though there is no one cohesive definition that these companies utilize, yet there is a good amount of overlap in the types of initiatives that these companies support. Namely, they claim to fund or operate clinics, HIV/AIDS prevention and treatment, and Malaria prevention and treatment. In this section there is a summary of data collected from these international companies websites and their reports which provide insight into the health initiatives they declare.

A. First Quantum Minerals

First Quantum Minerals, which fully owns Kalumbila Mines and majority owns Kansanshi Mine, offers many health initiatives that are intended to serve their surrounding mining communities. According to FQM's Sustainability Report, there are four clinics that serve mining employees and their dependants including Kansanshi Mine Clinic serving 20,000 people, Mary Begg Community Clinic serving 1,500 employes and other community members within a population of half a million people (FQM, 2016). In this report there is no mention of the names or any information on the two other clinics FQM claims to operate. These clinics run on a fee-for-service basis; however, Gertrude Musunka, the Health Programs and Projects Advisor for FQM, claims that the fees are a quarter of what people in the capital city pay, meaning that these medical services are not too expensive and that many people can afford these services (FQM, 2016).

FQM also focus on HIV awareness and prevention in Solwezi, which is near Kansanshi mine. FQM states that their HIV initiatives include: workplace training sessions on HIV prevention, mobile testing and treatment units which regularly visit local communities, free condoms in work-site washrooms and medication for HIV-positive employees (FQM, 2016). They claim to focus on changing social attitudes through a program called "One Man Can" which educates male employees on how to recognize behaviors that

may lead to HIV including "multiple concurrent partnerships, mobile lifestyles and the use of alcohol," (FQM, 2016, p. 13). Another program which follows a behavioral-change model targets women who are predisposed to HIV due to "low social status, or a lack of assertiveness and effective negotiating skills," (FQM, 2016, p. 13).

FQM claims to also offer clinic services for malaria prevention and management, maintaining that they sponsor malaria management and treatment research for the District Health Management Team and Tropical Diseases Research Centre (FQM, 2016). The FQM Sustainability Report also states that they organize insecticide spraying in people's homes and monitor the effectiveness of these efforts (FQM, 2016). Additionally, they identify a focus on "education and sensitization," and say that at their Trident mine they spend \$300,000 annually on Malaria prevention (FQM, 2016, p. 14-15). Overall, FQM reports that in the 2014-2015 fiscal year they spent \$12.5 million on health-related programs in Zambia (FQM, 2016).

B. Glencore

Glencore, which majority owns Mopani Copper Mines, also has a sustainability report in which they outline their workplace health and safety strategic priorities for 2015-2020. This report discloses that there have already been eight deaths at Glencore owned operations during 2019, six of which occurred at Mopani copper mine in Zambia (Glencore, 2018). As a result, Glencore has closed Mopani's underground operations while they review the reason for these fatalities (Glencore, 2018).

Overall, Glencore has three steps to tackling health concerns in local communities including assessing, monitoring and controlling community health risks, ensuring that their employees are capable to work, and contributing to the wellbeing of the community (Glencore, 2018). In a promotional video on their website, Glencore states they have seven clinics, five first aid centers and two hospitals surrounding their mines in Zambia ("Health Programmes in Mopani, Zambia", n.d.). To address HIV/AIDS, Glencore claims that they offer testing, and that they increase access to antiretroviral treatment and HIV care ("Health Programmes in Mopani, Zambia", n.d.). Overall, they take credit for helping to reduce the HIV mortality levels from 4.3 to 0.4 % and the mother to baby transmission rate from 36% to less than 1% ("Health Programmes in Mopani, Zambia", n.d.). They also state that they sponsor two cervical cancer screening centers ("Health Programmes in Mopani, Zambia", n.d.). To combat Malaria they cite two methods of control: indoor residual spraying for households and wetland maintenance ("Health Programmes in Mopani, Zambia", n.d.). These methods have supposedly contributed to the reduction of Malaria cases from 216 to 21.37 per 1000 people ("Health Programmes in Mopani,

Zambia", n.d.).

C. Barrick Gold

Barrick Gold, which fully owns Lumwana Mines, has an Occupational Health and Safety Policy. This document includes policies that meet all host country regulations, maintaining an Occupational Health & Safety management system and promoting a safe workplace through providing information, education and supervision. According to this statement these policies are applied and enforced in every one of Barrick Gold operated workplaces, including every mine they own. Their human rights policy also reiterates this focus, stating "nothing is more important than the safety, health and well-being of our workers and their families" (Barrick Gold, 2018, p. 60).

In the Technical Report for Lumwana mines, HIV/AIDS and Malaria are referenced as threats to maintaining a skilled workforce (Barrick Gold, 2014). "Allowances have been made to cover the costs associated with the health and training of the workforce," (Barrick Gold, 2014, p. 20-4). The report does not specify the extent of these allowances. This document also states that the company will continue to implement HIV/AIDS prevention and education policies for employees (Barrick Gold, 2014). While the report mentions one program, the Lumwana Community Aids Task Force, which works to educate all employees and local community members on the HIV/AIDS pandemic, there is no specific information given on the program or its implementation (Barrick Gold, 2014).

