A PATINA OF SUSTAINABILITY: CORPORATE SOCIAL RESPONSIBILITY AND LARGE-SCALE COPPER MINING IN SOLWEZI, ZAMBIA

VLADIMIR DVORETSKIY

A THESIS SUBMITTED TO THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF ARTS

GRADUATE PROGRAM IN GEOGRAPHY
YORK UNIVERSITY
TORONTO, ONTARIO

August 2023

Abstract

The Kansanshi mine in Solwezi, Zambia is one of the largest copper-gold mines in Africa by output. Since 2005, the mine has been operated by First Quantum Minerals Ltd (FQM), establishing it as the largest Canadian-owned mining asset in Africa. The study aims to understand the influence of FQM's corporate social responsibility (CSR) policies on social and spatial relations within the local community, as well as the environmental and land use impacts of these policies.

By examining the decision-making processes behind the CSR interventions, the research sheds light on the extractivist nature of sustainability in large-scale mining operations. Drawing on the corporate imperialism theory, the research suggests that an appearance of stakeholder well-being becomes crucial for the corporate vision of sustainability, turning the pursuit of a social license to operate into a form of extraction itself.

Acknowledgements

I extend my heartfelt gratitude to the interviewees who generously shared their insights and experiences for this study. To ensure their privacy and protection, their identities will remain anonymous. The warm reception I received in Solwezi left an indelible impression, and I express my earnest appreciation to everyone I had the privilege of meeting for their kindness and hospitality.

My deepest appreciation goes to my supervisor, Dr. Anna Zalik, for her exceptional mentorship and guidance throughout this endeavor. Additionally, I extend my gratitude to my committee member, Dr. Justin Podur, for his valuable input and support.

I would like to extend my thanks to the academic community, specifically Dr. Alexander Caramento, Dr. Gavin Hilson, and Dr. Rita Kesselring, for their assistance in establishing networks and gaining familiarity with fieldwork in Zambia. I am also grateful to my dear friends Anna Khuan and Wiley Sharp for their unwavering encouragement during the writing process.

Lastly, I acknowledge the support of York University grants, particularly the Academic Excellence Fund and Research Cost Fund, which made it possible for me to conduct fieldwork in Zambia.

Thank you, nasanta mwane, спасибо.

Table of Contents

List of Tables

List of Figures

List of Abbreviations

BSAC – British South Africa Company

CF – Conservation farming

CSR – Corporate social responsibility

DRC – The Democratic Republic of the Congo

ESG – Environmental, social, and corporate governance

FQM – First Quantum Minerals Ltd

GBV – Gender-based violence

KF – Kansanshi Foundation

LME – London Metal Exchange

NGO – Non-governmental organization

TNC – Transnational corporation

YWCA – Young Women's Christian Association

ZCCM – Zambia Consolidated Copper Mines

ZEITI – Zambia Extractive Industries Transparency Initiative

Chapter 1

Introduction

Patina is a thin green film that forms on copper following prolonged oxidation and an impression of something. Much like the film, a promise of sustainability covers extractive industries. The appeal of 'green' mining is hard to dismiss, and corporations employ various tactics to secure an appearance of sustainability, such as corporate social responsibility. The ethics of corporate philanthropy and the results of its interventions, however, remain contentious.

The Kansanshi mine, located in Solwezi, Zambia, is one of the largest copper mines in all of Africa. Toronto-based First Quantum Minerals Ltd (FQM) has been operating the mine since 2005. Kansanshi is capable of producing 340,000 tons of copper and more than 120,000 ounces of gold per year (First Quantum Minerals, n.d.-c), making it the largest Canadian-owned mine on the continent.

With a global push for a transition toward a low-carbon economy, the demand for critical minerals is rising. These minerals are essential components in renewable energy and clean technology applications. By 2035, new gas-powered cars will no longer be sold in Canada, which elevates the urgency surrounding the critical minerals used in electric vehicle production, and their sustainable sourcing. According to the IEA[1], approximately 53.2 kg of copper is needed for one electric car, while a conventional car requires 22.3 kg of copper (IEA, 2021). Increased demand for renewable energy generators (such as wind turbines and solar panels), as well as grid

[1] International Energy Agency

storage, will further demand more copper for wiring and other components. As such, copper production is increasingly important, which amplifies the necessity of an inquiry into the social realms of its extraction.

Corporate social responsibility (CSR) is a contested and multifaceted phenomenon. More broadly, it could be viewed as:

> "an umbrella term for a variety of theories and practices all of which recognize the following: (a) that companies have a responsibility for their impact on society and the natural environment, sometimes beyond legal compliance and the liability of individuals; (b) that companies have a responsibility for the behaviour of others with whom they do business (e.g. within supply chains); and (c) that business needs to manage its relationship with wider society, whether for reasons of commercial viability or to add value to society." (Blowfield & Frynas, 2005)

For the purposes of this thesis, I operationalize Frederiksen and Himley's (2020) critical perception of CSR as "strategies that firms and their allies deploy to secure and preserve the transformed relations of land and resource access upon which accumulation relies" (p. 51).

Building on Girvan's (1976) understanding that the corporate imperialist system relies on controlling laborers and local authorities needed for resource extraction, I suggest that the CSR agenda of FQM follows suit by including smallholders in the host community. As such, their perceived well-being is imperative for the corporate vision of sustainability, and obtaining a social license to operate becomes a form of extraction itself.

By excluding local actors from decision-making and using colonial epistemology of viewing local attributes as inferior (Mbembe, 2001), FQM denies the community members agency in questions of development and "capacity to live on their own terms" (Fairhead & Leach, 1996), further highlighting the extractivist nature of sustainability in large-scale mining.

At Kansanshi, the decision-making process behind the CSR agenda is confined to corporate enclaves. Through exclusion and disconnection from the community where it operates, FQM engages in what Appel (2012) refers to as infrastructural violence. By disentangling itself from its surroundings, FQM abdicates responsibility for its actions, which creates zones of exclusion in the city.

Using a political ecology approach, I examine how FQM navigates land use issues arising from its operations. Farmers in Solwezi utilize traditional agriculture practices, which are highly efficient and adaptable to local environmental conditions. The *chitemene* cultivation revolves around burning trees and using ash as a soil acidity neutralizer and a fertilizer, permanent *mashamba* gardens utilize nutrient-rich soils of the river valleys and wetlands, while other household-adjacent gardens, *mapoka*, use compost as a fertilizer. These practices have provided various food sources under normal circumstances.

However, colonial authorities have described chitemene as destructive, and Zambian farmers as unsustainable and even 'backward.' During multiple land use interventions, colonial policies aimed to introduce cash crops, promote crop rotation, and commercialize peasant farming, failing most of the time. Yet colonial perceptions and misconceptions continue to shape land use and agricultural projects in FQM's CSR policy. To address the alleged land misuse by the local farmers, FQM implemented a conservation farming program, which aims to promote intensive agriculture practices and commercialize farmers. Most importantly, depicting locals as inadequate land stewards allows FQM to divert the attention from environmental and social externalities of the Kansanshi mine operations, including displacement and dispossession.

Thus, I argue that FQM's CSR policy is not concerned with acquiring the social license to operate or what would be better for the community; it rather is a corporate construct for

shareholders, aimed at checking off the environmental, social, and corporate governance (ESG) deliverables and producing an appealing corporate image. FQM tries to intervene in the everyday livelihood of the community under the disguise of sustainability, but it fails to grasp what would be considered sustainable development in the context of Solwezi.

Research Questions

The main objective of my research *is to outline the CSR practices of FQM at the Kansanshi mine*. This translated into the following research questions:

1. What are the underlying reasons for the implementation of certain social projects and why are some defined as CSR?
2. What is the ontological basis behind the CSR policy at the Kansanshi mine?
3. What tactics does FQM use to implement its CSR agenda?

Outline of the Thesis

This thesis is structured around two manuscripts, chapters 5 and 6, that were written with the intention of publication in peer-reviewed academic journals. The intended journals are *The Extractive Industries and Society* and *Land Use Policy*, respectively.[2] Chapters 5 and 6 contain the main findings of my research, while the preceding chapters serve the purpose of providing context, background, in-depth methodology, and research process.

[2] As such, according to the requirements of these journals, the text of this thesis has been formatted to reflect the American English spelling.

In Chapter 2, I provide the conceptual framework of this thesis. The key concepts of corporate imperialism, political ecology, and postcolonialism form the theoretical basis of my research. In this chapter, I also provide an overview of the critical CSR literature. Some of the concepts outlined here are utilized in chapters 4 and 5, though in a more specific light related to each of the manuscripts.

Chapter 3 details the methodology of this thesis and research design. In this chapter, I describe the research methods used, my positionality, and my overall fieldwork experience in Solwezi.

Chapter 4 sets a geographical and historical context for the research site. An overview of physical and human geography is provided, along with the history of extraction. The current operator of the Kansanshi mine, FQM, is also discussed.

In Chapter 5, I problematize the CSR practices implemented at the Kansanshi mine, viewing them through a Marxist prism of corporate imperialism. In this chapter, I identify two main characteristics of Kansanshi's social programs: (an attempt at) providing food security for the community and entertaining the mine's staff. The analysis reveals that the community does not benefit from it greatly, as the main goal behind the CSR agenda is to divert attention from the infrastructural violence the mine entails. The flawed decision-making process behind CSR policy and the mine's disentanglement from the community puncture the narrative of extraction-driven development and highlight the nature of CSR as a corporate deliverable.

Chapter 6 provides a political ecology analysis of the studied area. This chapter is concerned with external attempts at regulating land use from colonial and corporate actors. The view of traditional agricultural practices as unsustainable is employed to warrant the

intervention. The community, however, remains resilient to change its livelihood in favor of external-dictated know-how. FQM's CSR in agriculture, I argue, repeats colonial practices to depoliticize extraction and shift the attention away from its operations. To achieve its goals, the company disregards local input and resorts to manipulation.

Chapter 7 features the synthesis of research findings and reflections on further research.

Chapter 2

Conceptual Framework

Introduction

The purpose of this chapter is to position my research in the body of scholarly work at the intersection of the political ecology of extraction and critical development studies' approach to corporate-community relations. First, I provide an analysis of contemporary literature on corporate social responsibility (CSR), focusing on the critical interpretations of the subject. Then, I delve into the issues of corporate imperialism and the political ecology of extraction, both of which form the theoretical basis of my thesis. Next, I elaborate on the postcolonial lens that I employ in my work. Finally, I detail the methodology and design of my research.

Corporate Social Responsibility

My research builds on the critical understanding of CSR, which encompasses economic, legal, ethical, and philanthropic responsibilities (Carroll, 1991). In my work, as in most CSR literature, the focus primarily lies in the realm of the last two. In the case of Kansanshi, it is necessary to go beyond corporate philanthropy and analyze the ethical component of their responsibilities.

The relation of mining to geography rests in the notion that "mineral and hydrocarbon production are spatially fixed, asset-depleting activities" (Frederiksen & Himley, 2020), thus, the CSR practices of extraction companies are also spatially fixed by association.

In terms of contemporary scholarship, I draw upon the works of G. Hilson (A. Hilson et al., 2019; G. Hilson, 2006, 2012, 2014), Fredericksen (2019; Frederiksen & Himley, 2020) and Hamann & Kapelus (2004) on CSR in large-scale scale mining operations in Sub-Saharan Africa. These works provide insight into the attitudes and concerns around CSR. The great variation of concerns on CSR in practice arise from divergent expectations in various parts of the continent; these variations in turn informed my research question and approach. These scholars provide insight into the motivation shaping CSR implementation in the region.

The problematics of CSR implementation in the global South, including Sub-Saharan Africa, have gained traction and created debate in academia and the non-governmental sector over the past twenty years (Blowfield & Frynas, 2005; Hamann & Kapelus, 2004; G. Hilson, 2006; Idahosa, 2002; Jenkins, 2004; Lungu & Mulenga, 2005; Watts, 2005). Nevertheless, the topic remains relevant, as the adaptation of CSR becomes even more widespread and expected, continuing to generate scholarly literature on the subject in recent years (Frederiksen, 2019; A. Hilson et al., 2019; Kemp & Owen, 2022; Makwara et al., 2023; Mbilima, 2021).

The popularity of the phenomenon is not surprising. CSR was originally conceived as means of mitigating negative externalities of corporate operations (Hamann & Kapelus, 2004; Lungu & Mulenga, 2005), and the engagement of mining companies with, for instance, African states was limited solely to business matters (G. Hilson, 2006). However, with the attempts of the corporate world, CSR metamorphosed into an alleged tool of industry-led development (Frederiksen & Himley, 2020; Zalik, 2004). Such narratives, most noticeably, distract attention from the structural issues of poverty and inequality situating them as localized problems that can be simplified and solved by a company (Blowfield & Frynas, 2005; Khan & Lund-Thomsen, 2011).

Overall, this body of literature demonstrates that the results of corporate philanthropic intervention often are rarely useful or tangible, if they come to fruition at all. Indeed, the research suggests that, as a development tool, CSR programs have been unable to alleviate poverty in rural areas (G. Hilson, 2006) and, in the case of large-scale mining, have had little effect on the well-being of the community (A. Hilson et al., 2019). Moreover, even the positive economic spillover effect of large-scale mining and its supposed ability to act as 'growth poles' is contested (A. Hilson et al., 2019).

Conducting such research on CSR outcomes is a challenging task, which requires consultations with the recipient community. In turn, it presents an additional difficulty as polarized opinions are frequent; those members who benefit from CSR projects are unlikely to contest them (Hamann & Kapelus, 2004), while some even defend the industrial development despite the clear negative externalities that its operations create (Bebbington et al., 2008). Moreover, defining 'community' in the context of CSR further complicates the analysis, as corporate engagement with stakeholders is indubitably prone to bias towards certain groups (Jenkins, 2004), which in turn promotes social divisions.

Indeed, some companies implementing CSR projects have been known for deliberately creating such divisions. Blowfield and Frynas (2005) point out how the Cortez mine interacted most with the presumed active Indigenous faction, and Mayes et al. (2014, p. 404 as cited in Frederiksen & Himley, 2020) depict how a local group favoring extraction in Western Australia was tokenized to portray a general acceptance of the operations. Thus, participation can be employed by the company as a tool for controlling opposition and attaining "compliance through consent" (Frederiksen & Himley, 2020). The marginalization and exploitation in the recipient

communities may in fact be attributed to unjust power relations with the company (Blowfield & Frynas, 2005).

The self-reporting and self-monitoring nature of CSR is often critiqued given that in many jurisdictions such activities face limited state oversight. In Ghana, for example, large-scale mining companies choose what CSR programs to finance (G. Hilson, 2006). Similarly, at my field site at Zambia's Kansanshi mine, First Quantum Minerals (FQM) is selective in which standards of compensation for dispossession it uses, and even sets some of them itself (Kesselring, 2018). In turn, this contributes to a system of inequality in which the agency of the mining firm is prioritized. In terms of voluntary compensation, A. Hilson et al (2019) question the ability of corporate actors to decide what embodies a better outcome for the community post-dispossession, because, as Frederiksen and Himley (2020) point out, the negotiations between the company and community "are rarely between equals."

Frederiksen and Himley (2020) further argue that the extraction has the capacity to reconceptualize and create subjects in the recipient communities "(1) by reworking forms of exclusion and inclusion in ways that serve the interests of firms, (2) by reshaping lifeworlds in areas targeted for investment, and (3) by transforming state–society–market relations, with firms assuming state-like functions and subjecting them to capitalist logics" (p. 58). This is explicitly evident on the extractive frontiers, where the companies "become increasingly entangled and influential in socio-political life" (Frederiksen & Himley, 2020).

In relation to CSR, it is important to differentiate *what* companies claim as CSR, *of what* CSR programs actually consist, and *why* they engage with CSR in the first place. Answering the last question, Watts (2005) positions CSR in the political ecology of extraction as an instrument of obtaining permission to operate, and Jenkins (2004) conceptualizes it as the product of a social

contract between the corporate actors and the community. Frederiksen and Himley (2020) also see CSR as a construct that assists in legitimizing the corporate presence in the context of "rapidly reordered socio-ecological relations."

Furthermore, Velásquez (2012) highlights that such CSR actions as environmental studies can be employed to both comply with state regulations and gain the trust of the community. While extractive companies, such as FQM, assert that their CSR strategies aim to secure the social license to operate, some studies suggest that the corporate adaptation of sustainability is driven by the desire to ensure access to the property (Frederiksen & Himley, 2020), markets[3] and capital (Hamann & Kapelus, 2004).

The lack of meaningful results has pushed other scholars to consider the CSR practices "a façade intended to deflect public criticism of industrial practices" (G. Hilson, 2006) or, more bluntly, a greenwash (Hamann & Kapelus, 2004). Hamann and Kapelus (2004), naturally, do not totalize CSR exclusively as an instrument of greenwashing, viewing the issue more broadly in the corpus of corporate philanthropy ethics. However, if CSR fails to address and mitigate the impacts of the company's operations, they consider it a greenwash (Hamann & Kapelus, 2004).

Some scholars go beyond conceptualizing CSR as a Western construct and either draw parallels between CSR and colonial practices (Hamann & Kapelus, 2004; A. Hilson et al., 2019) or directly view it as an imperialist practice (Khan & Lund-Thomsen, 2011). Khan and Lund-Thomsen (2011), on the example of Sialkot manufacturers, contracted to produce footballs for Western brands, depict a counter-discourse in which "CSR [is viewed] as part of the wider historic project of Western imperialism in the developing world through which economic

[3] Such as London Metal Exchange (LME).

resources are extracted from local manufacturers while their perceptions of what constitutes socially responsible behaviour are delegitimized." The implementation of CSR practices from the top down by Western-based companies informs this model and perpetuates its inability to reconcile with local needs. Drawing from the history of company administration in Northern Rhodesia, Noyoo (2016) perceives colonial practices of the British South Africa Company (BSAC) as CSR, which further exacerbates the imperialist nature of the phenomenon.

Such dynamics will continue to persist as long as the CSR policy is conceptualized solely by Western actors within their ethos. To further depart from the Western canon, Makwara et al (2023) suggest that CSR decision-makers should consider alternative theorizing in order to better adhere to the local beliefs and cultural principles.

In the Zambian context, CSR has relatively recently established itself as an object of scholarly inquiry (Choongo, 2017; Frederiksen, 2019; Frederiksen & Himley, 2020; Kesselring, 2018; Lungu & Mulenga, 2005; Mbilima, 2021; Negi, 2011). Here, I turn to Frederiksen for critical analysis of CSR in a large-scale extraction setting, while recognizing the influence of other authors. Researching large-scale mining in the northwest, Mbilima (2021) determined that CSR did not contribute to poverty alleviation. Focusing on small and medium enterprises, Choongo (2017) has found a positive impact of CSR implementation on a company's fiscal performance. Despite the difference in scale, the value of the work for my research lies in the dissection of Zambian attitudes and trends in CSR. All these authors further elaborate and provide an analysis of stakeholders' participation and decision-making issues in CSR practices. Moreover, they focus on assessing the impact of the implementation of CSR practices on a local and national scale, as well as the monitoring problems associated with CSR.