D. Vedanta

Vedanta Resources, which fully owns Konkola Copper Mines, maintains a Corporate Social Responsibility page on their website which outlines their general health care practices as well as the Konkola specific initiatives. Vedanta lists their health initiatives within their Corporate Social Responsibility Policy listing the following: Vedanta Hospital, Mobile Health Units, Community Medical Centre, Specialized Health Camps, Drinking Water Projects, Household Sanitation and Drug De-addiction ("Vedanta Limited, 2017). There is no further context for how each of these programs are run and how they function in each Vedanta subsidiary.

On the Vedanta CSR page for KCM, the company claims that it operates two hospitals and fourteen clinics, ("Corporate Social Responsibility-KCM", n.d.). However, the CSR page on KCM's website, claims to have two hospitals and eight clinics ("Corporate Social Investments, n.d.). A representative from Vedanta clarified that the former figure is correct and claimed that the KCM website was outdated. They claim that they offer

antiretroviral treatment to over 3,000 people for HIV/AIDS, of which 500 receive nutritional supplements ("Corporate Social Responsibility-KCM", n.d.). They also claim to have 200 counselors and peer educators to provide support ("Corporate Social Responsibility-KCM", n.d.). It is unclear if this free treatment is for surrounding communities or just employees of KCM.

Rollback Malaria is another health initiative they publicize ("Corporate Social Responsibility-KCM", n.d.). This program includes indoor residual spraying, which reportedly covers over 40,000 households annually ("Corporate Social Responsibility-KCM", n.d.). KCM asserts that the company has helped reduced the malaria incidences from over 100 per 1,000 in 2000 to 68 per 1,000 ("Corporate Social Responsibility-KCM", n.d.). KCM also claims to provide diabetic eye care to 2,000 patients throughout the Copperbelt, saying that they have also provided eye-glasses to 2,500 individuals ("Corporate Social Responsibility-KCM", n.d.). KCM does not offer any clarification regarding when or how these measurements were taken. On KCM's individual website they also mention "occupational health monitoring" which includes regular health checkups for diseases such as malaria, tuberculosis and HIV/AIDS ("Corporate Social Investments", n.d.).

II. Barriers to Implementing CSR Policy in Zambia

Scholars have identified various barriers to implementing CSR policies, both in low- and middle-income countries at large and in Zambia specifically. These barriers can be attributed to conflicting interests within multinational corporations. The inability of the state to oversee all activities within mines and mining communities results in a lack of collaboration between communities and companies. The unequal power dynamics which exist between corporations, the state, and civil society may contribute to unequal implementation of CSR policy (Phiri, Mantzari, and Gleadle, 2019) This multi-stakeholder approach serves as a framework for analysis through the identification of stakeholder roles and the associated barriers to implementing CSR policies.

A. Multinational Corporations

Conflicting interests of corporations often negatively impact the efficacy of their CSR programs. As Mayondi (2014) recognizes, the highest priority for a corporation is its profits. While social, legal, or philanthropic interests may partially dictate corporate decisions, economic interests will always take precedence. Given this, there may be little incentive for corporations to invest in CSR as it could ultimately cut into their profits (Mayondi, 2014). However, some scholars have argued that implementing CSR programs

has a positive effect on company profits. Social programs can attract both customers and investors who prefer companies with positive social reputations (Wirth, Kulczycka, Hausner, and Koński, 2016). As Wirth et. al. (2016) argue, this incentivizes companies to use CSR programs as public relations tools. By investing in social benefit projects, corporations attract more business and subsequently increase profits. (Mayondi, 2014). Additionally, market pressure and consumer oversight acts as a necessary motivators for businesses to successfully implement their CSR policies (Mori Jr., 2018). Theoretically, a corporation can be motivated and held accountable by its investors to provide for local communities.

While a corporation can be effectively motivated by its investors to create CSR policies, the programs they develop are often designed to appeal mostly to its consumer and investor bases. Therefore, policies the company ultimately develops may only address those issues which are visible to the public (Idemudia, 2011). Projects addressing underlying health concerns such as environmental degradation and a lack of healthcare facilities for mining communities, would be rejected in favor of individual infrastructure projects which create easily measurable end products (Idemudia, 2011).

A study by Frederickson (2018) identifies that, despite the huge investments copper mining companies have poured into the communities they live in, "all communities [who were interviewed] complained of insufficient action and support from the mining companies (6)." An additional ActionAid Zambia study (2018) exhibits that while the mining companies consistently believe their CSR programs are effective, communities think differently due to "lack of community effective participation in the planning, implementation and evaluation process" (28). Both of these examples demonstrate a disconnect between the companies' intention in creating policies. Communities are not seeing the benefits of social responsibility programs because the companies independently identify what programs to invest in.

B. The Government

Considering that corporations may not always have mining communities interests' in mind when drafting CSR programs, scholars and international stakeholders identify the government of the host country to act in a regulatory capacity to ensure that its citizens are protected. Phiri et. al. (2019) identify one role of government as monitoring business practices within its dominion. Additionally, the United Nations' (UN) report, "Guiding Principles on Business and Human Rights" (UNGP) (2011) maintains that it is a states duty to protect its people from human rights abuses at the hands of third party businesses.

The Government of the Republic of Zambia (GRZ) regulates mining companies' actions in the mines themselves, but it has not passed any legislation that addresses the social responsibilities of businesses in local communities (ActionAid Zambia, 2018). Generally, laws exist which establish that companies have a responsibility for mining communities. The Mines and Minerals Development Act of 2015, for example, states that in order to issue a license to a company, the state must "ensure that any mining... activity prevents any adverse socio-economic impact or harm to human health." In this law specifically, the GRZ incentivizes corporations to provide protections for local communities, by leveraging a license to mine on the requirement of protecting human health and well-being. This creates an environment favorable to CSR activity by encouraging companies to create social policies. However, the GRZ has no actual legislation which requires or regulates CSR policies (ActionAid Zambia, 2018).

The state's long-standing dependence on the copper industry inhibit its ability to promote policies that may constrict corporate freedom. Banda (2016) argues that a misalignment of government and citizen interests can result in suboptimal regulation for the citizens. The same study further argues that although the state does technically act as a representative of its people, its officials will often fail to regulate corporations out of a desire to maintain good relations with mining corporations. Because the mining sector makes up such a large part of the Zambian economy, government officials consider it a high priority to incentivize companies to stay in the country (Phiri et. al., 2019). This results in the GRZ acting as a "dependent stakeholder... act[ing] as an advocate for the mining companies (Phiri et. al., 2019, 36). Ultimately, the GRZ often represents corporate interests over those of Zambian people (Banda, 2016).

While international bodies can theoretically fill the gaps left by the Zambian government, they do not have the enforcement power necessary to regulate such large companies. The UN holds that, regardless of a host country's laws, corporations must "seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts" (United Nations, 2011). Without any legislation from the GRZ, these international guidelines provide "minimum standards on corporate behavior (ActionAid Zambia, 2018, p. 29). Some companies will opt-in to abide by international standards for responsible business without the prompting of a host government. Glencore, Barrick Gold, and Vedanta are among those corporations who have volunteered to be governed by the UN Global Compact (UNGC) which advocates for principles of corporate sustainability ("What is the UN Global Compact", n.d.). However, the voluntary nature of

these programs means that, aside from condemning actions which do not align with the UNGC's standards, they cannot sanction these companies. Ultimately, international bodies can set guidelines for corporate social behavior, but they cannot enforce any punitive measures should businesses defy those standards. Therefore, it is in the hands of the national and local governments to ensure the health of their citizens and enforce these regulations consistently.

C. Civil Society

Civil society is generally seen to exist outside of the state-business nexus (Phiri et. al., 2019). Hobi (2019) defines civil society as "a sphere in between but not at all disconnected from the economy, the private, and the state" (27). Within this sphere, there is an amalgamation of non-governmental organizations (NGOs) and other community groups which aim to represent community interests (Hobi, 2019). Existing outside of government and the private sector, civil society organizations (CSOs) today are generally seen as intermediaries between the people they represent and other stakeholders, such as the government or corporations (Phiri et. al., 2019). As both of these stakeholders face growing pressures to include community voices in discussions of their social services programs, CSOs are perfectly poised to fill that role (Hobi, 2019). Thus, where the GRZ has failed to hold corporations accountable for their CSR programs, many CSOs in Zambia seek to hold both parties accountable. However, these CSOs face numerous barriers in establishing authority before the state and corporations and gaining influence in policy decision making. Because CSOs exist outside of the state and private sector and have no legal power to influence their decision-making processes, they have been excluded from the mining deals negotiated between the corporations and GRZ (Phiri et. al., 2019). It is therefore up to CSOs to appear legitimate before the other stakeholders and to gain enough power within the mining sphere to effectively negotiate for the communities they represent (Phiri et. al., 2019).

Corporations will often perceive civil society as lacking in accountability and argue that CSOs will purposefully misconstrue the statements made by their officials (Phiri et. al., 2019). These accusations create a deep sense of distrust between the two stakeholders. As a result, corporations will often refuse to include civil society in decision-making processes (Hobi, 2019). Information given to CSOs often pertains solely to small-scale decisions in order to project the image that the corporation engages with local communities without actually having to incorporate their feedback in major policies (Hobi, 2019). As the mining companies are ultimately the sole creator of CSR policies, they hold the majority of the power in their relationships with civil society (Phiri et. al., 2019). Therefore, the CSOs attempting to influence CSR policy are mainly dependent on

the company's goodwill; if the CSO and corporation do not share a common interest in community well-being, the CSO will be limited in its ability to influence corporate policy (Hobi, 2019).

The relationship between CSOs and the GRZ is also complex. As Phiri et. al. (2019) argue, partnerships between the state and civil society allow for parties to more effectively regulate corporations. This study identifies that when civil society is mobilized and acts as a whistle-blower for human rights abuses, it can "[build] capability with the state in terms of... regulating the mining sector, with the objective of increasing corporate accountability" (41). A coalition of state and civil society actors can effectively regulate corporate actions because the CSOs will make the issues communities face more salient for GRZ officials and will act as a more serious motivator for the state to act in the interests of its people (Phiri et. al., 2019). Yet, Hobi (2019) finds that this relationship has deteriorated as of late, noting that the GRZ has become more repressive of CSO rights to freedom of expression and organization. Due to this growing trend, CSOs have a decreasing ability to influence government and policy (Hobi, 2019). While CSOs and the GRZ *can* work to regulate CSR practices, they rarely are able to build the necessary alliances to do so.