Frederiksen (2019) establishes a relationship between the CSR policy of large-scale mining companies and extraction governance, especially on the local level as those companies "took a proxy state role as local communities directed their demands for basic service provision" (p. 168). Likewise, Zalik (2004) depicted a similar situation in the Niger Delta, where Shell essentially assumed the role of the state. Nonetheless, the communities where CSR projects are implemented were not the main beneficiaries, which the author attributes to the elite bargaining and the empowerment of traditional institutions by the company (Frederiksen, 2019). Instead, the community members felt themselves "marginalised" and not possessing "a sense of ownership over the projects done for their benefit" (Frederiksen, 2019).

For this thesis, it is most curious and useful how Frederiksen and Himley (2020) position the northwest of Zambia as an extractive frontier. In such spaces, "firms themselves take a range of actions to appropriate land and resources, and maintain access to these over time" and balance the changing socio-spatial relations in the light of "uneven state presence" (Frederiksen & Himley, 2020). Essentially, by equating industrial needs with collective prosperity and development, CSR projects can enact an antipolitical role in relation to the questions of extraction by forming "quieter registers of dispossession" (Frederiksen & Himley, 2020).

The importance of the Zambia Consolidated Copper Mines (ZCCM) for the perception of mining in Zambia cannot be understated as it has prominently become a part of the collective national memory and remains relevant to this day. The practices of nationalized mines that have contributed to the development and social change in the Copperbelt, following the privatization of the mines, informed some aspects of CSR policy at certain mines, such as sports or community development (Fraser & Lungu, 2007). Negi (2011) documents these charitable and infrastructure contributions as emblematic of Zambian CSR. However, most importantly, the

collective memories of those practices have formed a reference point in constructing a positive vision of extractive futurities in the face of the new development in the northwest (Frederiksen, 2019).

As such, these works establish CSR as a tool that allows corporations to influence the development of a recipient region if not substantively than in terms of social relationships. My inquiry, taking into account this research but building from Girvan's earlier (1976) foundational work on the relationship between the transnational firm and the state employs the paradigm of corporate imperialism to examine the ethics of public-private partnerships and corporate-driven participatory development.

Corporate Imperialism

Girvan's (1976) work on corporate imperialism is integral to the theoretical framework of my research. Corporate imperialism is a form of local population dispossession under the system of unequal economic and social relationships (Girvan, 1976). Under such a system, as Girvan (1976) puts it, economic growth occurs in enclaves without creating much or any external development beyond the confines of the extractive site. Beginning as an instrument of shielding companies from external demands, this enclave-oriented development translated into the structure of economic dependency and foreign domination, which, consequently, led to the underdevelopment of areas in the Global South.

With regard to my research, these imperial relations explain the institutionalized system of knowledge production vis-à-vis CSR (largely handled by the firms themselves) and why firms lobbied for the deregulation of the mining industries of the host, Global South, countries. This

Marxist analysis is relevant to this day, as corporations still exercise neocolonial oligopolistic control over many geographical areas. Concerning uneven enclave development in Solwezi, for instance, even today the executives are segregated from the rest of the workers and townspeople by the tall walls of their golf course refuge. The latter, building on the work of Appel (2012) can be interpreted as a corporate attempt at disentangling its elites from the community—a denial of social relations through infrastructure.

According to Girvan (1976), the corporations composed a belief system that equates their goals of capital accumulation with the broader interest of the public, and anything that opposes such belief is viewed as anti-progress.

In his work, Girvan (1976) outlines several problems that the system of corporate imperialism creates: (1) lacunas in mineral knowledge in the Third World, (2) unequal development in the recipient countries, (3) surplus drainage of incomes from the periphery to the center, (4) low returned value for the mineral exporter countries, (5) low national value added in the absence of processing and manufacturing industries which gravitate to the center, (6) lack of backward and forward linkages attributed to the extraction on the periphery, (7) expatriate staffing in extractive industries and (8) absence of agency in decision-making and development in the Third World.

Many of the listed issues are present in Solwezi. Unequal development is observable in the enclave spatial structure of extractivism in the locale and expatriate staffing at the mine is evident both in managerial (South Africa, Zimbabwe, etc.) and technical (non-local Zambians, mostly Bemba) positions. The policies of local content promotion in post-privatization Zambia were not successful in cultivating backward linkages (Caramento, 2020), and the development of forward linkages at Kansanshi correlates with the interest of the extractive company. By creating

and operating the copper smelter on-site, FQM captures profits from higher value-added products.

As such, mineral extraction in Solwezi contributes to the "growth without development" (Girvan, 1976, p.30) by virtue of disentangling itself from the community where it operates while integrating into global supply chains. Notably, the issues should not be viewed solely in the First vs Third World dichotomy, as corporate imperialism benefits the interests of the privileged classes in both center and periphery countries (Girvan, 1976).

To Girvan (1976), the corporate imperialist system strives to control and cast into a "dominated and dependent status" those groups that are needed for mineral extraction. While Girvan (1976) identifies laborers and local authorities in the recipient country, I extend this line of reason to include peasants in Solwezi as they, and their perceived well-being, are crucial for the CSR agenda of FQM. Obtaining a social license to operate becomes, essentially, an imperial exercise in the cooptation of as many social groups as possible into the corporate vision of a sustainable enterprise. The problems of inclusion in CSR resonate with another stronghold of corporate imperialism, the absence of agency in decision-making and development.

Continuing the line of exploitation and dispossession, I also turn to Rodney (1973) for the Marxist historical analysis of the underdevelopment of the African continent. The study of current socio-spatial and political relations in Zambia, just as in the rest of Sub-Saharan Africa, is not possible without an understanding of colonial resource exploitation and its lasting negative consequences. The value of Rodney's (1973) work in relation to my research lies, however, in demonstrating the continued and perseverant ability of local actors to determine their own living environment, using the resources available to them.

Lanning and Mueller (1979) further develop Rodney's and Girvan's ideas, pointing out the role that mining companies played in the underdevelopment of Africa. Most importantly, corporate actions developed the "pattern of mineral exploitation" (p. 497) on the continent, creating a dependency on mining exports (Lanning & Mueller, 1979). Their contributions bridge these topics with postcoloniality and raise questions about the agency of local stakeholders in the decision-making process. The role of the local agency is salient to conceptualizing the ecological implications of industry as well.

Political Ecology of Extraction

The political ecology of extraction deals with the subsoil and, as Bebbington (2012) identifies it, is concerned with the "ways in which resource extraction becomes causally implicated in the relationships between polity, economy, nature and society". In my research, I primarily operate within the political ecology literature that is concerned with questions of wealth distribution and socio-economic inequalities created in mining operations.

Akin to corporate imperialism, the political ecology of extraction stems from the political ecology of the Third World and its relation vis-à-vis First World transnational corporations (TNCs). As such, the TNCs imposed "economic practices that contribute to environmental degradation and social inequality in the Third World" under the capitalist system (Bryant & Bailey, 1997). Under this system, traditional environmental practices and knowledge of local actors are becoming eradicated "as part of the integration of peoples and environments into a larger system over which they have no control" (Ecologist, 1993 in Bryant & Bailey, 1997). In

the scope of my research, this helps explain the misunderstanding and misconceptualization of socio-environmental issues in Sub-Saharan Africa and the exogenous nature of such problems.

As this work points out in due course, the colonial (and later corporate neocolonial) actors were always concerned with environmental governance in Zambia and tried implementing a myriad of interventions (while failing most of the time). Nevertheless, local communities remained resilient in the face of the ever-changing environmental agenda, highlighting Bryant and Bailey's (1997) stance that "no actor is omnipotent and hence no actor is completely powerless."

The ontological basis of failed environmental governance interventions lies in the Western-conceived 'tragedy of the commons' framework, which disembeds people from their environment and characterizes them as irrational actors that disregard nature in a quest to maximize personal accumulation. Characterizing traditional practices as destructive facilitates imperial external intervention (Fairhead & Leach, 1996), which is repressive by design as it insists on the 'right' (often misguided) way of living and engaging in socio-ecological processes, denying the target recipient any voice in the matter.

In terms of displacement, these policies can manifest themselves spatially in the 'zones of exclusion' (Zalik, 2009) surrounding the strategic sites of extraction. As Zalik (2009) describes it, small-scale fishers were forbidden to fish near the oil rigs, and instead, the state promoted fish farming. That invites a comparison with the research site of this thesis, the Kansanshi mine, where local farmers were displaced to make space for large-scale mining development and later were offered training in conservation farming to redress their losses.

Nonetheless, the difference in economic power between a developing state and a multinational corporation is evident; a TNC is not necessarily vertically integrated with the host country, and, given its "footloose nature" (Korten, 1995 in Bryant & Bailey, 1997) has an opportunity to choose a more suitable jurisdiction where environmental costs can be minimized. That, in turn, contributes to the inequality in bargaining power between TNCs and the state. The state, should it elect to uphold the regulation, has the burden of proof and faces additional challenges in the process, yet often the bypassing of environmental regulations occurs with an "active complicity of Third World states" (Bryant & Bailey, 1997). Moreover, in mining, the state is forced to negotiate with the mining companies over taxation and royalties given that certain critical minerals like copper are spread throughout the world, allowing firms to threaten departure to other extractive sites (Girvan, 1976).

Spatiality, the State, and 'Transition' Minerals

At the current moment, the transition towards sustainable energy (Bridge et al., 2013), extractive concessions (Bebbington, 2012), and foreign direct investment (FDI) distribution in the primary sector of the economy (Bridge, 2004) all are inherently geographic phenomena associated with the political ecology of extraction.

I turn to Bridge (2004, 2014) for connecting the topics of corporate imperialism, mineral extraction, and postcoloniality with the spatial context. Policy analysis offers a way of understanding the geographic distribution of extractive industries and investments associated with them on a national scale (Bridge, 2004). The reestablished significance of the state in light

of the recent resource nationalist developments in Zambia (Saunders & Caramento, 2018) further emphasizes the relationship between the state and the resource.

Nonetheless, concerning the FDI in the mining sector, Bridge (2004) points out their flexible nature as "socially mediated" (p. 416) and disconnected from geographic determinism because "not all liberalizing, mineral-rich countries saw inflows of investment during the boom years" (p. 417). That provides an important understanding of the plurality of actors in extraction and their influence on spatial distribution.

Furthermore, Bridge, et al. (2013) incorporate the socio-economic scale of mineral resource extraction into the energy transition processes, highlighting the geographical nature of the issue. This provides a theoretical foundation for positioning CSR in copper mining and its implications in the context of the global green transition. Zambia is becoming increasingly involved in this transition, having signed a memorandum of understanding with the US and the DRC over the electric vehicle battery supply chains in late 2022 (The Government of the United States of America et al., 2022). It is, however, unknown if the political intentions of Hakainde Hichilema will materialize in domestic manufacturing and overall energy transition, which, Bridge et al. argue (2013) corresponds with the social change.

Despite its obvious benefits, "implementing a low-carbon economy will be a simultaneously creative and destructive process" (Bridge et al., 2013), and as such the externalities of this process must not be ignored. The construction of sustainable supply chains calls for the inquiry into the CSR practices of the companies engaged in critical minerals extraction, because upon closer examination, as this thesis argues, the CSR agenda plays a crucial part in the company's operations.

The works of Bebbington (2012; Bebbington et al., 2008) also guide my research on the topics of extraction as a driving force in shaping development and social attitudes concerning resource governance in developing countries. Above all, Bebbington et al. (2008) establish a connection between extraction and the "palpably unsustainable patterns of development and growth" in the recipient countries, a context shaped by corporate imperialism.

Postcolonialism

Postcolonialism is a critical approach to understanding the lasting impacts of colonization in former colonies (Bayly, 2016). Mamdani (2018), via his theoretical approach, established that indirect colonial rule is a manifestation of despotism. That same indirect rule by the BSAC essentially created the artificially drawn state of North Rhodesia, which is now Zambia. Therefore, company rule, a clear feature of corporate imperialism, is nothing new in Zambian history. Complementing Mamdani, Mbembe (2001) raises the questions of subjectivity and unequal power relations in Sub-Saharan Africa.

I turn to Mbembe and Mamdani to deconstruct the Western narrative in which Africa is viewed as possessing attributes of lesser value, quality, and importance. This emerges from the Western gaze of the Orient, first described by Said (1979). By using the postcolonial lens, it is possible to analyze the region in terms of presence rather than void and lack. Furthermore, to base my research more fully in African theorizing, I rely on Adeniyi Ogunyankin (2019). Her work also provides a theoretical basis for urban studies counter-discourse in the "enduring legacy" of colonial relations (Adeniyi Ogunyankin, 2019), which relates to the enclave system of the built environment and infrastructure violence exhibited in Solwezi.

The postcolonial approach is central to my work, as it allows for a more accurate representation of modern realities in decolonial spaces by giving agency to the formerly colonized. Additionally, it shapes the way in which I (strive) to write about the research matter. In this regard, my research approach—which seeks to avoid objectifying African communities—is also informed by Wainaina's satirical article (2019) on the language used to describe Africa and Zalik's (O. E. A. Johnson et al., 2021) adoption of the corporation, rather than vulnerable community, as the unit of analysis.

Conclusion

The value of the political ecological approach to my work lies in its reconciliation with the geographic scales of socio-environmental relations and ways in which extraction becomes embedded in these relations. Corporate imperialism, on the other hand, examines the continuous power struggle between the object and the subject of capitalist exploitation, which provides a background for understanding the intentional underdevelopment of the global South. To depart from the narrative of the resource curse and developmental shortcomings, I turn to postcolonialism to shape the ways in which I inquire into the issues of CSR and corporate philanthropy more broadly.

Chapter 3

Methodology and Research Design

The data for this thesis was primarily collected in July 2022, when I undertook fieldwork in Solwezi. During that time, I conducted 20 semi-structured interviews. The semi-structured interview method is most suitable for the objectives of this research as it allows the research to elaborate and build upon new topics that respondents raise. The interviewees come from various social and ethnic backgrounds and include community leaders. They were of varied age groups and geographic areas that compose modern Solwezi. Moreover, they exemplified different employment statuses, such as: working for the Kansanshi mine, working for an entity affiliated with the mine, and working in an entity at arm's length from the mine.

To seek better quality and buttress the integrity of collected data, I interviewed representatives of two types of non-governmental organizations (NGOs): those that receive funding from First Quantum Minerals (FQM) and are affiliated with the Kansanshi Foundation (KF), and those that are not affiliated. These NGOs operate in various spheres and work with different demographics, which I do not reveal to protect the identities of the interviewees. To offer perspective from the traditional authorities, a sub-chief of Kapijimpanga chiefdom was interviewed. All the specific cultural protocols and customs were adhered to when the interview took place. The final round of interviews included representatives of the Kansanshi mine, namely the senior officials working at the KF. Having contact with the mine representatives allowed me to cross-check claims and address concerns that may have been raised in previous interviews.

In my analysis of the gathered data and consequent establishment of the central themes, I turn to Taylor (1971) for an interpretive lens “to bring to light an underlying coherence or sense.” When dealing with the accounts of lived experiences, it is crucial to ascertain the reasoning behind one’s understanding of the events:

> “Already to be a living agent is to experience one's situation in terms of certain meanings; and this in a sense can be thought of as a sort of proto-"interpretation." This is in turn interpreted and shaped by the language in which the agent lives these meanings.” (Taylor, 1971)

Departing from positivist notions of objective truth and its attainability, I argue, enriches my research because it allows capturing the unique perspective of a community on multi-faceted social issues, such as the impact of corporate philanthropy on social and spatial relationships in the given locale.

Although the predetermined and approved questionnaire remained the basis for my interviews, my personal observations, previous interviews, and general conversations with local residents informed many of my follow-up questions. That added a tremendous amount to the questionnaire, as I structured the original one solely on the academic materials and media outlets available online. By incorporating field observations and conversation threads into data collection, I achieved a clearer understanding of Kansanshi’s corporate social responsibility (CSR) practices, and how their impact on the community was achieved. Local news outlets and online groups, particularly on Facebook, have further helped me stay in touch with current affairs in Solwezi.

The importance of casual conversation cannot be understated in building a better understanding of Solwezi and its current affairs. From an exchange bureau clerk rolling her eyes

at me[4] to a taxi driver sharing his story of being laid off from the mine after the COVID restrictions were lifted—many seemingly random interactions bear a lot of personal affect and information which could not be attained otherwise. All observations were written down in field notes for analysis.

Naturally, there are certain limitations posed by the research design. People can present rumors and their personal fears as facts, and misinformation can be present in any community. Therefore, it was crucial to verify and cross-reference (where possible) some claims made by interviewees. Regardless, semi-structured interviews offered a reasonable overview of the attitudes I encountered in Solwezi in the summer of 2022.

During the interviews, respondents were asked open-ended questions as they are more suitable for describing one's own experiences regarding CSR and its effect on respondents. Moreover, it gave respondents an opportunity to bring in new ideas or topics, which would not be possible otherwise. The concept of CSR might be unfamiliar to the general public even in the setting where mining companies operate, and Kansanshi is no exception. Most respondents were confused by what CSR embodies, which is why the interview questions were prepared with that in mind.

The interview questions, in laypersons' words, covered the actions taken by the company to improve well-being in local communities and/or mitigate negative externalities that result during mining operations—mirroring the direct definition of CSR. Arguably, the need to do that supports the understanding of CSR (and ESG[5] more broadly) as a corporate construct from the global North.

[4] "Of course, your research is about the mine!" – she said alluding to the predominantly mineral narrative around Solwezi.
[5] Environmental, social, and corporate governance.

If specific answers have not surfaced in the semi-structured discussion, I asked some follow-up questions. These touch upon general information about the participants and their experiences with Kansanshi's CSR (see approved questions in Appendix A).

Although being a White researcher from the global North and conducting research in Africa can present challenges, I recognize my overall position of privilege; self-reflexivity with regard to my positionality is undeniably crucial for my work. By using a postcolonial lens in my research and a community-minded approach, I engage in Kohl & McCutcheon's (2015) 'kitchen table reflexivity' to improve the accuracy of my findings and the impact of their analysis. I acknowledge that being White has certainly opened a few doors in Solwezi for me; therefore, it is only fair to use this thesis to air some grievances that people shared with me during my fieldwork.

My visit to Solwezi was not a particularly long one—around three weeks. In order to try to avoid participating in neocolonial extractive practices in academia commonly referred to as 'helicopter research,' I employ a postcolonial lens and cite Zambian scholars. Because of the limitations of the thesis format, I could not collaborate with them in any other format. Interviewing Zambian experts would also be a form of extraction since, for the purposes of the research ethics, all interviewees in this thesis are anonymized.

Including local knowledge, treating participants and community members with respect and dignity, anonymizing their identities for research purposes, and 'studying up' the company as the subject of inquiry collectively contribute to the issues related to my positionality. The processes of fieldwork and research in general are continuous and one cannot 'clock out' at 5 pm; my commitment to research ethics and better practices extends to all the interactions. For instance, though not regulated by York University's guidelines, I elected to abstain from taking any pictures of people during my time in Zambia so as not to objectify them and maintain their privacy.