Findings and Discussion

I. Analysis of CSR Health Policies

This section of Findings will analyze the four corporations' CSR claims and the actual effect these initiatives have on communities. For each company, this will detail the investigative responses to their CSR health policies as well as community perceptions of those programs. Additionally, there are comparisons between specific corporate health policies and their actual implementation where the information was available.

A. First Quantum Minerals

The general reactions to FQM's CSR policies at Kansanshi Mines have been negative. Hobi (2019) found that CSR policies at Kansanshi are generally ineffective because they are uncoordinated with local civil society, poorly planned and researched, and misaligned with local development plans and other government initiatives. Multiple investigations conducted by Kabemba and Lange (2018) confirmed that the policies have not had positive impacts in mining communities. Their report cited the lack of community consultation on these policies as the main reason for that negative impact, stating that "people in the communities [they] visit feel cursed and abandoned [by FQM]" (10). Kabemba and Lange found that, according to community opinion, FQM treats community

consultation as voluntary and "further suggest that the few times when it consults with [communities], the company disregards the decisions taken in meetings" (16). Clearly, there is a largely negative perception of FQM's CSR policies in Kansanshi mining communities.

There is little information on the community reactions to FQM's implementation of CSR at the other mine they operate, Kalumbila. A study done by Jakobsson (2019) in those communities indicated that Kalumbila's CSR policies were met with mixed reception, finding that "while some interviewees asserted that FQM addresses the issues and complaints raised by community members, others said the dialogue with the company has decreased over time" (44).

As stated in the literature review, FOM claims to run four clinics that serve its mining communities, citing Kansanshi Mine Clinic and Mary Begg Community Clinic as two examples of this, but failing to provide the names of the other two (FQM, 2016). Kabemba and Lange's study (2018) investigated the other clinics, including Kabwela Health Centre. They found that establishment is severely dilapidated and understaffed. Kabwela Health Centre "has no toilet facilities, no running water, and looks like an abandoned place" (Kabemba and Lange, 2018, p. 12). In their initial investigation in late-2018, they found that there was no staff at the clinic, but as of April 2019, there is one staff member serving the 2000 people who are dependent on the clinic's services (E. Lange, personal communication, 10 July 2019). An interview with one of these researchers, Edward Lange, indicated that Kyafukuma Clinic, the other clinic which FQM fails to identify in its sustainability report, is in a similar state. Mr. Lange saw that Kyafukuma has an inadequate provision of essential medications and is also maintained by only one staff member. Moreover, the fee that community members must pay to access health services at Kyafukuma Clinic, which FQM's Sustainability Report cites as affordable, excludes many from receiving adequate and sufficient care (E. Lange, personal communication, 10 July 2019). Mr. Lange emphasized that the clinic was incredibly important for the local community, as the next closest medical facility is three to four hours away by car. This factor is especially important because most community members do not have cars (E. Lange, personal communication, 10 July 2019).

Overall, various stakeholders expressed that FQM's employee health programs are generally well-implemented, but that its community health programs are not. For employees, "Kansanshi has been providing everything... all the First Quantum companies have been doing that [with health services]" (Chief Engineer of the Ministry of Mines,

personal communication, 12 July 2019). Precious Nkandu of ActionAid Zambia "worked with FQM to put up an HIV policy...[and said that] they concentrate on the workers but they really do not do a comprehensive package for the communities." While Edmond Kangamungazi, with Caritas Zambia, said that "Kansanshi has been taking the lead on [free HIV and malaria testing]," Mr. Lange found that community health programs were rarely effective because FQM failed to notify local communities about the programs at all. There is a clear disconnect between the effectiveness of FQM's employee health and community health policies.

B. Glencore

A focus group study conducted by Musonda (2016) indicates that community members living by Mopani Copper Mines considered Glencore's health services insufficient. One member of this study stated that he "would not mind much suffering pollution if [local communities] are allowed attendance at the mine hospital because [their] health problems are caused by the mine'" (quoted in Musonda, 2016, p. 11). This indicates that these community members feel they cannot access the medical services that Mopani provides as they are reserved for the miners alone. These findings are consistent with information received from an interview with Dr. Robert Zulu, the Provincial Director of the Ministry of Health in the Copperbelt. Through his dealings with Glencore, he found that the company needs to "do more of what they're doing" to support mining communities that their workers are from.