Solwezi might seem remote on a map, but, in reality, it is heavily globally networked. News of the Russian invasion of Ukraine in 2022 was widely circulated by Zambian media, and many people are informed on world affairs. I was upfront about my positionality as a Russian national living in Canada with all my contacts in the country, and it never presented any significant challenge to my work. Some even guessed my origin correctly just as I introduced myself.[6] People that I met were curious about the cause of the invasion of Ukraine and complained about rising wheat flour and petrol prices. At first, making small talk about the war upset me, but I realized that my experience of mild discomfort is irrelevant. The least I could do is to denounce the violent actions of my state which claimed thousands of innocent lives and to spread awareness that many Russians do not, in fact, support the invasion.

Interestingly enough, my Russian background helped me grasp some concepts more easily than would otherwise be expected from a white person in similar circumstances (to the amusement of persons on the other side of a dialogue). Be that the ancestral villages or the 'near/far' garden system, finding some surprising similarities between the two cultures allowed me to better understand life in the Northwestern Province while building rapport with the respondents.

In my fieldwork, I abstained from using the help of research assistants. There are two areas where employing them could be beneficial in research similar to mine: translation and gaining access. The translation of interviews was not required in my work as every one of the respondents spoke English fluently. While Kaonde is the most common language spoken in the Solwezi area, English is the main language of commerce, education, and intercultural communication. That is

[6] "Vladimir? So, you're Russian? Why aren't you at war?" – a respondent asked me.

further supported by street advertisements in both formal (shops) and informal (witch doctors) sectors of the economy.

Furthermore, I did not face significant challenges in getting access to respondents. For the interviews, a snowballing technique was used. The starting contacts in these chains were either found in a common domain or introduced to me by other researchers. They referred me to other people or gave them my phone number so they could reach me. Naturally, having a research assistant (or a few) would potentially expedite the process, but the funding available for my fieldwork barely covered accommodation and transportation costs, leaving me no choice.

In this research, I derive hypotheses from data collected during fieldwork and then work toward theorizing my findings. The original research design included a quantitative analysis of the nighttime light satellite imagery. The night-time light dynamic has been proven to correlate with income inequalities (Mveyange, 2015) and economic activity distribution (Bluhm et al., 2020; Keola et al., 2015). During fieldwork, this became untenable; the scale of the research object turned out to be less spatially extensive than was initially envisioned. Furthermore, nighttime light satellite imagery available for the region of the study was not suitable for a conclusive analysis on that scale.

However, observations in the field and data gathered in the interviews drew my attention to charcoal burning in Solwezi. Because of the lack of access to electricity in the rural parts of Solwezi, using charcoal for cooking is the way of life for most households (Kesselring, 2017a). Charcoal burning is usually performed by men from low-income households. The procedure consists of felling a tree, burning it in an improvised kiln, and then selling the charcoal on the markets in town or along the roads in sacks or string bags. The charcoal is not pressed. Another activity related to charcoal burning is the traditional slash-and-burn agriculture system—

chitemene. Clearing a land plot requires cutting the trees down, burning them to create ash, and then fertilizing the soil with this ash. After the nutrients in the soil deplete following a few seasons, the cycle repeats.

FQM implements some CSR policies that are aimed at preventing these agricultural activities, namely anti-burning and conservation farming campaigns. Both of them have a similar goal of dissuading farmers from using the traditional slash-and-burn system, which is why they are appropriately analyzed in tandem. There are approximately 7,000 farmers participating in the conservation farming program every year, where they also receive information on the alleged ecological harms of the traditional agriculture system. Spatially, the distribution of farmers stretches up to 130 km from Solwezi.

Another important, albeit supplementary, research method I employed was the use of open-source intelligence data. This data includes publicly available information on the Internet, such as news articles, Facebook groups, and Instagram posts. It must be noted that these sources do not substitute for peer-reviewed scholarly works that I base my thesis upon. However, in the African context, the use of this method can provide a glimpse into some underreported issues and occurrences. By examining the Instagram accounts of expat workers, for instance, I confirmed that the game reserve at Kansanshi was operational and was a starting point of inquiry into the sporting activities of the CSR department. Facebook, on the other hand, translated the manipulations FQM uses to coopt local farmers into its CSR agenda, showcased its close liaisons with traditional leaders, and brought attention to food shortages in Solwezi. Needless to say, all information derived from these sources was scrutinized to the best of my knowledge and ability.

Using supplementary research methods helped me to triangulate the data and improve the integrity of my findings. While transcribing the interviews, I would cross-reference specific claims

with the experiences of other interviewees or my field notes and observations. Next, I would manually highlight and analyze the recurring themes from the interviews that present the basis for this research.

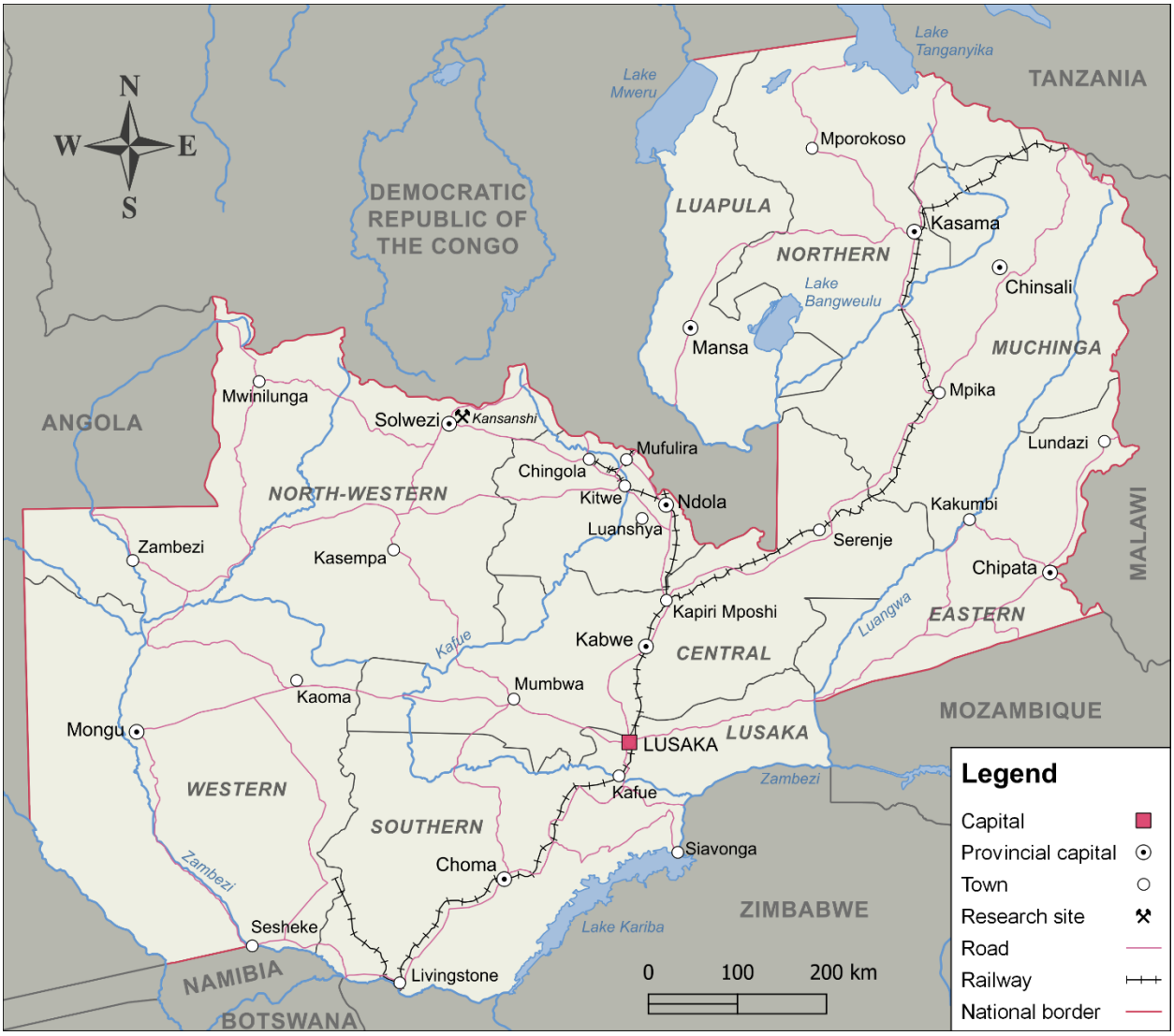
Chapter 4

Kansanshi and Solwezi: Contextual Background

Physical Geography

The Kansanshi mine is situated in Solwezi, the capital of the North-Western province of Zambia. Solwezi is located approximately 400 km (or 600 km by road) northwest of Lusaka, Zambia's capital. Sitting 250 km east of the Angola border and only 25 km south of the DRC border, it is connected to the rest of the country by T5 (Chingola–Mwinilunga) road. Intercity buses take approximately 13 hours to complete the journey from Lusaka to Solwezi via Copperbelt. Solwezi has a domestic airport with regular services to Lusaka (1 hour) and Ndola (45 mins).

Figure 1. *Map of Zambia*



Much of the North-Western province rests on the plateau with rolling hills formed on the underlying "gneisses, schists, and quartzites overlain by sandstones, shales and dolomite limestones of the Katanga system" (P. C. Johnson, 1994). Kansanshi is located on an anticline of that system. The elevation above the sea of Solwezi's urban area is approximately 1,305 m (confluence of Solwezi and Kifubwa rivers) to 1,395 m (Kansanshi mine area). Generally, the

topography of Solwezi town is uneven, with the southern direction of the hill slopes on interfluves[7] and minor river and creek valleys. The town is bounded by a large *dambo*[8] Kimasala to the west.

The predominant soils in Solwezi town and Kansanshi, due to the geology of the Central African Copperbelt, are leached red clays. Leached sandveldt is mostly present on the outskirts of the town in all directions (Soils Section, Research Branch, Department of Agriculture, Zambia., 1967). Two main streams flow through Solwezi: the Solwezi River in the east of the old town area and the Kifubwa River east of the Kansanshi road. Solwezi River flows into Kifubwa south of the main urban core near the Teachers' College, going south within the Zambezi River basin.

Similar to the most of North-Western province, Solwezi is situated in the Central Zambezian miombo woodlands ecoregion, dominated by species of *Brachystegia* (Rattray & Wild, 1961) with a presence of *Julbernardia paniculata* (Chidumayo, 2017). With 1310 mm (Mühr, 2018) of annual rainfall, miombo woodlands in Solwezi can be classified as wet savanna woodland. The coldest month in Solwezi is June with average daily temperatures of approximately 15.0 degrees Celsius, and the warmest is October at approximately 22.5 degrees Celsius (Mühr, 2018). The wet season in Solwezi runs from mid-October through early April, thus conducting fieldwork in July was most auspicious.

Human Geography

As of 2022, the North-Western province is the second least-populated province in Zambia (after Muchinga). But with 1,270,028 residents, it is the fastest-growing province in the country—

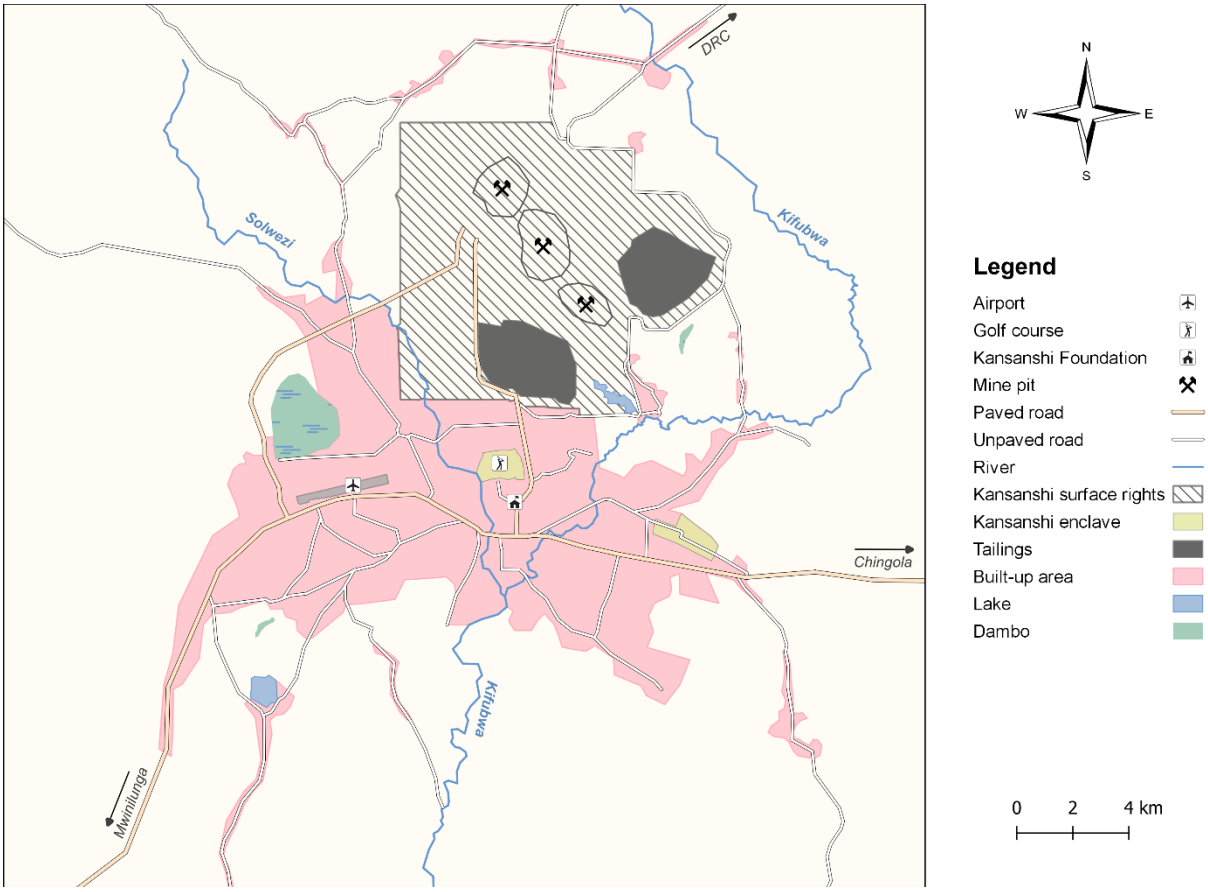
[7] An area, usually upland, between the valleys of adjacent streams.
[8] A wetland.

between 2010 and 2022 it grew by 74.7% (Zambia Statistics Agency, 2022). The share of the urban population is 41.7% (Zambia Statistics Agency, 2022). It is the third most urbanized province in Zambia after Copperbelt and Lusaka (82.7% and 81.5% respectively). The North-Western province is also the most sparsely populated in the country with 10.1 people/sq. km (Zambia Statistics Agency, 2022). The population of Solwezi district is reported as 332,623 residents, and its annual growth from 2010 to 2022 was at 8.0% (Zambia Statistics Agency, 2022). Despite their source in official census data, these numbers have to be considered carefully as the official data has been contested by researchers. For instance, anthropologist Rita Kesselring, citing the GIZ[9] baseline study, estimated Solwezi to have 266,000 residents in 2015 (Kesselring, 2021).

Solwezi region of the North-Western province is predominantly populated by the Kaonde, although there are significant numbers of Lunda and Luvale. This contrasts with the mine's workforce: many miners are Bemba and come from the Copperbelt region, while managers come from other regions of Zambia, as well as South Africa and other countries. The mine's officials claim that locals do not secure employment at Kansanshi because they do not possess the necessary skills. However, those same locals, denied jobs by Kansanshi, get them with the neighboring Barrick Gold's Lumwana mine.

[9] Deutsche Gesellschaft für Internationale Zusammenarbeit.

Figure 2. *The Greater Solwezi and the Kansanshi mine*



While technically Kansanshi lies outside of the town proper, it is adjacent to the north of the urban area. With the rapid development of the last twenty years, it became virtually impossible to tell where Solwezi ends, and neighboring villages begin. Modern Solwezi presents itself as an amalgamation of a town center and numerous surrounding localities. Together they form a non-discrete and continuous urban body. Therefore, when referring to those (former) villages that have grown together with the urban core (e.g. Mushitala), they should be understood as vernacular areas of Solwezi.

Zelinsky (1980) defines a vernacular region as a "product of spatial perception of average people." By using the term vernacular area, I am building on the works of Russian human

geographers Smirnyagin[10] and Pavlyuk[11] and follow Garnaga and Yarulin (2020) in their application of the phenomena to urban space.

Vernacular areas in the case of Solwezi can be parts of town (e.g. Mitech), former villages (e.g. Mushitala), or establishments (e.g. Teachers' College). It can be argued that even those villages that are stretched along the roads leading into/out of town (such as Mbonge and Kabwela) should be considered as a part of "Greater" Solwezi (in the same capacity as "ends") due to their immediate proximity and economic/social ties to the town.

Similar parallels can be drawn to Nkana and Kitwe in the Copperbelt (see Figure 11 in Appendix B). The Nkana locality predates the establishment of Kitwe as a town, but nowadays it is absorbed into Kitwe. The name Nkana remains on maps in the capacity of an area, or a neighborhood, of Kitwe city (which is sometimes referred to as Nkana-Kitwe[12]). Following the current urbanization trend and given the geography of Solwezi, it is unclear if the town will ever absorb the mine. However, it most definitely will spread along and around its borders, further establishing Kansanshi as a vernacular area of the town.

The Mushitala area is situated between Solwezi town and Kansanshi mine, harboring the Kansanshi Foundation (KF), Golf Estate, and Mary Begg Hospital. The KF plays the role of a *boma*[13] in a neoliberal extractivist context—it is designed as an outreach center for the greater Solwezi community where the mine operates. It features corporate social responsibility (CSR) and

[10] See Smirnyagin, L. V. (2005). Key Issues of Regionalization. *Izvestiya RAN. Seriya Geograficheskaya*, (1), 5-16.
[11] See Pavlyuk, S. G. (2009). Key Issues of the Study of Vernacular Areas. *Territorial Structure of the Economy and Society of the Foreign World*, 46-56.
[12] Or, in Russian, Kitwe-Nkana.
[13] During the British colonial rule, a local government office.

public relations offices, training facilities for farmers, a job center, and the Nsanshi Art jewelry workshop.

Golf Estate contains upper-level management housing, various sports facilities (bowling alley and swimming pool among others), a school, and, naturally, an eighteen-hole golf course. The estate presents itself as an enclave of lush greenery and infrastructural abundance, allowing First Quantum Minerals (FQM) and its upper managerial class "[to] appear as if separate from the broader social context within which they operate" (Appel, 2012). Mary Begg is a private hospital that serves primarily miners and other Kansanshi workers. Solwezi general hospital is located 3.5 km down the road. Hereby, it is argued that Mushitala acts as an infrastructural heart and a geographic center of the Kansanshi extractivism.

Kansanshi: History and Present

The Kansanshi mine in land-locked Zambia lacks a favorable location from the conventional economic geography perspective. It is situated away from the Copperbelt–Lusaka–Livingstone rail line,[14] making the transportation of production reliant on trucks. The largest buyers of FQM's products are located in China, Singapore, and India, making sea shipments essential to business. The mine's production is shipped from the ports of Dar es Salaam, Durban, and Walvis Bay—some 2,000 to 2,600 km away from the mine. While the first two are accessible by rail with an interchange in the Copperbelt, trucks still have to carry the product there by road.