Malcolm Watson Hospital is the perfect example of this. Featured prevalently in Glencore's promotional videos for their health services, Malcolm Watson is one of the two hospitals which reportedly serve Mopani's mining communities ("Health Programmes in Mopani, Zambia", n.d.). Although it is heavily advertised as one of the examples of the company's effective CSR health policies, Glencore attempted to shut down the hospital in December 2018 because it was unprofitable (R. Zulu, personal communication, 11 July 2019). Dr. Zulu found that the mining company was motivated to close operations because "[they] make profit from mining not from treating [their] workers." The Provincial Office for the Ministry of Health has stopped them from doing this, but as of July 2019, Glencore is still working to reduce services at the hospital (R. Zulu, personal communication, 11 July 2019). While Glencore claims to make community health services a priority, this information from Dr. Zulu indicates that it is actively working to reduce its service provisions because they do not tie into the company's profit model.

While Glencore's health services do seem to be inefficient based on these reports and interview, it has demonstrated an increase in consulting communities on the development of CSR policy. Mr. Lange has identified that the company's Community Corporate Social Responsibility Forums, established in 2017, are doing good work in building the relationship between communities and the corporation (E. Lange, personal communication, 10 July 2019). These forums bring community members from local churches, businesses, schools, and community groups together with company representatives on a monthly basis to discuss issues facing the community; Mr. Lange believes that, because these groups meet monthly, they create an ongoing relationship for consultancy that effectively incorporates community perspectives into CSR policy.

C. Barrick Gold

There is very little information on Barrick Gold's CSR programs, especially as they relate to health. All that was available on community perceptions to these policies was a study from Mayondi (2014) in which a local chief said that "Barrick Gold is a big international company and [he expects] them to do more in terms of CSR than [the mine's previous owners] did." (4). There is no information on the effectiveness of the company's specific community health programs. Thus, the findings for this company are inconclusive. It is apparent from Barrick Gold's health initiatives provided on its website that there is a strong focus on keeping their workforce healthy, but the information on community health initiatives was very scarce. From this lack of documentation and policy, it is clear that community health initiatives are not a priority for this company.

D. Vedanta

The general community and CSO perceptions of Vedanta's CSR programs are predominantly negative. Jakobsson (2019) finds that policies are not consistently implemented and do not meet international standards set by the UNGP and UNGC. Additionally, the study finds that the lack of information Vedanta gives on its CSR policies "appears to be in breach of KCM's own Health, Safety and Environmental Policy and Human Rights Policy which both state that the company will measure and report progress and communicate with all stakeholders" (Jakobsson, 2019, p. 37). Local communities in Chingola express dissatisfaction with the mining corporation as well, remarking on the "discrepancy on the magnitude of [CSR] activities undertaken and the publicity given" (Ziba, 2019, p. 3). The same community members also complain that "the programmes are identified and designed without [their involvement]."

There is little more information on any of the specific health programs that Vedanta claims to run. The ActionAid Zambia study (2018) finds that there are "no essential drugs

and inadequate personnel in the clinics" which serve Chingola communities (18). However, there is no other information provided on which clinics specifically lack these resources. Overall, the negative perception of the CSR programs generally implies that they are not implemented to the benefit of local communities.

II. Common Themes Across CSR Policy Analysis

The specific findings on the four mining companies and information gathered from stakeholders establish overarching themes which characterize the state of CSR policies in Zambian copper mining communities. Using the theoretical framework of CSR established in the literature review, this part identifies the current limitations of corporations, government, and CSOs in implementing these policies. As the findings will demonstrate, each of these three stakeholders are not adequately contributing to the development or fulfilment of CSR health policies for the benefit of Zambian copper mining communities.

A. Companies are not motivated to help mining communities

The vague descriptions of these initiatives and the ambiguity of the implementation of these programs is a concerning similarity among these companies claims. The company policies "sound good on paper but in practice there are a lot of gaps" (P. Nkandu, personal communication, 15 July 2019). Stakeholders from both government and civil society that the corporations "can do more" for mining communities (R. Zulu, personal communication, 11 July 2019). There are some occasions in which these CSR policies are properly implemented to the benefit of mining communities; however, the more prevalent opinion is that "if you compare the positives and negatives [of CSR], you'll find that there are more negatives" (E. Kangamungazi, personal communication, 17 July 2019).

There are numerous reasons why CSR policies may not have the desired effects on communities. Some stakeholders have expressed concern that the focus of companies' CSR policies is not on community development, but on public image. The Chief Engineer of the Ministry of Mines indicates that "what these companies do [is] they publish... they make a big deal of all the small things they do." While these corporations boast about the work that they claim to do in local communities, the implementation of these claims is severely lacking. Mr. Lange considers many of existing CSR programs to be "image-building tool[s]... [which are] not visible" to local communities.

Additionally, the lack of definition for CSR creates ambiguity in the implementation corporations' policies. As Mr. Kangamungazi states, it is important to "look at how mining

corporations are defining corporate social responsibility" in order to see what programs they are incorporating into their overall strategies and whether those are truly aimed at helping communities. He concluded that without a clear definition of CSR, some programs enacted do not at all contribute to community development while others are focused only on small subsections of the community like the miners themselves (E. Kangamungazi, personal communication, 17 July 2019). In order for these policies to have the desired effect, they must actually be directed toward the mining communities.