The industrial history of Kansanshi begins in 1899 with the arrival of George Grey's prospecting expedition (Gann, 1964). Nonetheless, the copper was extracted by local artisanal

[14] In some publications it is referred to as the 'line-of-rail.'

miners long before the arrival of Europeans (Simon et al., 2008). The smelting began in 1906 when Grey brought a small furnace to Kansanshi, and by 1908 the first 50 tons of copper derived from the high-grade ore were transported to Broken Hill (modern-day Kabwe) (Kesselring, 2021). That has marked Kansanshi as the first commercial mine in Northern Rhodesia.

Throughout the 20th century, Kansanshi has experienced many closures—1914 to 1927, 1932 to 1951, then briefly in the late 1980s, and again in 1998 to 2005—but "[t]here was hardly any year when there was no activity at all, such as processing or exploration" (Kesselring, 2021). Most notably, the mine's operators included Anglo American from 1951 to 1957 and parastatal Zambia Consolidated Copper Mines (ZCCM) from 1982 to 1998, although the Zambian state controlled the majority of shares since independence in 1964 through the Nchanga Consolidated Copper Mines (Kesselring, 2021). As I discovered during the fieldwork in Solwezi, the memory of nationalized mines remains prevalent among the respondents. The mine was first put on the world map of copper mining in 2005 when FQM reopened it and scaled the production significantly. Since 2001, FQM has had 80% interest in the mine, while the other 20% belongs to ZCCM.

As of 2022, the Kansanshi mine is one of the largest copper-gold mines in Africa by output. It is also the largest Canadian mining asset on the continent. Since 2005, it has been operated by Kansanshi Mining PLC, a subsidiary of FQM. The mine is capable of producing 340,000 tons of copper and more than 120,000 ounces of gold per year (First Quantum Minerals, n.d.-c), and in 2021 it produced 202,159 tons of copper and 128,199 ounces of gold (First Quantum Minerals, 2023b). This is 19,000 tons of copper less than the year before, which reflects the depleting oxide ore (First Quantum Minerals, 2022a). The sulfide ore grade in the same year is reported at 0.88%,

mixed ore grade at 0.96%, and oxide ore grade at 0.72% (First Quantum Minerals, 2023b), which is to some degree higher than the global average of 0.62% (Calvo et al., 2016).

Kansanshi is a mine with two open pits (Main and Northwest) and a smelter on site, the latter added in 2015. In 2022, the work on S3 Expansion began, which involves creating a new pit within the enclosed mining area. The pit will be located between the two tailings dams, at the southeast of the mine. The tailings dam is located between the S3 Expansion and the town, but the new pit will be seen from the Congo Road. The first production is expected in 2025, and its volume is estimated at 250,000 tons per year (First Quantum Minerals, 2022a). With the addition of a new pit, FQM estimates the remaining life of the mine with the current throughput at 23 years (First Quantum Minerals, 2022d), pushing it to 2045.

Kansanshi: Ecological and Social Criticism

The smelter at Kansanshi also services another FQM copper mine in the province, Sentinel (colloquially known as Kalumbila). The main products of Kansanshi mine are copper in the forms of LME grade 'A' equivalent cathode, copper concentrate, copper anode (since 2015), gold doré, gold in copper concentrate, and gold in anode (First Quantum Minerals, 2015). The by-product of the copper production cycle is sulfuric acid. A truck carrying said acid overturned in 2017 ("Kansanshi Mines Truck Accident Pollutes Kifubwa River," 2017), and the contents have leeched into the Kifubwa River, resulting in water contamination and loss of fish stock. Although the accident was declared contained (Mapapayi, 2017), it has further contributed to local skepticism of Kansanshi's commitment to environmental integrity.

The locals blame the mine for water pollution and dust which is carried with the wind from tailings.[15] FQM denies all allegations, backing their position up by the testing conducted at their own site. The company attributes acidic pH levels and iron content in water to geological conditions and the dust—to unpaved roads in town. Solely relying on pH levels and iron content in water can be unreliable in determining if contamination from the mine is taking place as red clay soils in Kansanshi are high in iron. The research has shown evidence of ground and surface water near the mine being acidic (Karen et al., 2015; Southern Africa Resource Watch, 2020), which is contested by other work (Namwanja et al., 2018). However, there is no evidence of the heavy metals level elevation in groundwater near the mine (Karen et al., 2015) or in the sediments of the Solwezi and Kifubwa Rivers (Hasimuna et al., 2021).

There is, however, evidence of air pollution in FQM's annual information form from 2022. While claiming that overall emissions of the mine are compliant with Zambian standards, the point source emissions from smelter stacks exceed the norm and there are works on a flue-gas desulfurization (FGD) project (First Quantum Minerals, 2023a).[16] FGD is used to capture sulfur dioxide (SO_2) emissions. Thus, the claim that "[t]he smelter efficiently traps 100% of sulphur dioxide by-product and converts it into sulphuric acid" (First Quantum Minerals, n.d.-c) on FQM's website is inaccurate. Moreover, the wording around Kansanshi's 'zero discharge' policy is also misleading, as it only applies to the effluent, but insinuated no gas emissions as well. The very same narrative of Kansanshi's 'zero discharge' was employed by a senior official at the CSR department in an interview.

[15] From interviews. Solwezi, July 2022.
[16] Though same wording was used in the 2020 report (First Quantum Minerals, 2021a).

As evident from FQM's documentation, the smelter at Kansanshi in fact emits gases that exceed the Zambian air pollution threshold. Thus, instead of 'zero discharge' the mine operates by the permission-to-pollute system, where a certain quota of discharge into the environment is legally allowed. The threshold theory of pollution is contested as it does not account for cumulative pollution in a given area. Furthermore, any pollution is viewed by some Indigenous scholars as a manifestation of colonialism (see Liboiron, 2021). Nonetheless, the abdication of responsibility for air pollution cannot be a characteristic of an environmentally and socially conscious enterprise.

In 2020, an unnamed mine contractor was fined 97,000 Kwacha [$4,590 USD] for a violation related to "hazardous waste management and housekeeping" (First Quantum Minerals, 2021a). Contractors present a large proportion of all the workers at the mine, which can be quite convenient for Kansanshi as these workers are not members of the Mineworkers Union of Zambia. The mine uses the contractor companies as a proxy between themselves and contract workers, who "must bargain separately with their immediate employer" (Negi, 2011).

FQM's relations with its workers can be tense at times. For example, in 2018, it threatened to fire 2,500 of its workers in Zambia (and an unspecified number of contractors) over a taxation dispute with the government ("First Quantum Minerals Plans 2,500 Layoffs in Zambia over Tax Hikes," 2018). Being treated as pawns in power play with the state aside, unionized workers enjoy competitive salaries and benefits.[17] Contract workers, on the other hand, are in a much more volatile position as their contracts can be ended arbitrarily and most, if not all, do not have any severance package provided to them. An unforeseen contract termination can put these workers

[17] According to Kansanshi workers I interviewed in Solwezi, July 2022.

(primarily from the Copperbelt) in a precarious position, seeking employment in ever-growing service industries in Solwezi.

Despite its perceived remoteness, the semi-desolate location of the mine has not stunted its development. Nevertheless, the extensive use of diesel-operated trucks required to bring copper concentrate to the smelter from Sentinel or transport the finished product contributes to the CO_2 emissions. FQM's greenhouse gas emissions in 2020 were 4.26 Megatons of CO_2, and the Kansanshi oxide leach circuit accounted for 12% of all emissions (First Quantum Minerals, 2022a). That is as much as almost 114,000 cars or one natural gas-fired power plant emit a year (United States Environmental Protection Agency, 2023). However, the company does not elaborate on whether these numbers include the transportation of their products to the port.

Although closely intertwined with the Kansanshi mine, Solwezi town has its own history, and it would be incorrect to attribute its growth solely to the mining boom (Kesselring, 2021). The role of the mine in the local economic development is contested, and while researchers have argued that backward linkages have not been created (Caramento, 2020), the firm claims Kansanshi employs over 13,000 workers (First Quantum Minerals, n.d.-c), many of whom do not come from Solwezi or surrounding areas. According to some employees, workers at the mine have a "good income,"[18] and employment at the mine is very sought after. Moreover, the company provides workers with a housing allowance of around 40% of their basic pay.[19]

Since the workers are not provided with housing, their options are to lease a house in the FQM-built Kabitaka estate (Kesselring, 2017b) or rent in town. Further research is needed on the

[18] From interviews, stating that a junior engineer makes approx. 10,000 Kwacha ($574 USD) per month. Solwezi, July 2022.
[19] From same interviews. Solwezi, July 2022.

role that miners play in the development of services in Solwezi, but their impact on the local economy cannot be negligible. It would appear clear, however, Solwezi will not be deserted once mining ceases—Zambia, like many countries in Sub-Saharan Africa, is undergoing a demographic change—the population of the country will double by 2050 (DESA, Population Division, 2022).

On First Quantum Minerals

First Quantum Minerals Ltd. (FQM) is a Canadian mining company with headquarters in Toronto, ON (*First Quantum Minerals Ltd Profile*, n.d.). It was formed in 1996 in British Columbia, and in the same year acquired its first major asset—the Bwana Mkubwa mine in Ndola (First Quantum Minerals, n.d.-a), Copperbelt province of Zambia. FQM is listed on the Toronto Stock Exchange and Lusaka Stock Exchange. Until 2016, it was also listed on the London Stock Exchange.

Apart from the Kansanshi mine, as of 2023, FQM's assets in the North-Western province of Zambia include the Sentinel copper mine and Enterprise nickel mine (the latter due to begin operations in 2023). Other assets include the Çayeli mine in Türkiye, the Cobre Las Cruces mine in Spain, the Cobre Panama mine in Panama, the Guelb Mohgrein mine in Mauritania, the Pyhäsalmi mine in Finland and the Ravensthorpe mine in Australia. There are also two greenfield projects under development: Haquira in Peru and Taca Taca in Argentina. In 2021, FQM's net earnings after tax were $1.089 billion USD (First Quantum Minerals, 2021b).

In May 2022, Tristan Pascall was appointed as CEO of the firm (First Quantum Minerals, 2022c), replacing his father, Philip Pascall, in this position (McGee, 2021). Although the company claimed to have conducted a thorough search for the role, such a transition raises questions on the

corporate level. On the local level, however, it is no different. Unclear hiring practices and the problem of nepotism at Kansanshi have surfaced in many interviews conducted in Solwezi, and such an appointment might further corroborate the lack of commitment from FQM to addressing these issues.

FQM is one of the largest taxpayers in Zambia. In 2021, it paid $754,217,284 in taxes, royalties, and fees, out of which Kansanshi has contributed 54% (First Quantum Minerals, 2022b). A new amendment to the calculation passed by Zambian authorities will decrease the mineral royalty tax and make them deductible from income tax starting in 2023 (Mitimingi & Hill, 2021).

Chapter 5

Maize and Circuses: Problematizing Corporate Social Responsibility at the Kansanshi Mine

Introduction

In this chapter, I outline the modalities of corporate social responsibility (CSR) at the Kansanshi mine and the decision-making processes behind its implementation. I also analyze the issues it tries to solve while being mindful of the corporate agenda and paying attention to the expectations of the community. As the chapter's title suggests, the main aims of Kansanshi's CSR are fundamentally divertive; instead of mitigating the consequences of its operations, CSR seeks to cultivate the approval of its presence in the community by attempting to commercialize small-scale maize farming and entertain the population. However, the members of the community do not necessarily benefit from these projects.

First, I position my findings in the bodies of literature on corporate imperialism, political ecology, and critical CSR studies. Next, I outline the main concepts of Kansanshi's CSR strategy by pointing out the perceived allure of CSR-related development, while describing the processes of its implementation and the role of extractivist enclaves as decision-making centers. Following that, I construct a typology of Kansanshi's CSR projects, dividing them into 4 categories. Then, I analyze a correlation between CSR spending and global copper prices. I finish the chapter by touching upon the embedded problems of CSR as a corporate deliverable and the developmental delusion it entails.

Conceptual Framework

The deliberate policy of expatriate staffing in technical and managerial posts at Kansanshi is an example of corporate imperialism (Girvan, 1976) exercised by First Quantum Minerals (FQM). In Solwezi, it creates contested spaces of exclusion, which "are not a given, but emerge through socio-material practices" (Kesselring, 2017b). In my work, I suggest that Kansanshi's attempts at disentanglement from the host community (Kesselring, 2018) derive from a class division as, in a post-independence Zambian context, class is a more determining aspect of discord than race (Burawoy, 1972) or tribe (Chaput, 1968, p.16).

Drawing on Appel's (2012) corporate abdication of responsibility and infrastructural violence, I examine the juxtaposition of infrastructurally deprived locale and the extractivist enclaves that create "growth without development" (Girvan, 1976) in modern-day Solwezi. To Appel (2012), infrastructural violence entails the exclusion and disconnection of the oil enclaves from their surroundings, which is heightened by the corporate abdication of responsibility for these actions through the process of disentanglement. The results of enclavement are both material and intangible: they manifest in unequal access to the built infrastructure and, for instance, electricity (Kesselring, 2017a).

For Girvan (1976), the lack of backward and forward linkages in the extractive industries in the periphery is emblematic of corporate imperialism. Following the privatization of the copper mines, local content policies in Zambia failed to promote cultivating backward linkages (Caramento, 2020). At Kansanshi, despite the formal efforts to collaborate with Solwezi's chamber of commerce, local businessmen find the allocation of contracts and tenders not

transparent at best. Furthermore, the creation of forward linkages is associated with the interests of the extractive company. FQM owns and operates the copper smelter at Kansanshi, which allows it to harness profits for products with a higher value added.

FQM's discourse of its positive influence on the local economy by the sheer presence and 'creating a market' is imperialist in essence, because it leaves out the locals from higher value-added businesses and directs them towards the sectors with a lesser value added— food, consumer goods, and domestic help employment. As such, these enclaves are "disconnected from local economies" (A. Hilson et al., 2019) and selectively engage with them solely in an extractivist capacity.

The enclave framework is a result of deliberate efforts in disentangling itself from the community where FQM operates. In terms of CSR policy, it creates the inability to capture local development ideas and heed the needs of the community, while preventing "innovative grassroots-oriented CSR programs from emerging in these settings" (A. Hilson et al., 2019). The community welcomed mining in hopes of benefiting from it, directly or indirectly, which would further social justice, equity, and a sense of belonging in the greater development. However, infrastructural violence enacted by the company prevents that.

A 'Win-Win' Strategy?

FQM exercises its CSR policy in the northwest through two of its assets: Kansanshi and Trident.[20] Most of the smaller in scope CSR activities are incepted in separate CSR decision-making centers and implemented separately, although there are some projects where Kansanshi

[20] FQM's Trident project includes proximately located Sentinel, Enterprise, and Intrepid mining licenses.

and Trident cooperate. One example is the Jimuka initiative, which provides teenage girls at schools with entrepreneurship skills sessions, mentoring, and sexual reproductive health education. The program's name comes from a Kaonde phrase meaning 'stay sharp' or 'be informed' and, when given certain liberties, can be translated as 'stay in school.' That program was initiated by FQM back in 2018,[21] and the Young Women's Christian Association (YWCA) is responsible for its operation.

Both YWCA and FQM view their cooperation as fruitful, but the credit FQM claims must be brought into question. The mine contributes to the One stop GBV[22] center in Solwezi and provides a transit home for the victims of GBV in town; the operation of that home is funded by the Kansanshi-based Nsanshi Arts studio, which employs women who experienced GBV and provides them with training and employment in jewelry-making. However, the daily operations of the YWCA and the salaries of its staff are funded by a grant from the UNFPA.[23] Thus, claims from FQM staff that "where we [FQM] don't reach, they [YWCA] do"[24] regarding the expansion of its CSR practices across the Northwestern province are unfounded; the FQM-sponsored activities are limited to the immediate locale surrounding Kansanshi, and other YWCA operations in the province have little to nothing to do with FQM. While not suggesting that FQM piggybacks on YWCA's success, I believe the role of FQM is certainly exaggerated.

The rehabilitation of the T5 road which connects Solwezi to the rest of Zambia is often presented as a CSR effort on FQM's behalf ("Zambia May Be Taxing the Mines to Death, Says Outgoing First Quantum Minerals Chairman Matt Pascal," 2019). In reality, although FQM has

[21] Although Margaret O'Callaghan, an Australian working with UNHCR at the time, is credited with the idea.
[22] Genger-based violence.
[23] The United Nations Population Fund.
[24] From an interview with KF staff. Solwezi, July 2022.

contributed to the cause ("First Quantum Minerals Budgets $50 Million for Chingola-Solwezi Roadworks," 2016), it was not the sole actor in the project and the government has partially financed it ("Chief Chibwika Praises Govt. over Chingola-Solwezi Road," 2016).

Immediately, these inconsistencies suggest some embellishments to the story. Moreover, the road is necessary to transport FQM's products from their smelter at Kansanshi to the ports, which raises questions about the CSR nature of the infrastructure development in Solwezi. This is further supported by the FQM-funded Solwezi airport refurbishment. The supposed beneficiary of this CSR effort is the community of Greater Solwezi, although the cheapest flight to Lusaka costs approximately 2,200 Kwacha ($126 USD), which is 6 times the price of a regular bus ticket to the same destination. Naturally, not everyone can afford to splurge on what is essentially half of the monthly rent.[25]

These instances indicate one of the defining components of Kansanshi's practices: a shimmering definition of what is considered *its* CSR agenda. By expanding what it considers CSR and including the achievements of non-governmental organizations (NGOs) that FQM works with (such as YWCA), FQM dilutes the role of other agents in the development processes in the province, while subtly but surely exaggerating its impact. However, this strategy only applies when the accomplishments are discussed.

Simultaneously, when criticized, FQM distances itself from the expectations of the community in a post-ZCCM[26] Zambia. It defines its role in local development as secondary, stating that it never intended to substitute the government.[27] Rather, FQM sees itself working

[25] Estimate for a 2-bedroom house based on Facebook advertisements and field observations in Solwezi, July 2022.
[26] Zambia Consolidated Copper Mines.
[27] From interviews with the KF officials. Solwezi, July 2022.

alongside the Zambian government and other development actors in the region. This narrative manifests in two main arguments employed by FQM when addressing criticism of their CSR.

First, FQM states that it contributes to development indirectly by being the largest taxpayer in Zambia (Langmead & Baker Communications, 2022a). Thus, any dissatisfaction with social and economic development must be attributed to the idleness of the state or its policy of tax revenue redistribution. Second, FQM brings into question the expectations of the community, which are perceived to be informed by the ZCCM past. By portraying the times of nationalized mines as extravagant and fiscally irresponsible, FQM paints those expectations as unrealistic and unfeasible. That, in turn, devalues the community feedback, and puts FQM in the position where it has to separate the alleged 'wants' from the 'needs.'

In essence, in the context of its CSR accomplishments, FQM aims to claim as much credit for its work as possible, even when that implies downplaying the role of NGOs and other actors with which it collaborates. At the same time, FQM projects its own shortcomings onto the state and community when its CSR policy is brought into question. Either way, it is a 'win-win' for FQM.