B. Government is ineffective in enforcing CSR health programs

Current GRZ regulations do not utilize their enforcement power to oversee the implementation of CSR health programs. As with corporations, this may be due to the fact that the GRZ has no legal definition of CSR or laws that regulate it. "The law gives [corporations] leeway to decide what they want to do with the community" indicating that the laws as they stand have no stipulations for how corporations can design and implement their CSR policies (Chief Engineer of the Ministry of Mines, personal communication, 12 July 2019). The Chief Engineer of the Ministry of Mines considers this a limitation of government power, stating that the GRZ can "work only by the law... [the GRZ] can only encourage" corporations to create effective CSR health policies.

However, the GRZ's long-standing dependence on the copper industry fosters an unwillingness to create legislation which would address this inconsistency (Phiri et. al., 2019). According to Mr. Kangamungazi, "mining [companies have] very good advocacy skills and the government actually changes to fit [the companies'] needs." This can be especially dangerous for health CSR policies, because without sufficient government oversight, company-run hospitals and clinics may not reach the minimum standards set by the Ministry of Health. This was the case with FQM's Kabwela Health Centre and Kyafukuma Clinic, which did not have essential infrastructure or resources. As a result, "it is very evident that the people are suffering" as they are unable to access the viable health resources that corporations promise them (P. Nkandu, personal communication, 15 July 2019).

Regardless of GRZ regulations, companies' CSR health policies are "far from reaching international standards" (Chief Engineer of the Ministry of Mines, personal communication, 12 July 2019). But, as stated in the literature review, international governing bodies cannot sanction these companies for failing to meet their optional standards. So, even if the international standards can provide minimum principles for company conduct, they are also ineffective in regulating CSR health programs.

In order to keep corporations accountable to their claims and ensure that they are properly implemented, there needs to be a stronger legislative framework for CSR policy. Mr. Kangamungazi suggests that government regulations should take the form of "guidelines in terms of expenditure for CSR." This would stipulate what can and cannot count as CSR activity and would help ensure that the funds allocated to those activities are properly spent (E. Kangamungazi, personal communication, 17 July 2019).

C. Civil Society is unable to influence CSR policies

The interviewed stakeholders unanimously acknowledged that CSR policies are most effective when they included community voices and identified CSOs as key actors in facilitating this participation. "Corporate social responsibility is more meaningful when communities lead the process" because they are able to identify their needs and communicate them directly to the mining corporations (P. Nkandu, personal communication, 15 July 2019). Ms. Mundia found that, in order for communities to lead the way on policy development, "they need someone to speak on their behalf." Thus, CSOs are best situated to act as intermediaries between mining communities and corporations. However, these stakeholders also acknowledge that this is not what is happening in copper mining communities. Some NGOs and other CSOs will try and influence company policies, "but they don't have access to the mines" and are thus ineffective in representing their interests (Chief Engineer of the Ministry of Mines, personal communication, 12 July 2019). The corporations "really do not take into consideration the needs of the people" (P. Nkandu, personal communication).

As discussed in the literature review, CSOs may be unable to influence corporations' health policies because of the long-standing distrust between those stakeholders. Civil society exists outside of the relationship between corporations and the GRZ and are thus not held to the agreements made between those two parties (Phiri et. al., 2019). As such, corporations will be hesitant to disclose information to CSOs out of fear that they will misconstrue or misreport that knowledge (Hobi, 2019). Additionally, the fact that CSOs exist outside of formal state-business agreements means that they have no legal power over corporations and cannot demand that they be included in the process of policy development (Phiri et. al., 2019). This ultimately leads to stakeholders' observations which have indicated that the corporations do not consult CSOs on their CSR policies.

The current lack of consultation has a negative effect on mining communities. Mr. Kangamungazi finds that "CSR has actually brought in an aspect of inequality between communities" because of companies' uneven implementation of these policies. While local civil society is better situated to identify where health resources are most necessary

in communities, corporations rarely consult them when planning their programs (E. Kangamungazi, personal communication, 17 July 2019). Without consulting the CSOs which represent communities on what resources they need and where they need them, mining companies will funnel money into areas which may not benefit all equally; as a result, there is greater movement into the communities that receive aid from the corporations. This leads to overpopulation and puts a strain on local natural resources (E. Kangamungazi, personal communication, 17 July 2019).

Moreover, the insufficient dialogues between civil society and companies means that mining communities are generally dissatisfied with the CSR policies which are created. As Ms. Nkandu remarks, "the problem is communities feel that something is being imposed on them." Without the ability to communicate community needs with mining companies, many individuals disclose the feeling of being "'spectators' to their own development," meaning that they have no ownership over the policies which are pushed on them (Frederickson, 2019, p. 6).

Given the current limitations to community involvement with companies' decision-making processes, several stakeholders have suggested that CSOs work more closely with the government to hold corporations accountable. Dr. Zulu proposes that "an NGO working with the government trying to make sure there's an enforcement of the laws" is necessary. Similarly, Ms. Mundia believes that a CSO with "the capacity to engage with the government" can help empower community voices. While civil society alone cannot influence CSR policies, it may be able to partner with the GRZ to more effectively engage with mining companies.