The Mine Knows Best

The CSR agenda of Kansanshi is conceived at the FQM-owned Kansanshi Foundation (KF). The KF is the primary decision-making center in this realm as they operate the CSR budget. In the interviews, the senior staff at KF asserts that their decisions are undertaken after extensive monthly stakeholder engagement meetings. The broader community of Solwezi at these meetings is represented by the Extractive Industries Transparency Alliance (a group of 32

NGOs), development committees of local authorities, and rotating local experts which depend on the key performance indicator and development agenda the company is focusing on at that time. However, the questions of the representativity of these stakeholders and the inclusivity of all community members remain.

The broader public is invited to other meetings that focus either on particular projects or the various locales of the Greater Solwezi. During the interviews and talking to people in the field, many residents viewed these meetings as ingenuine, and their main concern was that they are not being heard by the mine. Indeed, little is known about the projects that get conceived in these meetings—they are predominantly used to assess the attitudes, not to hear out the ideas. Moreover, the gender make-up of these meetings is predominantly male as women either choose to delegate attendance to a man in their household or they are not in a position where they can decide to attend a meeting in the first place. That skews the representation and suppresses the problems that might be relevant to them. The issue is recognized by FQM but there seems to be no contingency plan to address that.

To get their ideas heard, local NGOs that are not represented by the Extractive Industries Transparency Alliance resort to pitching directly to the KF. That in itself presents several challenges, from getting access to being taken seriously. One NGO representative shared in an interview that visiting the KF with a mutual White acquaintance immediately opened all the doors for them. However, when they returned without that acquaintance, they were dismissed and dissuaded from returning.

The ideas brought up by the NGOs that do not receive Kansanshi funding, if they ever manage to get through to the decision-makers at the KF, are always met with lots of red tape. Even if the idea is presented in the form of a conducted study, it proceeds to be questioned and

critiqued by a department of the KF that works on a respective issue. In many cases, the heads of these departments do not come from Solwezi or even the Northwestern province. As understood from the interviews, some of the KF department heads' critique of the grassroots projects is informed by their personal experience with the issue, which occurred in a different place. The NGO representatives from Solwezi often find themselves frustrated when the viability of their proposed project is assessed by criteria that are not relevant to the local situation.

This is not representative of the quality of these ideas and should be rather viewed as a deliberate strategy of unapproachability employed by the KF. The system is designed to dissuade the community from presenting their own projects because KF has already set development targets. A notable exception is the YWCA, which approached Kansanshi and began a collaboration with the mine. The only difference of this endeavor from many others is that, at the time, Kansanshi did not have a CSR policy related to gender issues. When other NGOs presented their ideas in spheres where Kansanshi has an established CSR policy, such as agriculture or education, they were not as welcome. For the most part, Kansanshi is ready to cooperate with local NGOs only to implement its own vision of CSR-driven development.

The company's position rests on the understanding that ideas generated at the KF are often the only possible solution to existing problems faced by the community. As such, the company has distanced itself from the development of much-needed infrastructure, identifying a knowledge gap among the local population as the primary developmental issue in Solwezi. Hence, this is what FQM sees itself bringing to the table, and local knowledge that contradicts such an inclination is deemed unsound. That propels the KF to implement projects that do not complement the existing practices but rather try to alter or exterminate them. Therefore, the decision-making process at KF can be characterized by a paternalizing belief in the superiority of

its expert knowledge over anything conceived locally, deliberate unwillingness to implement grassroots initiatives that do not align with the company's vision of development, and a crusade on the established practices that go against this vision.

Extractivist Enclaves as Decision-Making Centers

Extraction in Solwezi and at Kansanshi is marked with clear boundaries. The mine is fenced off for security reasons; the corporate housing and amenities are separated from the town on similar grounds. However, I suggest that these spaces of exclusion resemble enclaves at the core of which lies a class division. Moreover, there is also a division within the mining circles: the higher management lives on the Golf Estate, while the middle class enjoys Kabitaka (if they choose to lease there).

The CSR is designed within these enclaves (KF in particular), and the decisions on funds disbursement are made there as well. Within these enclaves, according to FQM's actions, the 'right' kind of knowledge is produced. It differs from the local knowledge, which is deemed outdated at best and extortionist at worst. The epistemological basis of that model rests in what Mbembe (2001) calls a *negative interpretation*—the colonial understanding of Africa as devoid of something and characterizing its attributes as being "of lesser value, little importance, and poor quality" (p. 1), instead of describing it through the language of presence.

Viewing locals through a condescending lens, the company strives to teach them that 'right' way of living, which is not limited to specific technical knowledge but is rooted much more broadly: "We want members of the community to learn to take responsibility for what

they're receiving."[28] FQM positions itself not only as a separate entity with the only correct view on the issues but also above the community as the supreme disseminator of goods.

In creating a façade of good developmental intentions, FQM seeks a social license to operate by disregarding local needs and imposing policies that it sees as beneficial. The reproduction of this model is embedded in the enclave framework, us *vs* them contradistinction. One of the main themes that arose during the interviews is that the decision-makers at KF are not open to any ideas that the community has to offer.

Furthermore, by painting locals as careless environmental stewards, FQM shifts the discourse away from the negative externalities of their mining operations. Any pollution claims are rejected by the mine, and their in-house environmental testing supports that. Thus, the cause of any environmental problems lies in local everyday practices.

Progressing from one employment class to another (e.g., from laborer to technical specialist and/or manager) is difficult – employment at the mine is reserved for out-of-town laborers, and the same is true for managerial positions. The contracts are not being given to local businesses, so the majority of residents see little benefit from the spillover effect the mine has on the local economy. That way the system of exclusion perpetuates itself. The members of the community find themselves at an impasse where they do not capitalize on any mining development happening in their backyard yet face the full force of the negative externalities that extraction brings. I argue that FQM's CSR policy is aimed to address these tensions by means of virtually showing locals their place (away on a small-scale farm) and what they should do (grow maize).

[28] From an interview with KF official. Solwezi, July 2022.

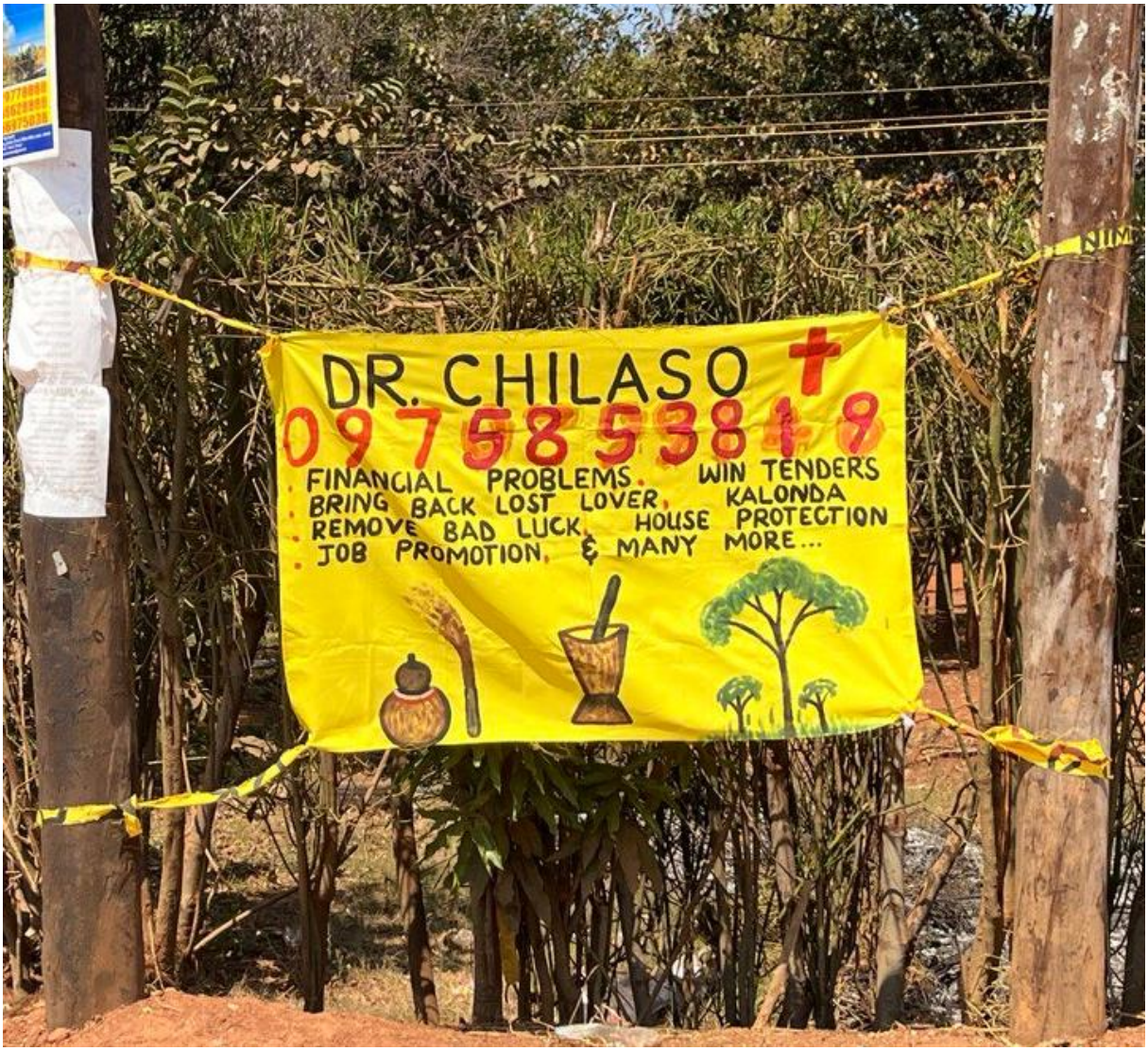
To add an insult to injury, FQM employs a strategy of faux inclusion, stating that locals are welcome to apply for employment and/or enjoy the facilities the company provides. In reality, there is a certain glass ceiling (or a gate) in relation to that: the positions require expertise and skills that locals have no way of obtaining without leaving the province, and mingling with the higher class comes at a hefty price of 1,000 Kwacha ($57 USD) per month + facility charges. Though even if you were to afford that, only knowing someone on the inside grants you access—an attribute of a higher social class. The problem is recognized, and senior officials at Kansanshi say that it excludes 99% of the community, yet nothing has been done to overturn FQM's status quo.

The support system for miners in most aspects (excluding some housing) is created by the company. Healthcare, education for their children and even transporting workers – all is managed in-house via company-run or otherwise affiliated facilities. That limits the ability to integrate Kansanshi and its workers into the local economy, which in turn limits the possibility for local businesses to capitalize on their presence.

Regardless, the mine's position is best summarized by a member of the KF: "So, we've created a market for them [locals], but it's up to them to tap in and learn how to do business…" Considering how locals are left out in the tenders, this is simply cruel. What is left for them to 'tap into' is food, consumer goods, and domestic employment—sectors with lesser added value and, in the latter case, proletarian. Ironically, almost a hundred years ago, similar sentiments were expressed in relation to industrial mining: "The natives of this District [Kasempa] do not appear to appreciate the very excellent opportunities offered them to trade the produce of their gardens" (NAZ, KDD 7/1: Kasempa Province Annual Reports, December 1929 in Chabatama, 1999). More interestingly, until 1924, the Kansanshi mine imported the food into the region and

did not buy it from local farmers unless they agreed to pay the hut tax, so the farmers simply adapted to the limited corporate demand (Chabatama, 1999).

Figure 3. *An advertisement for witch-doctor services in Solwezi*



Note. Dr. Chilaso promises to help with winning tenders.

The enclaves of extraction in Solwezi are not limited to luxury amenities, they are most importantly (supposed to be) public spaces, which the town catastrophically lacks. Enjoying a swimming pool at the Golf Estate is a pleasant bonus, but the main idea behind accessing the

facilities is social justice, equity, and a sense of belonging in the greater development.[29] The community has welcomed the mining development, seeking to benefit from it directly or indirectly through infrastructure improvement, but has not received much from it.

Traditionally, for Kaonde "village life takes place primarily around the open meeting hut ('kinsanza'), in the centre of the village" (Jaeger, 1981). A town, especially the size of Solwezi, is undeniably different from a village, but the value of this account lies in establishing the significance of public spaces. In Solwezi, in lieu of kinsanza, people gather around the places of commerce (markets and malls), as well as in some lodges. In the case of the latter, unlike the corporate enclaves, locals generally can access those premises without any harassment even if they do not pay for any services.

The facilities available to those in the enclave are not found elsewhere in Solwezi, and local children, who would like as little as to simply see the wild animals that are kept at Kansanshi, do not have an alternative site to view such things. For better or for worse, there is an accurate understating among locals about what is actually present 'there,' and many want nothing more than to take a peek at the life of the wealthier percentile.[30] As of now, they remain excluded, behind the physical and metaphorical fence of the extraction industrial complex.

[29] The mine's position is that anyone can use the facilities, provided they pay 1,000 Kwacha ($57 USD) per month plus the facility fees (separate for a swimming pool, gym, tennis court, etc.). In practice, one would still need to know someone working for the mine to get inside. However, those privileged few who can afford it, virtually always would know someone at the mine.

[30] From interviews and conversations in Solwezi, July 2022.

Typology of Kansanshi's Social Projects

To better understand the modality and assess trends of CSR at Kansanshi, a comparison of individual projects is necessary. In my work, I identify 4 types of CSR activities undertaken by FQM in Greater Solwezi. They are presented in the following table:

Table 1. *Typology of CSR projects at the Kansanshi mine*

Type of CSR projects	Examples	Components
Upkeep	Hostel for the nurse college, books for schools, latrine for a school, teachers' training, repairing bicycles, renovated clinics in town, T5 road upgrade.	Complements an existing institution/structure, aims to keep current ways, often material (ribbon-cutting opportunity).
Behavior change	Conservation farming, anti-burn campaign, One stop GBV centre, Jimuka, village banking, entrepreneurship training over the radio.	Long-term intent, local knowledge is often viewed as inferior, aims to change current ways, often intangible.
Charity	Lunches for orphans, scholarships for disadvantaged students.	No significant effect on the community, targets vulnerable recipients, virtue signaling.
(Expat) entertainment	Cycling and other sports, village movie nights, Pascal chapel and theatre, wildlife conservation.	Action for the sake of action, aimed at the expats/upper class, disguised as CSR.

The first type, titled *upkeep*, is the most predominant. Projects of this type aim to sustain the status quo. They do not strive to eradicate any specific issue, rather they provide an existing institution or entity with some support. The support in question can be minor and ephemeral, such as a one-day-long bicycle tune-up campaign, or even become materialized in a modest construction—a latrine or a hostel, for instance. The construction is favored by both the community and the mine. It gives much-needed infrastructure to the former and a ribbon-cutting opportunity to the latter.

Moreover, the approach behind this is extremely targeted—only some facilities get the maintenance they so much need—which speaks to the cost-effective nature of CSR. The allocation of the funds is not tied to a specific locale and is subject to the current theme of CSR is exercised that month (e.g., water access, healthcare). Overall, the implementation of these projects is informed by the aforementioned FQM's position of distancing itself from being perceived as an actor of change. In part, it aims to sustain the current social supports, which, in the case of education or public health, is formed by national institutions.

The second type, *behavior change*, in my opinion, deserves the most attention. It aims to suppress or even eradicate certain aspects of life in the community, while promoting another vision of development and, consequently, futurity. Though it is often intangible as it transmits through radio waves or presentation slides, I believe, it has the most significant impact on the community of all the types of CSR projects.

The main areas that the behavior-changing CSR projects target relate to sustainability, literacy (including financial literacy), and gender-related issues. These areas were identified by the KF as the ones where the community requires assistance from an outsider. A notable exception would be the One stop GBV center and the Jimuka program—the projects are the

result of the YWCA and Kansanshi cooperation. Originally, the YWCA approached Kansanshi about tackling GBV perpetrated by its workers, and later it was responsible for the implementation of other gender-specific projects.

In the case of sustainability and literacy, the projects were conceived within the Kansanshi enclave by its staff in agriculture and education. During the COVID-19 pandemic in Zambia, schools were closed, and students resorted to distance learning. FQM facilitated the process by enabling the School on Radio Programme to use the Solwezi FCC Radio for grades 1-5 lessons and Radio Kabangabanga for grades 6-7 lessons. After the in-person classes resumed, the same concept was used to launch the entrepreneurship training project. The idea behind the project is that people would listen to the podcast at their place of labor, eliminating the need to leave work for training.

While the business radio program aims to equip residents of Solwezi with entrepreneurship skills, the village banking project is supposed to provide aspiring businesspersons with the capital to support their venture and scale up production. The sustainability projects, namely conservation farming and anti-burn campaign, aim at transforming subsistence farmers into small and medium-scale commercial farmers. The focus on agriculture is not random, as it is the main occupation for the half of Zambian population (International Labour Organization, 2021), and Solwezi is no exception.

All these behavior-changing projects form an agricultural commodification machine—a solution identified by FQM for local developmental problems. From Kansanshi's position, "agriculture is supposed to be viewed as a business" (Langmead & Baker Communications, 2022c), and CSR policy is how it is being communicated to locals. The anti-burn campaign should educate people on the alleged harms of traditional agricultural practices, the conservation

farming project—to provide them with the 'right' kind of knowledge of growing crops, the village banking—to allocate required capital during sowing season(s) and the radio business program—to teach the aspiring commercial farmers skills needed to sell their produce.

The goal of this machine is to change the traditional way of life in Solwezi using outsider expert knowledge. However, the process did not go as smoothly as anticipated. The "teach a man how to fish" approach results in a man being fed, in many cases, for as long as the fertilizer subsidies last—the price is just out of reach for many households. The village banking system was the first to collapse as its design did not meet the needs of the community. The business skills program is as intangible as the radio waves which broadcast it. Its efficacy cannot be clearly assessed as its objectives are quite vague and ambiguous. Nonetheless, these two projects played only a supporting role in the agricultural commodification process.

In this work, I emphasize the sustainability projects as the most detrimental because of their geographic scope and the underlying objective of creating social change. Moreover, I suggest that through these behavior-changing CSR projects, FQM shields itself from external demands while continuing to create economic development only within the extractivist enclave. This will be further discussed in the following chapter.

Although some significant characteristics differentiate them, the third and fourth types have a lot in common. Most importantly, both do not fall under an orthodox definition of CSR and have little to no impact on the general community. In the case of the *charity* type, the virtue-signaling nature of these projects is visible to the naked eye. This type targets vulnerable groups,

such as orphans, and, essentially in exchange for school lunches, puts them in quarterly brochures to showcase an ESG[31] success story of a humble corporation.

The same is true for scholarships granted to attend Kansanshi-operated private schools, such as Trident College. After undergoing an arbitrary selection process, local kids are put there to create an aura of inclusion. Essentially, they are being tokenized: an extremely limited number of scholarships[32] and the language of ESG reports and press releases attest to that. The extraction transcends mineral deposits; now it is the members of the community who are being extracted for profit. Instead of mitigating the impact of its operations, the company elects to chase a story that parades its presence in Solwezi.

The *(expat) entertainment* type further develops that thesis but unlike the previous type, it makes very little effort to be taken seriously as a CSR action. As the name suggests, this type of CSR project aims to entertain the public, most importantly the residents of the extractivist enclave. Among others, all CSR in the sports realm fall within this category. The dubious intent of the company in sports promotion within the community is evident through the funding allocation. Once a team or a club starts to perform in a manner that is unsatisfactory for the company, as a senior KF official disclosed in an interview, the funding ceases.[33]

Based on my observation and analysis, there is a number of motives for this strategy. First, all sponsored teams bear the Kansanshi logo on them, and associating itself with a team that is perceived to perform poorly might be considered disadvantageous to the company image. Second, it can get tough watching the team you sponsor (thus, your team) consistently

[31] Environmental, social, and corporate governance.
[32] 88 in almost a decade of operation of the Trident College.
[33] For instance, from the same interview, this is the case with rugby and basketball teams. Solwezi, July 2022.

underperform, especially when you subscribed to this project not for the love of a given sport, but in an alleged attempt to gain a social license to operate. Eventually, the decision-makers are no longer amused and rapidly switch to a new enterprise. A deliberate policy of not providing necessary infrastructure[34] allows a smooth transition into a new field.

As of 2023, one of the FQM's most prominent CSR projects in the sports sphere is the Kansanshi cycling team. As it appears, the project's ingenuity comes from the fact that cycling requires no permanent infrastructure. Should anything not go as desired, the bicycles could be redistributed, and the KF sports workers could be allocated elsewhere—the net losses would be relatively minimal. Once again, such an approach to CSR signals the lack of any long-term commitment to the community where the mine operates. Furthermore, the company again puts itself in the position of gatekeeper, which identifies what should be done and in what manner because locals cannot have an agency to determine what CSR projects get implemented. It was implied in an interview with a KF official that local children might have ulterior motives regarding cycling, which is why running for 6 months before they can lay their hands on a bicycle is a prerequisite to being on the cycling team.

One of the main shortcomings of CSR projects of this type is that only a few people involved in them benefit directly. At best, the rest of the community gets some entertainment out of it. Budgetary concerns are understandable and often brought up in long-term CSR projects. However, FQM has found several million dollars to construct the Philip Pascall Chapel and Theatre (PPCT)[35] and hand it over to one of the "Kansanshi-supported" schools (Langmead & Baker Communications, 2022b). The school in question, Trident College, is a private institution

[34] Except, in the case of sports-related CSR, the refurbishment of the Solwezi stadium was completed.
[35] Named after Philip Pascal, FQM's Chairman.

located within the premises of the mine, which serves the families of expat workers as well as a few locals children that manage to get scholarships.

The wildlife reserve at the mine, which is closed to the public and can only be accessed on a mine tour, is also presented as a social contribution to the community aimed to create a point of interest for potential tourists once the mining operations cease (O'Callaghan, 2019). Regarding the financial matters related to the game reserve, O'Callaghan (2019) provides the following:

> "The Zambia Daily Mail (2012) quoted a company spokesperson as saying that it '… has invested over $1m in the creation of a nature reserve…' and that supplementary feeding of the animals cost US$60,000 per annum and annual maintenance $50,000 per annum. In 2014 the same source said that the nature reserve budget was reported to cost 0.5% of total annual social expenditure (although one could well argue that such a project was not CSR)."

Indeed, the social expenditure occurring in the present is justified as an investment in a post-extraction future, while in reality, it funds a safari experience for its staff. The narrative of 'hand me downs' is insulting in its own right. The company abdicates responsibility for the Solwezi at present-day, claiming that the community will receive the infrastructure but only after FQM leaves the town. The infrastructure in question (PPCT and a game reserve), however, is arguably the last thing Solwezi needs. Even the provision of some critical infrastructure that the community needs may serve as an immediate benefit to the company exclusive of its CSR agenda. Negi (2011) describes such example:

> "For instance, boreholes have been dug ostensibly to provide water to villages around the mine. But an official in the local water supply agency reckoned that these have been strategically placed to monitor groundwater levels at the mine, which has a long history of flooding."

This stunt shows that, in the present, FQM might be accountable to the interests of the company and its workers, but not the community. That indubitably contradicts the carefully curated media image of responsibility cultivated around the mine.

The third and fourth types of CSR projects at Kansanshi exhibit a conflicting nature of FQM's policies. Most of the community sees little to no benefit for themselves, which could present a problem should the company look for a social license to operate. Nevertheless, these projects are not burdened with seeking approval locally as their target audience and end goals are different. To an investor, these projects are a sign of FQM's multifaceted ESG policy and the enterprise's social consciousness. To an expat in Solwezi, they give a sense of accomplishment in the first case and some leisure in the latter. For the broader community, however, they bear almost no significance to their everyday life.

Overall, CSR projects at Kansanshi can be characterized as opaque and distant from the needs of the community. Most importantly, Kansanshi's CSR projects fall short of mitigating negative externalities of the company's operations and, arguably, contribute little to nothing to the well-being of the community. Therefore, they often fail to meet the universal requirement of CSR, as defined by Blowfield and Frynas (2005) on page 3 of this thesis.

Ready, Set, Spend: Social Expenditures and Global Copper Prices

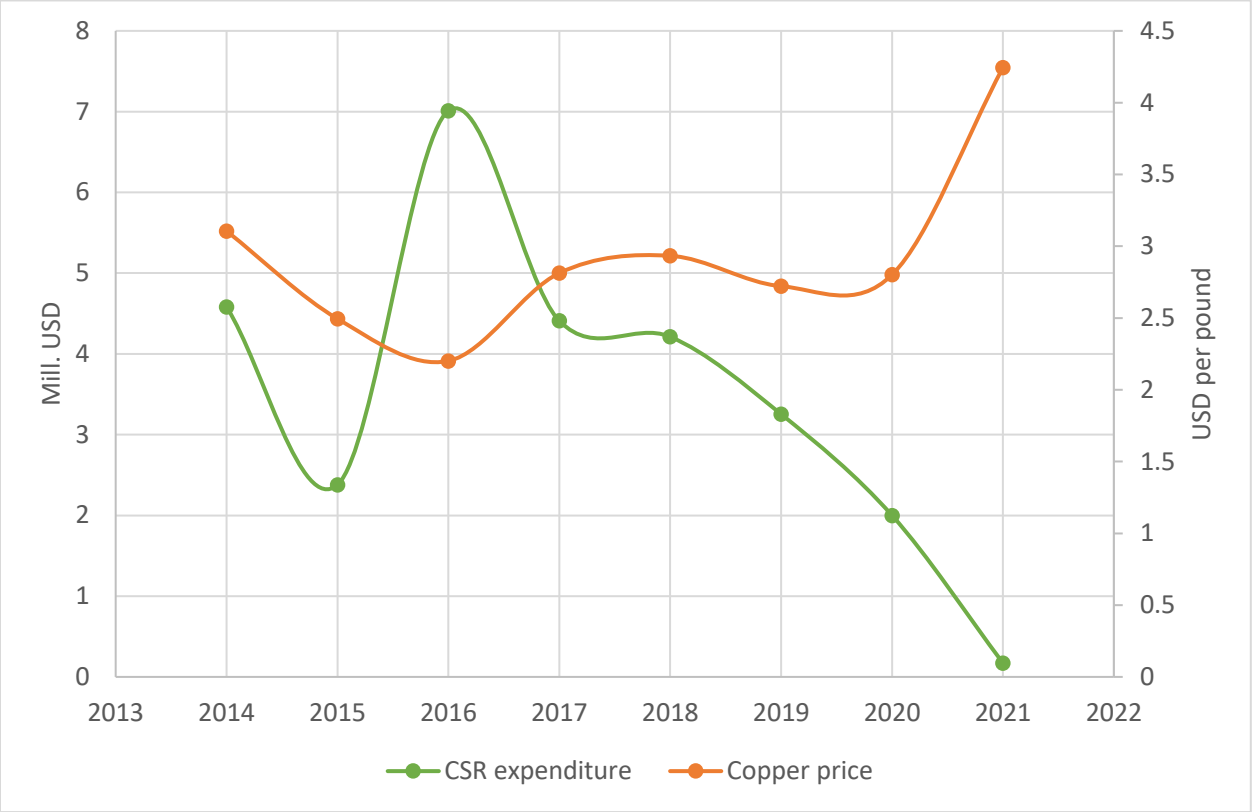
Zambia Extractive Industries Transparency Initiative (ZEITI) has been tracking Kansanshi's CSR spending with various successes over the last 14 years. The earliest report available dates to 2009. Unfortunately, CSR data for 2010, 2012, and 2013 are not available, and the reports' methodology has changed from year to year, although overall expenditure figures are

offered. In 2009, Kansanshi spent 3.9 billion Kwacha (0.85 million USD) on CSR (Zambia Extractive Industries Transparency Initiative, 2012). During another outlier year, 2011, the spending reached over 56.2 billion Kwacha (11 million USD)[36] (Zambia Extractive Industries Transparency Initiative, 2014). Uninterrupted and continuous data is available from 2014 to 2021, hence this analysis will focus on that particular 7-year period.

For the graph, overall social payments (CSR) from ZEITI reports (in millions of USD) and historical copper prices (USD per pound) from Macrotrends.net were used. To account for the inflation of the Zambian Kwacha, the expenditures were adjusted to USD according to the official exchange rate of the Bank of Zambia for the end of each given year. The trends of CSR expenditure and global copper prices from 2014 to 2021 are presented in the following graph:

[36] Large spending in 2011, among other expenses, is attributed to the Solwezi airport upgrade.

Figure 4. *CSR expenditure and global copper prices*



Note. Data from ZEITI reports (Zambia Extractive Industries Transparency Initiative, 2012, 2014, 2015b, 2015a, 2018, 2019, 2020a, 2020b), ZMW/USD historical exchange rate (Bank of Zambia, n.d.), and Macrotrends.net (*Copper Prices - 45 Year Historical Chart*, n.d.).

As presented in the graph, during the 7-year period, both CSR expenditures and global copper prices fluctuated. CSR spending has been decreasing over the given period, while copper prices showed a positive trend. As such, the analysis does not show any correlation between CSR expenditures and copper prices. If anything, there is a slight opposite correlation at –0.7, which might suggest an increase in the price of copper would mean a decrease in CSR spending. This is not by any means a totalizing argument and it might seem counterintuitive. However, at the Kansanshi mine, from 2014 to 2021, CSR spending was unrelated to copper prices, which undermines the reasoning presented by senior management of the KF.

The second part of the analysis deals with detailed data on CSR expenditures. Unfortunately, ZEITI does not provide the same baseline and methodology for its reporting every given year, which further complicates the analysis. Detailed data is available for 2017 and 2018.

As such, expenditures on infrastructure, sporting activities, and conservation farming in 2018 accounted for 58.3% of all social spending at Kansanshi. In 2017, these 3 categories accounted for 73.7% of all social spending. Unfortunately, there is no relevant data for other years, but since these categories received most of the CSR funding for 2 years in a row, focusing on them is justified for the purposes of the analysis.

Figure 5. *Kansanshi's (KMP) CSR spending by beneficiaries, 2017*

Comp any	Beneficiary Identity	Beneficiary Location	Cash Payments		In Kind payments (Projects)	
			Amount (ZMW)	Date	Description	Amount (ZMW)
KMP	Conservation Farming Programme					3,041,036
	Other					233,711
	Local Business Development					6,981
	Sporting activities					5,614,595
	Other					101,054
	Traditional Establishments					68,134
	Road works					21,217,601
	Solwezi Airport works					992,651
	External Training					8,070,911
	First Aid					146,555
	CRS -Community Scholarships					457,144
	Local Business Development					1,084,813
	Police Donations					189,268
	Sporting activities					1,616,656
	ZAWA (Wildlife project)					53,292
	Other					928,691
	Traditional Establishments					88,766
	Adult Learning Centre					94,286
	Gender based violence program					31,222
	Road Safety Campaigns					26,227
			-			44,063,594

Note. Retrieved from the ZEITI report (Zambia Extractive Industries Transparency Initiative, 2019).

According to ZEITI, in 2017 the main expenses of Kansanshi's CSR were road works, external training, sporting activities, and the conservation farming program. Oddly enough,

sporting activities accounted for 16.4% of all CSR expenditures in 2017. By contrast, the pride and joy of Kansanshi's CSR, the conservation farming program, made up only 6.9%.

Infrastructure projects accounted for 50.4% of all spending in 2017. Roads are the only way of bringing Kansanshi's production out of Solwezi to international ports, and the airport is used primarily by upper-class residents and visitors; thus, designating the infrastructure necessary for extraction and expat convenience as CSR is, at the very least, creative. Evidently, Kansanshi's CSR strategy identifies the needs of the company with the needs of the community, and it does not shy away from spending significant sums on that. Ironically, by including the upper-class expats as CSR recipients, Kansanshi includes them in the definition of the community. Unfortunately, the valorization of the expat community transportation needs, such as an airport, further exacerbates the enclave mode of the mine's operation.

Figure 6. *Kansanshi's (KMP) CSR spending by beneficiaries, 2018*

Company	Beneficiary Identity	Beneficiry Location	Cash Payments		In Kind payments (Projects)	
			Amount (ZMW)	Date	Description	Amount (ZMW)
KMP	Conservation Farming Programme				Foundation	8,481,596.74
	Other				Foundation	144,658.28
	Donations School Books				Foundation	1,188,594.51
	Desks for local schools				Foundation	307,968.27
	Sporting activities				Public relations	8,191,284.43
	Other				Public relations	60,894.42
	Traditional Establishements				Public relations	70,906.63
	Zambia Police				Public relations	2,865.24
	Road works				Roads	10,188,659.04
	Town Infrastructure				Roads	1,175,928.53
	External Training				Training & Development	13,563,556.27
	First Aid				Training & Development	171,068.11
	CRS -Community Scholarships				Corporate Social Responsibility	926,776.55
	Local Business Development				Corporate Social Responsibility	769,556.19
	Sporting activities				Corporate Social Responsibility	1,236,491.87
	ZAWA (Wildlife project)				Corporate Social Responsibility	144,650.53
	Other				Corporate Social Responsibility	761,725.27
	Traditional Establishements				Corporate Social Responsibility	121,025.39
	Adult Learning Centre				Corporate Social Responsibility	83,591.57
	Gender based violence program				Corporate Social Responsibility	7,822.01
	Road Safety Campaigns				Corporate Social Responsibility	196,087.75
	Solwezi General Hospital				Corporate Social Responsibility	14,031.36
	Child Marriage				Corporate Social Responsibility	128,304.33
	Boreholes				Corporate Social Responsibility	794,449.50
	Champ				Corporate Social Responsibility	209,478.00
	Zambia Police				Corporate Social Responsibility	10,557.17
	Mushitala & Mbonge Schools Project				Corporate Social Responsibility	699,104.34
	Kyafukuma Bridge				Corporate Social Responsibility	579,045.37
						-
	Farming Inputs				Corporate Social Responsibility	10,995.60
			-			**50,219,682**

Note. Retrieved from the ZEITI report (Zambia Extractive Industries Transparency Initiative, 2020a).

In 2018, the share of infrastructure projects in overall CSR expenses was reduced to 22.6%, which does not represent much as the roads do not receive much maintenance every year. The other streams of funding, namely agriculture and sport, have been present in Kansanshi's CSR for a long time and remain operational to this day. In 2018, once again, sporting activities received more funding than conservation farming, 18.8% and 16.9% of overall expenditure respectively. The police expenses, interestingly enough, are alleged to be an answer to the theft happening at the mine.

Kansanshi also occasionally pays a part of its property rates to Solwezi Municipal Council in infrastructure projects, such as local roads in the township. For instance, in 2019, developmental projects valued at 6,632,723.94 Kwacha ($472,753 USD) were deducted from the property rates, and the rest of them (20 million Kwacha)[37] were paid in cash (Zambia Extractive Industries Transparency Initiative, 2020b).

On September 30th, 2022, a KF employee started a GoFundMe campaign with the goal of supporting sporting activities offered by Kansanshi (*Fundraiser by Nora Richards: Kansanshi Cycling Team*, 2022). The goal was set at $11,000 USD, but as of May 29, 2023, $18,322 USD had been received. It is unknown what funding sporting activities received in 2022, but crowdfunding Kansanshi cycling team, a CSR project, is nothing but inappropriate. On the campaign website, nothing is mentioned about this project being part of FQM's CSR agenda, which is deceiving. Ordinary people that wish to support sports in northwestern Zambia end up, eventually, funding a project that is (and will be) paraded as an example of Kansanshi being a socially responsible enterprise. In an interview, a senior official at the KF in July 2022 indicated

[37] $1,425,517 USD.

to me that they had no plans to defund the team considering that it is one of the best-performing sports teams sponsored by the KF.

Promoting cycling in the community was, like many others, an in-house idea: "In 2014, a senior member who was an avid biker at First Quantum Minerals' (FQM) local Kanshanshi [sic] Mine decided he wanted to start a team" (Hackett, 2019). This once again reiterates that internal ideas get the green light from the CSR department, unlike the ones coming from the community. Circling back, I draw attention to the fact that CSR primarily funds what is needed to extract the resources (roads), provides amusement to expats (cycling and other sports), or promotes a corporate vision of food security (conservation farming). For this reason, conservation farming warrants its own chapter in this thesis.

The Embedded Problems of Corporate Social Responsibility as a Deliverable

If CSR falls short of being an instrument of development and/or change, I argue that it should be viewed for what it is worth—a corporate construct *from* the global North *for* the global North—a deliverable for the shareholders.

Not only is there no place for local knowledge and expertise in CSR, but there is also little or no place for locals and their concerns more broadly. The company knows better what its *shareholders* need, which in turn determines through CSR policies implementation what *locals* need. This is why the most important channel of communication is Kansanshi—Toronto (FQM's headquarters) and not Kansanshi—Solwezi (where the mine operates). By accepting this paradigm, it comes as no surprise that the mine is resistant to listening to locals because CSR

was never about what is actually better for the communities, it is about what looks flashier in a quarterly brochure.

The result of this dynamic is that what the mine sees as a problem and what the community sees as a problem are entirely separate from one another. The mismatch between what is expected by the community and what is being implemented by FQM is emblematic of the fact that it was never accountable to the community where it operates. As a community leader put it: “You could see that those guys have an agenda in their minds of how they want to proceed. They don’t want to listen.” The mine is not accountable to those workers that it brings in as well. Post-COVID layoffs also hit Kansanshi, leaving some workers to fend for themselves, securing employment in service industries in Solwezi.

FQM’s adaption of conservation farming (CF) could have not come at a better time—narratives around CF have been surfacing in Zambia for a few decades and some similar Western-funded projects have already been undertaken. As the concept was gaining more traction, CF became a part of Zambia’s 6th National Development Plan (2011-2015) (Whitfield et al., 2015). As discussed in the next chapter, FQM seized the moment and proposed a project that would appeal to the Zambian government. Local ideas on development in general and agricultural reform specifically were never on the table, which is not surprising considering that FQM at that moment sought a social license from the state, not the community of Solwezi.