III. Potential Solutions

Using independent research resources, the previous section has analyzed the validity of corporations health CSR claims and defined what aspects of these policies are effective and ineffective. By doing this, the key determinants of effective CSR health care can be distinguished and potential solutions can therefore be identified. This section identifies possible public and private policy adjustments that can ensure that CSR health policies are implemented effectively to benefit local communities. Through the main results two focuses have been identified. These include, requiring community-company collaboration and actualizing stronger government regulation on corporations' health policy implementation.

A. Incorporation of Community Collaboration

Increasing collaboration between mining communities and companies should be a priority for these private corporations' CSR health models. Communities should be empowered to offer their opinions on the policies and companies should provide a welcoming environment for that. Corporations should also display transparency in their efforts to incorporate these community perspectives. One model that may effectively address the need for increased collaboration identifies community forums as key grievance mechanisms. Ms Mundia posed the question, "even if [a] community can say 'we want this,' which channel are they using [to voice their concerns]?" It is not enough for a community to identify the issues that they face as they need a mechanism through which they can communicate those concerns to the corporations. And existing grievance mechanisms have been proven ineffective by Jakobsson's (2019) investigations into FQM and Vedanta, as the corporation can easily ignore concerns and often fails to maintain a relationship with the communities who express them.

If CSOs establish an ongoing relationship with corporations, they can hold these companies accountable to maintain their promises and help incorporate community perspectives into the development of their policies. An example of CSOs working regularly with corporations is Glencore's Community Corporate Social Responsibility Forums. As previously mentioned, these forums seem to be having a positive impact on local communities because of the ongoing relationship of consultancy established between Mopani Copper Mines and civil society (E. Lange, personal communication, 10 July 2019). There is not enough information on these forums to allude to their long-term success, but Mr. Lange believes that the exchange of "feedback is working" to create a lasting relationship between the two stakeholders, which can then result in more inclusive private policies. The main barrier to establishing these forums is incentivizing corporations to consent to meet with civil society regularly, as they generally distrust the CSOs. However, should CSOs gain this company consent, these forums should help incorporate community voices into corporate decision-making.

B. Implementation of Government Oversight

As previously stated, corporations have minimal personal stakes at the local level due to their international presence. Because their investor and consumer bases lie abroad, they are less responsive to local needs than they are international pressures (Idemudia, 2011). This makes it exceptionally important for the GRZ to act as an advocate for its citizens' needs. One way this can be done is by enforcing the corporate policy for increased community collaboration that is described in the previous section.

Establishing benchmarks for monitoring CSR policy at each step of its creation and

implementation could be an effective method of enforcement for this community-involvement feature, as well as many other behaviors. These benchmarks would act as measurable evaluation mechanisms that can streamline government oversight processes. For enforcing the incorporation of community input, a government benchmark could include a mandating monthly or annual surveys or government-held meetings to gauge community satisfaction with the corporations' healthcare initiatives. By receiving this information on the perceptions of CSR health policies, the government can assess the effectiveness of companies' policy development processes and identify where they can be improved to help communities.

Benchmarks could also monitor the implementation of the corporations' health programs, including those at hospitals and clinics. This could be the most efficient way to ensure that the standards of the GRZ, specifically those set by the Ministry of Health, are met by these corporation-sponsored clinics. For example, setting a minimum staff and resource requirements would ensure that the companies are allocating an appropriate amount of funding and supplies to serve their dependent communities. These requirements can be created based upon a ratio that is determined from the size of the population, and its specific health needs. If the Ministry of Health is able to direct funds within hospitals and clinics to the areas that are most in need, such as staff training, infrastructure development, and medications, they can ensure that the corporations effectively provide for local communities (E. Lange, personal communication, 10 July 2019).

Another important factor that should be established by the government is independent investigations into the mining companies' application of healthcare CSR and their compliance with government regulations. Many companies establish sustainability reports which are supposedly intended to monitor their progress. However, considering the ambiguity discovered in these reports, it is important that separate entities without any potential self-serving motives, such as CSO's, should be given power to conduct these investigations. If the government were to enlist civil society, either by commissioning an investigation or providing them the legal ability to enter and investigate mines, these organizations could evaluate the implementation efforts directly rather than just monitoring the claims or the community results. This policy solution is in line with those suggested by stakeholders, as well as those detailed in past investigative reports. As previously stated, Dr. Zulu and Ms. Mundia identified the need for CSOs to work with the GRZ to keep corporations accountable. ActionAid Zambia (2018) also identifies a policy solution that requires government to enter an enforcement role "with an oversight by respective civil society key players" (28).

In addition to implementing benchmarks and investigative practices, the government could enforce a minimum profit percentage to be allocated to healthcare CSR specifically. This would address the problems identified by Mr. Kangamungazi that there needs to be regulations for CSR expenditure. He indicated that several of these companies designate funds to unnecessary activities that are intended for publicity rather than fostering sustainable health within their mining communities (E. Kangamungazi, personal communication, 17 July 2019). For example, he stated that Barrick Gold sponsors a football team which they count as CSR expenditure. First Quantum also sponsors a football club and a cycling team ("FQM Sport Scores Big in Kalumbila", 2019). By requiring a minimum percentage of these companies' profits goes to healthcare, the government can ensure that corporations are meeting the most essential needs of the community prior to expanding into less crucial endeavours.