“A beggar, you can’t push, they have the money” – an NGO leader comments on the knowledge production at Kansanshi and their failure to engage with local initiatives. As with other matters relating to engaging with Kansanshi, one needs an insider in the enclave to be granted access to only pitch an idea. From what the gathered data shows, these pitches were

rarely successful, as FQM is only willing to collaborate with locals in *implementing* the policies they have decided upon in-house.

FQM takes criticism quite badly, both from the locals and NGOs/scholars. If the community doubts the motives of the company or the transparency of its fund disbursement strategies, FQM can scrutinize those who ask questions. There is no room for skepticism or peer oversight—any opposition is met with hostility—as a community leader pointed out in an interview: "The minute you question that hand [FQM], then you are questioned." The victim mentality of the mine targets academics and NGOs as well, with a senior Kansanshi official employing terms like 'parachute science' to describe scholarly inquiry into their CSR actions. By boldly appropriating postcolonial vocabulary, the mine once again turns the tables to position itself as a misunderstood agent of a 'greater good.'

Corporate-Driven Delusions

Having established a deliverable nature of Kansanshi's CSR, it is easier to understand its other projects in Solwezi. I argue that they are not driven by a desire to create any lasting impact, but rather to upsell their shareholders as well as locals on the righteousness of their operations: "For us, the cycling [team] is quite a nice advert. They move around in the villages with their FQM-branded clothing and the villagers… like them."

Indeed, there are a few billboards around Solwezi that do not feature 'sponsored by Kansanshi FQM.' The positive image of FQM's operations needs to be constantly reinforced because otherwise, it would not be so obvious to the community. In this comparison, I place FQM's entertainment sports project (e.g., national football teams, cycling team) together with

charity projects (e.g., school lunches for orphans) as they both aim to create a positive image of the company, be it a patron of the sports or a defender of the disadvantaged. This ties into the broader conversation on CSR's efficacy and (in)ability to create a lasting impact. I do not urge corporate actors to take on the functions of the government, but at the very least it must be accountable for its own actions.

Figure 7. *A virtue-signaling billboard in Solwezi*

To maximize its deliverables, instead of creating structural change that addresses the negative impacts of its operations, FQM engages in (somewhat) short-term CSR projects that provide a fast return. Some of the 6,000 orphans receive school lunches thanks to FQM—happy Black children smile in a tastefully organized brochure. However, the broader conversation regarding community needs is negated in favor of a captivating headline. Furthermore, by

employing a strategy of 'the mine knows best,' FQM further denies agency to local actors and disregards their needs as well as their outlook on the issues that the community faces.

These reasons help to perpetuate inequality in Solwezi, reinforcing the enclave mode of Kansanshi's operation. The combination of shifting the blame for externalities to communities, pressure from shareholders to be in the ESG trend, and—here if I give the firm's staff the benefit of the doubt—an intention (albeit borderline delusional) to 'do good' comprise the current state of CSR practices at Kansanshi.

Conclusion

FQM's CSR strategy at the Kansanshi mine involves expanding its presence and influence as far as possible while minimizing the costs of these actions. In this quest, it takes credit for the achievements of NGOs like YWCA, diluting the role of other agents in the province's developmental processes while exaggerating its own impact. The CSR projects are conceived in extractivist enclaves, leaving no space for the community to voice its vision of development. It can cooperate with local NGOs, but only to implement its own vision of CSR. The system is designed to dissuade the community from presenting their own projects, as the KF has already set its ESG targets.

By designating itself as the ultimate CSR decision-maker, the KF gets to evaluate what is indeed necessary for the community, devaluing its feedback. The decision-making process at these enclaves is characterized by a fundamental belief in the superiority of knowledge brought by KF's experts. This provides a basis for a refusal to implement grassroots initiatives that do not align with the company's responsibility vision.

In this chapter, I identify 4 types of CSR projects at Kansanshi: (1) upkeep, (2) behavior change, (3) charity, and (4) (expat) entertainment. The upkeep projects complement an existing institution or structure, aiming to keep current ways and the status quo of the company. Behavior change projects are long-term commitments to invalidating local knowledge through the promotion of practices the mine considers to be correct. Charity projects, arguably, have no significant impact on the community, nor are they designed to do so. They are designed to target vulnerable demographic groups to tokenize them in an attempt at creating a positive corporate image. Lastly, the (expat) entertainment is the projects disguised as CSR, but their intended recipients are the Kansanshi upper-class workers. The narrative of 'hand me downs' projects and the company abdicating responsibility for Solwezi's present infrastructure show that FQM may be accountable to the company's interests and workers, but not the ones of the community.

Through the use of what I describe, following Appel (2012), as infrastructural violence, Kansanshi disentangles itself from the community where it operates. The mine provides its personnel with the much-desired technical and social infrastructure, which the general public in Solwezi lacks. Overall, Kansanshi's CSR projects are opaque and distant from the needs of the community, failing to mitigate the negative externalities of its operations while contributing little to the community's well-being.

The analysis of CSR expenditure from 2014 to 2021 did not show any correlation with global copper prices, which undermines the narrative used by the management of the KF. In 2018, Kansanshi spent 58.3% of all social spending on infrastructure, sporting activities, and conservation farming, while in 2017, these categories accounted for 73.7%. The analysis confirms that the in-house CSR ideas receive attention and funding, rather than those coming from the community.

The focus of Kansanshi's CSR lies in the infrastructure used for resource extraction (roads), non-traditional food security approaches (conservation farming of maize), and amusement, mostly for its own staff (sporting activities). As such, CSR fails to be an instrument of development and change. Thus, I suggest, it should be viewed as a corporate construct from the global North for the global North, a deliverable for shareholders. By removing the community and its needs from the picture, Kansanshi's CSR strategy starts making more sense.

Chapter 6

Political Ecology of Solwezi: Swidden Agriculture, External Interventions, and Community Resilience

Introduction

In this chapter, I discover how farmers of northwestern Zambia have developed various agricultural techniques, attuned to their environment, that historically sustained them under normal conditions. Nonetheless, these practices were perceived as destructive by the colonial authorities, and, I argue, continue to be characterized as such in the corporate narrative of the Kansanshi mine. In this case, corporate social responsibility (CSR) is used as an "anti-politics machine" (Ferguson, 1994) to establish control over land and depoliticize extraction. In its attempts at regulating land use in Solwezi, Kansanshi aims to secure access to resources and suppress any potential opposition from the community. To achieve that, it uses narratives of industry-driven development and blunt manipulation, but the community remains resilient to external attempts at regulating their everyday life.

At the beginning of the chapter, I position my research in the academic literature on postcolonialism, political ecology, corporate imperialism, and critical CSR studies. First, I describe the variety of traditional agricultural practices in Solwezi. Second, I examine colonial attempts at land use and agriculture regulation, which viewed traditional agriculture as destructive and backward. Third, I suggest that the same concepts that drove the colonial interventions are present in Kansanshi's CSR regarding traditional land use.

Then, I analyze First Quantum Mineral's (FQM) track record of failures in agricultural CSR, pointing out the company's refusal to capture local ideas. Next, I describe problems associated with corporate-imposed conservation farming techniques. Following that, I suggest that the alleged concerns regarding traditional farming derive from the attempt to shift the attention away from mining-induced land grabs and dispossession. I close the chapter with a discussion on the feasibility of conservation farming while questioning the manipulations employed by the company to impose its vision of development on farmers.

Conceptual Framework

In my work, I employ a postcolonial lens to deconstruct the Western narrative in which Africa is viewed as possessing attributes of lesser value, quality, and importance (Mbembe, 2001). The research undertaken suggests that the epistemological basis of FQM's CSR model rests in a colonial interpretation of Solwezi as devoid of, most importantly, sustainability knowledge. Instead of characterizing the area through the language of presence, a discourse of degradation is used. The campaigns targeting the traditional farming technique stem from the 'tragedy of the commons' concept and are informed by the mainstream Western ecological thought, which tends to see nature and humans as separate, perceiving inhabitants "only as destructive of forest" (Fairhead & Leach, 1996).

Zambian farmers have developed an array of coping strategies to ensure their food security and traditional swidden agriculture remains a part of it. In the face of "the uncertainties of input delivery, pricing policy, the national economy, and the climate" (Moore & Vaughan, 1994), farmers continue to rely on the trusted methods which are most suited to the

environmental conditions where they reside. Corporate attempts at intervention in local land use strive to “seduce [the community] through visions of industry-led progress and modernity,” while “aiming to secure rural populations' lands and resources” (Frederiksen & Himley, 2020). Nonetheless, these interventions revolve around century-old colonial ideas and practices, even though they may be presented as something new. Considering the multitude of colonial and post-independence programs that failed to achieve their goals, it is not surprising that people are suspicious about the ‘next big thing’ imposed on them often without any consultation.

The CSR situation at Kansanshi is related to the developmental attempts described by Ferguson (1994). Similarly to Lesotho, a CSR project introduces a cash crop, the cultivation of which heavily relies on a fertilizer, unattainable by most peasants without subsidies. The residents of Solwezi also sought employment at the mine but to no avail, and it is doubtful that they wish to pursue commercial farming. As such, Kansanshi’s CSR policy acts as an “anti-politics machine” (Ferguson, 1994), designed to depoliticize the extraction and shift the gaze away from the issues associated with it. Essentially, CSR “could also be seen as distracting attention away from the problem, or deflecting blame to external or uncontrollable causes; in doing so the spotlight of any conflict is shifted away from the company” (Jenkins, 2004). In the case of Kansanshi, traditional agricultural practices are identified by the company as such causes.

Through its CSR policy, FQM establishes “an ideology which identifies the goals of the corporate system with the public interest” (Girvan, 1976), which allows it to “cast opponents as “anti-progress” or “anti-modern” (Frederiksen & Himley, 2020). By painting locals as careless environmental stewards, FQM shifts the discourse away from the negative externalities of its mining operations; and characterizing the chitemene system in terms of degradation justifies an intervention into alleged destructive land management (Fairhead & Leach, 1996). Not only does

this discourse suppress peoples' agency in constructing their model of development, but it also denies them their own history, social and political relations, as well as "capacity to live on their own terms" (Fairhead & Leach, 1996), because anything that might undermine the corporate doctrine "is made to appear as an obstacle to progress" (Girvan, 1976). Furthermore, it clearly signals to the community that matters of concern should be limited to their personal land plot, and CSR policy aims to show them exactly how to tend to it.

Traditional Agricultural Practices in Solwezi

In Solwezi, just like most of the Northwestern province, the predominant form of local agricultural practice is *chitemene*. The name *chitemene* comes from the Bemba language. It is a form of swidden (slash-and-burn) agriculture which has formed and adapted to the area's specifications. This system was used for centuries and, as Simon et al. (2008) note, it is the most efficient agricultural system for that particular area which does not rely on imported fertilizers.

Figure 8. *A chitemene field burnt in July, Solwezi*

Traditionally, men clear the fields to prepare for cultivation during the dry season, lasting from June to October. Right before the rainy season begins in October, the fires are burnt. The rain softens the soil which allows for relatively easy manual hoeing and seed planting, allowing germination in moist soil. The plateau fields that are away from a water source nearby rely on rain to water the crop. The harvest season lasts from May through June. In such a system, ash from trees and branches provides the nutrients in topsoil needed for crop growth and neutralizes acidic soils, while the fire exterminates weeds and unwanted insects.

There are three main variations in the chitemene system: (1) large circle chitemene, common for Bemba; (2) small circle chitemene, common for Lala and Lamba; and (3) block chitemene, common for Kaonde. The other two forms of shifting axe and hoe cultivation, namely

Mwinilunga intermediate shifting/semi-permanented system and Isoka mixed large circle chitemene/cattle system, will not be discussed in this thesis due to their irrelevance to the studied area.

In Solwezi and the other northern areas of the Northwestern province where the precipitation is abundant, the *block chitemene* system is the predominant form of traditional farming (Schultz, 1976). The main characteristics of this type of land use present an irregular cultivated block in the center of the cleared area, 3-year cultivation, and 20 years fallow traditionally. Once the soil carrying capacity has been exerted, the village would move further into new forested territory, although that is not extensively practiced anymore since the villages became more permanent in the mid-20th century. Nonetheless, that does not necessarily mean a shortened fallow period, other coping strategies include an increased reliance on root crops and "defend[ing] wide belts of gardens and regenerating forest lands against all encroachers" (Simon et al., 2008).

The plots are usually cleared around the termite mounds, but there are various deviations from that throughout the province. Unlike the *large* and *small circle chitemene*, the *block chitemene* does not usually incorporate groundnuts and beans (Schultz, 1976). Nonetheless, Chabatama (1999) points out that sorghum gardens can feature gourds, pumpkins, and beans. Schultz (1976) also noted that even though that system was traditionally used to cultivate sorghum, by the early 1970s maize constituted 91% of all crops. Maize continues to be the staple crop across the country, featuring in the diet in the form of *nshima*, a thick porridge-like dish served with a variety of relishes depending on the income of the family.

The main *chitemene* garden for the Kaondes of Sowlezi is called *najimi* (Chabatama, 1999) or *myonde* (P. C. Johnson, 1994) and is located relatively far away from the village.

During the cultivation period, the farmers would relocate closer to their fields, forming *mutanda*, a temporary village. Scaring away birds and animals from their crops and occasionally weeding the garden required staying close to their fields because the distance made commuting on foot not feasible. The plots previously used to be fenced off, but with the decline of the wildlife in the area, the practice became less frequent.

The other forms of agriculture practices in the Solwezi area are *mapoka* and *mashamba* gardens. Both entail a continuous cultivation of land, but *mapoka* is used to describe a garden immediately near a house or farm, while gardens on the alluvial soils of river valleys and dambos are referred to as *mashamba*. While both of the gardens are found closer to home than extensive *chitemene* fields, the difference between the two lies in agricultural techniques and the crops grown (P. C. Johnson, 1994). Cassava and sweet potatoes are usually grown in *mapoka* gardens, while pumpkins, groundnuts, gourds, and beans are grown in *mashamba* gardens (Chabatama, 1999; P. C. Johnson, 1994). These farming methods continued to evolve and incorporate other crops. During my fieldwork, for instance, I observed cabbages and eggplants grown in *mashamba* and *mapoka* gardens respectively. These farming techniques provide a supplementary food source for the family, attesting to the diverse food security strategies undertaken by the local residents.

Figure 9. *A mapoka garden at a lodge in Solwezi*

Animal husbandry is not prevalent in Solwezi, although chickens and occasionally goats are kept. In the past, the inhabitants used to rely on wild game as a source of protein. Due to the decrease of the wild game in the area, people developed coping strategies and began relying more on other sources of protein. Fish, usually dried and imported, is widespread at the markets, and children engage in caterpillar-picking in the bush. The absence of animals that can drag a plow, namely oxen and horses, and the low mechanization rates of small-holder farms mean that the plowing is done by hand.

As such, the traditional agriculture practices of Solwezi area residents[38] are diverse and adapted to the local environmental conditions. The tsetse fly presence makes keeping plow animals impossible, so the farmers turn to manual cultivation and non-labor-intensive fire-setting as a means of field clearing from the tall grass. In the *chitemene* gardens of the interfluvial divides, ash is used both as a soil acidity neutralizer and a fertilizer. The permanent *mashamba* gardens utilize nutrient-rich alluvial valley and dambo soils, and compost is used in *mapoka* cultivation. Nevertheless, the colonial and, recently, corporate actors target *chitemene*, viewing it as destructive and unsustainable.

Colonial Land Use Interventions and Perceptions of Traditional Agriculture

During colonial times, British emissaries discouraged the practice of *chitemene*, viewing it as "wasteful" (Simon et al., 2008) and "unsustainable" (Moore & Vaughan, 1994). At the beginning of the 20th century, the North-Eastern and Northern Rhodesian administrations enforced a *chisanka* policy that forced *chitemene* cultivators to abandon their temporary *mutandas* (Simon et al., 2008). The colonial administrations intended to keep Africans in permanent villages to facilitate the collection of hut tax and forced labor recruitment. The tax was monetary, which coerced native male residents into the labor recruitment programs. This forced labor recruitment policy, *chibalo*, was used to staff the colonial-era Kansanshi mine as well (Simon et al., 2008).

From the start of the indirect colonial rule to the day of independence, land use and agricultural policies were implemented by the state. They, however, were concerned primarily

[38] Here, I summarize the farming methods of Kaonde, Lunda, and Luvale that inhabit the area.

with lands along the line-of-rail and in the Eastern province. In 1936, the Maize Control Board was established, which regulated maize prices. Notably, the settler farmers received higher payments for their grain than Africans (Dodge, 1977). The hut tax collection that began immediately after the establishment of the colonial rule indirectly affected the land use in the countryside as men were forced to leave the countryside and seek employment at the mines to pay for it. The Maize Control Board, however, was directly targeted to affect rural livelihoods. Dodge (1977) characterizes the policy as having "little reliance on economic incentives and heavy reliance on a paternalistic setting of detailed requirements as to how the African farmer was to adopt European practices."

The colonial intervention continued with the African Improved Farmer Scheme, which started in 1946/47 in the Southern province and in 1952 was extended to the Central province (Dodge, 1977). Like many others, the policy centered on the introduction of cash crops, promoting ideas of crop rotation and soil conservation. In 1948, the Peasant Farming Scheme was introduced, which supported volunteering farmers to relocate into the newly cleared plots by providing them with capital to buy oxen and equipment (Dodge, 1977; Jaeger, 1981).

According to Jaeger (1981), the policy was designed "a) to terminate shifting cultivation through adaptation of improved farming methods, b) to create an income through the sale of farm produce, c) to stabilise the frequent population movements as a basis for further development." This policy once again targeted chitemene farmers to adopt intensive farming techniques for the reasons of soil conservation. The outcome was unsuccessful, for the most part, because of the policy design. It put pressure on adapting the "European methods of agriculture" and overall was "based more on physical conditions in Europe" (Baldwin, 1966 in Dodge, 1977).

The Intensive Rural Development Program and its flagship project the Mungwi Agricultural Settlement and Training Scheme continued to dissuade the use of shifting agriculture practices, aiming "to develop and demonstrate a system of settled farming to displace the chitemene system" while urbanizing the Northern and Luapula provinces (Dodge, 1977). Like the Peasant Farming Scheme, it has also been unsuccessful in its attempt at changing rural land use practices.

The colonial land use and agricultural policies were not, for the most part, concerned with the Northwestern province and its inhabitants during the first quarter of the 20th century. The change was done by the Forestry Ordinance of 1925, which stated that "the villagers were legally forbidden from cutting trees within 30 yards of rivers or streams and eight yards of public roads, while some areas became forest reserves" (Chabatama, 1999). Overall, Chabatama (1999) identifies five colonial land use and agricultural policies that were implemented in Northwestern province: (1) Corridor Resettlement Scheme, (2) Peasant Farming Scheme, (3) Tobacco Farming Scheme, (4) Cattle Loan Scheme, and (5) Rice Scheme.