C. Barriers to Proposed Solutions

Both of these proposed solutions require that the government increase or strengthen regulations on mining companies. While expanding the legislative framework for CSR health policy can act as effective motivators for mining companies, it currently seems unlikely that the GRZ will pass legislation that will enforce such regulations. As discussed in the literature review, the GRZ is restricted in its ability to monitor corporate activity because of an economic dependence on the copper mining industry (Banda, 2016). CSOs may be able to increase the GRZ's willingness to regulate corporations by mobilizing and putting enough pressure on government officials (Phiri et. al., 2019). However, given the GRZ and corporations' distrust towards CSOs as organizations existing outside of their mining agreements, it is unlikely that they will be viewed with the legitimacy to influence public policy (Phiri et. al., 2019; Hobi, 2019). For these proposed solutions to become viable policy adjustments, the GRZ needs to overcome its barriers to regulating the mining industry and CSOs need to gain the trust of government and corporation stakeholders.

Conclusion

This study aims to answer the question, "What are the key determinants of CSR health initiatives such that they benefit Zambian copper mining communities?" The four multinational corporations (First Quantum Minerals, Glencore, Barrick Gold, and Vedanta) have demonstrated varying degrees of effectiveness of corporate social responsibility healthcare initiatives. Due to the adverse effects of their mining operations on the surrounding areas, these corporations have a responsibility to look after the

health of local mining communities. Their CSR health policies should aim to address the issues that community members face as they relate to health; however, many are not properly implemented to the benefit of those people. Identifying the determinants of effective CSR health initiatives have helped key stakeholders create better policies for the benefit of Zambian copper mining communities.

A comparison of these corporation's health claims alongside the receptions they receive among civil society and government indicates where those policies are effective and ineffective. Ultimately, this paper finds that community involvement and government oversight are essential to developing effective CSR health policies that actually benefit local peoples. Community members have the best knowledge of what health issues impact them most negatively and must therefore have the ability to shape the policies which could mitigate those issues. And government regulations are essential to making sure that corporations actually incorporate the views of communities and create health programs that are up to national standards.

The proposed policy solutions which follow these findings aim to connect the Zambian government's interests with those of civil society in order to hold corporations accountable to their claims. Because there was limited information available on health-specific CSR programs, the policy recommendations detailed in the findings section are intentionally broad. This means that they could be applicable to other general CSR policies in the Zambian copper mining context, but also means that they may not address all issues of health CSR specifically.

Through the research process, there were several topics that came up as important to the discussion of CSR health policies but were ultimately outside the scope of this study. In order to further substantiate these findings, it would be important to conduct further research on these issues. Firstly, women often face higher health consequences of copper mining yet are excluded from key health services, including those provided by mining companies, because of their unequal status within their communities (P. Nkandu, personal communication, 15 July 2019). Other groups, such as youth, may face similar inequality in access to these services. To gain a more inclusive perspective on policy effectiveness, it would be important to investigate how healthcare CSR policies cater to the needs of those who are often excluded from community decision-making structures.

Secondly, there needs to be more research on the limitations the Zambian government faces in implementing CSR regulations. As the finding section suggests, many solutions to ineffective CSR policy require the GRZ to intervene on behalf of local communities

regardless of the fact that the government is largely dependent on the mining industry. In order to implement government regulations, there needs to be more research done on how the GRZ can overcome that dependence and effectively advocate for its people.

Overall, there is much more to investigate to ensure the wellbeing of copper mining communities. Healthcare is only one aspect of the vital resources that mining corporations should be providing for their communities. This study contributes a health-specific research approach in CSR policies within the Zambian mining context. More can be done on the parts of mining corporations, government, and civil society to meet mining communities' health needs. In order to ensure that copper mining communities are well-protected against the prevalent health concerns in the region. Each of these stakeholders must work collaboratively to develop effective health CSR policy for copper mining communities.

Limitations

There are several limitations to this study. All components including research, interviews, and writing were completed in two months. This short time frame could have resulted in the paper ultimately lacking the perspective of key resources or stakeholders that were unavailable during this period.

Also, there was no opportunity to receive clearance from Cornell University or the Government of the Republic of Zambia (GRZ) to conduct human subject research. This means not having the ability to interview members of the communities most closely affected by companies' CSR policies. This study was also conducted out of Lusaka province despite the fact that it focuses on key mining areas like the Copperbelt and Northwestern provinces. The inability to visit these areas may have limited the ability to get in contact with key stakeholders. Many local civil society organizations and government officials who may have been working directly on these topics did not list their contact information online and were thus unreachable. While some interviewees provided referrals for stakeholders in the Copperbelt and Northwestern provinces, the scope of this study was generally limited to those who were easily accessible from Lusaka. Finally, the specificity of this topic made it difficult to identify stakeholders who were able to provide information that is related directly to the research question. While there is a large body of CSR research as it pertains to copper mining, there is limited focus on the health claims of mining companies. Similarly, there has been a great deal of research on healthcare in rural areas of Zambia, but very little that relates directly to CSR. Finding stakeholders who had direct knowledge of both topics was difficult and ultimately impacted the specificity of the findings.

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