For the most part, all those policies failed to achieve their goals. The rice was not adopted into the diet, and its feasibility as a cash crop was unstable due to the market volatility, locals either could not afford to hire ox plows or were not comfortable with that, and the resettled villages did not flourish (Chabatama, 1999). The main objective of the colonial policies was the introduction of cash crops (maize, rice, tobacco, etc.), promoting crop rotation, and commercialization of peasant farming. Chabatama (1999) attributes their failure to the fact that "the agricultural schemes in the province were designed and imposed on the local communities by the Department of Agriculture, from the top, without local input or consultation, the peasantry received them with extreme caution or pessimism."

Local skepticism towards the colonial-imposed agricultural interventions was present in other areas as well. Moreover, it generated some animosity between the adopters of colonial "progress" and those who refrained from it. The participants of the Peasant Farming Scheme, "were treated as political sell-outs and had little influence upon their return" (Baldwin, 1966 in Dodge, 1977), and the partakers in the Intensive Rural Development Program "were ridiculed when they returned to their villages, and instead of spreading their acquired knowledge, they rapidly abandoned what they had learned" (Dodge, 1977).

The hesitation and suspicion about new farming techniques presumably derive from the fact that the traditional agricultural techniques were best suited to local environmental conditions. On that matter, describing Kaonde life in the Kasempa district of the Northwestern province, Jaeger (1981) notes that the "ingenious use is made of natural resources in respect to available soil types as well as seasonal circumstances, and a supply of a range of products practically all through the year is obtained under normal climatological circumstances."

Furthermore, traditional farmers developed various coping strategies in the face of unforeseen circumstances. For example, faced with the drought in the early 1990s, farmers turned back to chitemene while diversifying their crops:

> "[t]he rising costs of fertilizers and the breakdown in maize marketing arrangements has led a shift back to traditional crops such as millet, cassava, beans and sorghum, grown without purchased inputs… In North-western Province, farmers were growing sweet potatoes for the Lusaka market, others were producing beans for the Copperbelt" (Francis, 1997).

Taking into consideration the differentiation of garden systems found in the area, and various coping strategies employed by the local population, the claim seems reasonable. The local resilience, however, was misinterpreted as ignorance and backwardness. Devastatingly,

they dominated the discourse in the West post-independence as well. As such, the World Bank's report (Christie & Scott[39], 1977) provides the following 'obstacles to progress' in Zambian agriculture:

> "It is the dependence on hand labor, not the shortage of land, that results in 106,000 of these holdings [in the Northern and Luapala provinces] being less than 2-1/2 acres, since that is as much as an energetic woman and her children can cultivate with a hoe… The handling and training of oxen is almost as foreign to villagers in the Copperbelt, Luapula, Northern and Northwestern Provinces as is the operation and maintenance of tractors. Faced with this sort of backwardness, what relevance do so-called "minimum packages" of improved seed, fertilizers, mechanization and extension have?"

Naturally, chitemene was emblematic of such perceived 'backwardness' as it did not fit in the Western-imposed visions of the commercialized agricultural future prepared for Zambia by World Bank experts. The colonial perceptions and misconceptions are still shaping land use and agricultural policies, as the corporate actors seek to diversify their ESG[40] agenda. To support that claim, I provide a detailed overview of FQM's CSR policies that concern these issues.

Corporate Interventions in Agriculture

The Kansanshi Foundation (KF) has trained 45,000 farmers in *conservation farming* (CF) over the twelve years since the program's inception in 2010. The CF at Kansanshi is centered around a permaculture approach to land management, which utilizes minimal tillage and encourages the use of mulch and measured spacing. These technics are meant to displace the traditional mode of chitemene agriculture. Because it requires clearing the plots by cutting the

[39] Guy Scott served as acting President of Zambia in 2014-2015, being the first White head of state in the post-independence period. He authored other works on the backwardness of Zambian agriculture as well.
[40] Environmental, social, and corporate governance.

trees down and subsequently burning them to charcoal, the CF initiative should be studied together with FQM's anti-burning campaign. Without providing much detail, FQM claims that CF provides benefits for biodiversity, soil structure, and canopy preservation (First Quantum Minerals, n.d.-b).

There are approximately 7,000 farmers in the support program every year. The aim of the program is to convert them from sustenance farmers into emerging commercial farmers. The bar for entry is 400 Kwacha ($23 USD)—with that farmers receive subsidized fertilizer and CF training. That is a substantial amount of money because on average a poor household in Zambian rural areas earns approximately 3,000 Kwacha ($172 USD) a year.

Those who cannot afford the payment are not included in the program. According to the interviews with the KF staff, FQM subsidizes 50% of the fertilizer costs, which is less than the government subsidy. Those farmers get visited once a week by one of the 25 field officers. The company argues that the program has helped to improve crop yield by on average 800%.

The pool of farmers is limited due to budget concerns, but the company seems inconsistent about enrolling new farmers in the program (which consequently means dropping other farmers). In 2020, they let go of 2,000 farmers and brought in 2,000 new ones, while in 2021—only 1,000 farmers. The numbers have shifted throughout the operation—there is no clear limit for how long one can be on the program, and some farmers have been in it for 8 years.

The interviewees expressed concerns regarding FQM's selection process. The criteria are unknown, and there is no transparency. From what is known, refugees from the UNHCR's Maheba camp are not welcome. They are viewed by senior officials of the KF as "damaged."[41]

[41] From an interview. Solwezi, July 2022.

The CF training takes place at the KF, where experimental fields and greenhouses are located. However, there are also educational videos from FQM being broadcasted on local TV stations.

Figure 10. *Experimental gardens and greenhouses at the Kansanshi Foundation, Solwezi*

The access to CF training, though, is also uneven and follows the enclave model: members of the general public receive training at the KF, but the employees of the mine who wish to acquire CF skills do so in a training organized by the Lusaka-based Hematon Agro Services (Hematon Agro Services Ltd, n.d.). For miners, this 2-day training costs 1,000 Kwacha ($57 USD). While the higher price for participation reflects the higher incomes of miners, the choice of the organizer raises questions. If the KF has expert staff that trains local farmers in CF agriculture, why would FQM contract an external company to perform a CF masterclass for their

own employees? I will not speculate how this reflects on the CF trainers at the KF; what it strongly suggests, however, is the deliberate attempt of the company to disentangle its own staff from direct relations with community members, even in FQM-imposed ventures such as CF.

The inquiry into Kansanshi's CF program helps to establish if there is any impact that FQM's CSR has on the hosting community. There are a few reasons why I chose this particular project. First, it is large in scope—spawning over a territory of 130 by 100 km. Most of Kansanshi's CSR actions are extremely small-scale, contributing more to the corporate image than to the community. Second, it is fully FQM-run, unlike some of its other initiatives that simultaneously receive national or foreign funding.

The CF proponents label local agricultural practices as unsustainable. Yet, CF's dependency on fertilizer is not accented, nor is the insecurity it creates in farming systems. For example, Russia (one of the world's largest producers) withheld exports of fertilizer in 2021 and 2022, creating volatility in the market. Then, the war in Ukraine led to fertilizer prices rising worldwide, including in Zambia. The country's local fertilizer production is limited, and it heavily relies on imports.

Past Failures and Resistance to Listen

FQM's CSR misfortunes began before the acquisition of the Kansanshi mine. In 1996, FQM acquired the Bwana Mkubwa mining project in the Copperbelt province of Zambia. The company has constructed a road to the Lonshi Mine in the DRC, which attracted people to settle alongside it in the forest reserve while continuing to engage in traditional farming and charcoal

burning (Lungu & Mulenga, 2005). Lungu and Mulenga (2005) poetically describe the downfall of FQM's intervention:

> "Those who have agreed to move out of the forest reserve were provided with 10kg of maize seed and 4 bags of fertilizer, both basal and top dressing. The project did not work well as some farmers just sold the maize seed and continued with charcoal burning in the forest reserve."

It does not appear that the stakeholders were consulted prior to the implementation of this policy, thus it is unsurprising that they chose not to partake in it. The deliberate disentanglement from the needs of the community and corporate inability to listen to the community members seems to be a leitmotif of FQM's CSR policy in other projects as well.

The Kansanshi mine, however, has its own fair share of 'trial and error' CSR projects, notably in the agricultural sector. In the 2010s, Kansanshi recruited small-scale farmers in the cultivation of jatropha—a plant that is used in biodiesel production. The project has negatively impacted the yields of maize and beans among the participating farmers, because they had to accommodate jatropha plants in their fields (Kalinda et al., 2015). There was no demand for their novice product, and the farmers were experiencing increased food insecurity as a result of this project. The jatropha project was rapidly abandoned and now nothing but a few trees around Banda village remain.

The demise of another large agricultural CSR activity, the broiler chicken project, was officially attributed to the high feeding costs. Frederiksen (2019), however, recounts that half of all chickens in the project were stolen by local leaders, noting that "a local village subchief expressed mystification as to why the project had not worked to the soundtrack of hundreds of clucking chickens which surrounded us."

In all the cases, the consultation with the community was little to non-existent. Although various factors contributed to their futility, the lack of proper communication and the desire for the top-bottom project implementation played the main role. No developmental practice is straightforward and immediately successful, but the ineptitude of FQM to learn from its mistakes attests that the decision-making process behind its CSR agenda is flawed. Frankly, it is alarming, which is why I bring into question the feasibility of the CF project as well. This late into operation, I argue, FQM's inability to capture local ideas stems from the firm's deliberate removal and isolation of itself and its staff from the wider community.

Shortcomings of Conservation Farming

As this chapter has established, traditional agricultural practices in northwestern Zambia have provided a diversified and continuous food supply. The chitemene has sustained people for millennia, therefore, abolishing it in favor of CF must be rationalized by the KF. The CF methods have been productive in Zimbabwe where it originated; however, will that be applicable to the Zambian northwest?

Regarding the large numbers of farmers in CF programs similar to that of FQM, I turn to Andersson and D'Souza (2014), who describe the "limited value" of the CF techniques adoption numbers in Zambia "as CA [conservation agriculture] uptake is often also incentivized by means of input support (fertilizers, seeds, herbicides) provided by promotional projects." Indeed, I noticed similar attitudes and problems in Solwezi, where farmers would abandon CF once the support ceases. That is further corroborated by Huber's account of a KF official who "criticised

that farmers would return to conventional methods or stop cultivating if they no longer received financial support" (Kesselring et al., 2020).

CF is more labor-intensive in required preparation during the dry season, and most small-holders still cultivate their plot by manual labor in the absence of the large-scale adoption of ox-driven or mechanical plows. In chitemene, the soil is cultivated right after the rains, which makes the ground softer and the task more manageable. It should be also noted, that Solwezi lies in a relatively high precipitation area, which sees 2-3 times more rain than Zimbabwe. CF promotes no-till agriculture, and requires farmers to keep the cut weeds on the ground as mulch, "[y]et, in years of high rainfall or in high rainfall areas, mulch cover may lead to lower yields due to water logging (Chikowo, 2011; Rusinamhodzi et al., 2011 in Andersson & D'Souza, 2014).

FQM decided that CF should be the answer to food security issues, without searching for any input from the community. The company, in the face of the KF, believes to hold some knowledge inaccessible to people on whose land they operate. FQM's CSR in many spheres is aimed at changing habits and unlearning certain behaviors. Indeed, in interviews, KF officials claim openly that it takes time for people to change. However, in the case of agriculture, the question is whether we should be changing them at all. Thus, I believe critical inquiry into CF is warranted.

From the corporate side, there is little understanding of how much assistance farmers actually need and when such assistance should stop. A senior Kansanshi official stated in an interview that they part with farmers who had 5 years of consistently good crops. Even though every case is different, it seems there is no clear policy about this at FQM—the scope and length of assistance are tied to the budget.

As has been indicated previously, the main idea of the CF program is to pressure farmers to commercialize their farms. Loans for farmers are provided, but according to interviews, few farmers in the program succeed as they need capital to grow and scale their production. The data from interviews also show that there are concerns and grievances regarding people in charge of CF courses and other leadership positions—there is alleged corruption and nepotism in goods dissemination. Moreover, interviewees mention that the CF program and anti-burn campaign had little to no effect on the charcoal burning in the Solwezi area.

A disputed success rate of CF adoption in Solwezi and the underlying commercialization of agriculture can signify that commercial agriculture in Zambia is, in fact, derived from elite-driven land acquisition (Matenga & Hichaambwa, 2017). Emerging commercial farmers lack the working capital required for the operation and, subsequently, growth and expansion. The micro-credit village bank program, implemented by Kansanshi, has failed to provide that, leaving farmers to their own devices in navigating the realms of commercialized agriculture.

The skepticism around CF from the community members is understood when previous iterations of FQM's CSR in agriculture are examined retrospectively. Once again, without incorporating any local expertise, Kansanshi ventured into a fruit project. The project is supposed to circumvent the EU regulations on fresh fruit imports, which is why dried and canned fruit products are pursued. A Proudhon[42]-inspired idea from a local non-governmental organization of a school that would support its operation and provide nutrition to its pupils through the sale and consumption of fruit grown on-site was rejected by the KF. Evidently, only European consumers shall enjoy the Solwezi fruit.

[42] Pierre-Joseph Proudhon (1809–1865) was a French socialist and the founder of mutualist philosophy.

The company officials state that they do not wish to compete with a pineapple plant from Mwinilunga in the same province, which is why they explore other fruits such as mango and lychees. Neither is traditionally cultivated in the area, and an outsider agency was instructed to conduct a baseline feasibility study. At the risk of sounding like a broken record, I point out that the local knowledge, once again, was not taken into consideration. Thus, the prospects for that enterprise, given FQM's track record in agricultural CSR, are questionable.

Privatization at a Five-Finger Discount: Land Grab and Dispossession in Solwezi

The formerly customary land on which the Kansanshi mine operates, and to which FQM holds a valid mining license issued by the government of Zambia, was occupied by people long before 2005. Although it was designated as a forestry land, 60 families inhabited the area known as Kyafukuma (Southern Africa Resource Watch, 2020). The officials at the KF claim that the people inhabited the area illegally; nevertheless, the mine believes it has compensated them handsomely. In the absence of the relevant regulation at the time, the mine management got to decide what constitutes appropriate compensation to the displaced households. The ability of the extractive actors to determine how the resettled community can be "better off" (A. Hilson et al., 2019) is contentious in itself.

Needless to say, the displaced community was not satisfied. The amount of compensation was small, and the quality of the houses they moved into was poor. The estimates of the compensations range from 500 Kwacha [$29 USD] to $250 USD per household (Southern Africa Resource Watch, 2020) to $3190 USD per 50x50 meters of land (Kumwenda & Chileshe, 2019). The respondents I interviewed during the fieldwork quoted numbers closer to the first estimate.

Most importantly, there was no consultation with the community about the relocation. A large-scale land acquisition the size of the Kansanshi mine and its surface area rights inevitably creates long-term implications both for the affected communities and land use. As such, according to Zambian regulations, land that has been transferred from the customary realm cannot be converted back (Kesselring et al., 2019).

The main issues that the displaced community has faced due to the loss of the land are food insecurity and general precarity. Many of those who previously used to tend their farms to sustain themselves by growing maize and selling their cash crops at the market are now forced to purchase their food (Cheelo, 2008). These farmers, like many other residents of the Solwezi area, have been unsuccessful in securing jobs in mining.

The area where the community was relocated was unsuitable for farming because it was far away from the water source. According to a sub-chief of the Kapijimpanga chiefdom, FQM has promised to grant the relocated farmers access to the water reservoir on its territory. The reservoir, located behind a barbed-wire fence on the surface rights mining area, remains off-limits to the community. However, the rowing team from the Kansanshi-operated school practices there regularly.

As a result of displacement, the source of sustenance and income generating was lost to those farmers. To be able to feed their families and educate their children, they find themselves in new occupations, often precarious, such as burning trees for charcoal. Considering how the corporate-driven displacement pushed them to these economic activities, Kansanshi's anti-burn CSR campaign comes off as extremely inappropriate. Instead of mitigating the direct consequences of its operations, the mine resorts to preaching sustainability to former farmers.

In the case of the anti-burn campaign, villagers are dissuaded from burning trees for charcoal. What it fails to capture is that people who engage in these activities do so not for their love of bonfires, but, as it was shared by one head of the household in an interview, simply because it is their only way to survive:

> "Boss, yes, as much as we feel we cannot do that, but look at me: I need food on my table, my children need to go to school, my children need books, my children need medicine and clothes. What do you think we can do? Because my life depends on charcoal."

The root of the problem is not always unrelated to the actions of the mine. In the Mbonge area, the tailings dams were built on farming lands, and people were poorly compensated for their land. They got displaced further away, where farming is problematic due to challenging water access. Despite the company's promises, the water system was not implemented, and some people abandon their new land because of the inability to farm it. Striving to make a living, they engage in charcoal burning among other economic activities. Educating them on the environmental harms of deforestation is poor taste at best.

The other wave of mining-related displacement in Solwezi took place in 2014–2015. During that period, the smelter access road was being constructed, which affected 83 households (Kesselring, 2018). As Kesselring (2018) illustrates, the mine consulted with the community leaders on the questions of compensation, leaving farmers a choice between new land or money. Kansanshi's CSR department lobbied against the monetary compensation because it was viewed as "less secure and sustainable for farmers than land" (Kesselring, 2018). While the budgetary concerns are understandable, allocating land one does not own seems most appropriate in capitalist logic.

Despite FQM's assurances, there are fears in the community about possible displacement due to the upcoming expansion. This issue stems from the fact that the current large-scale mining license[43] granted to Kansanshi Mining PLC extends beyond the fenced-off area, where the company holds full surface rights. Since the license has been altered in November 2014 (Gray et al., 2020), it includes vast areas with farmland and villages to the east of the mine.

Because Zambian land legislation excludes lands under the mining right (Zambia, 1996), such relationships are regulated by the Mines Act. Therefore, FQM states it "can develop any part of the mining license outside of the area for which surface rights are held," but "[it] would have to purchase the land from the current owner, or otherwise enter into an Access Agreement with that owner" while "the owner cannot unreasonably refuse a request to develop the land" (Gray et al., 2020). For instance, Kabwela village, created as a result of the previous displacement, falls within the surface right boundaries, while fields east of the mine and (partially) Mbonge village lie within the mining license boundary.

The rationale behind the worries of the local population is clear, as the resettlement due to the smelter access road construction is fresh in collective memory, and many still remember Mushitala and Kyafukuma displacements. In interviews collected during my fieldwork in Solwezi, many respondents expressed their frustration at the meager sums of the compensation dislocated people received and despair at the state of the housing provided to them.[44] Overall, these manifestations highlight the fragility of FQM's social license to operate in Solwezi.

The CF initiative targets small-scale farmers and their agricultural practices that are blamed for deforestation. What it does not capture, however, is the fact that the land commodification

[43] 7057-HQ-LML
[44] From interviews (Solwezi, July 2022) and SARW report (Southern Africa Resource Watch, 2020).

around urban and mining areas in Zambia (Kesselring et al., 2019) is becoming increasingly widespread "through investment in medium-scale farms through local-level accumulation or investment by urban elites" (Jayne et al., 2014 in Matenga & Hichaambwa, 2017). The agricultural land accumulation in Solwezi and its class aspects, undoubtedly, deserve increased attention from scholars and policymakers.

Although some accounts suggest that small-scale farming is in decline (Mayondi, 2014), based on my fieldwork observations, I tend to disagree. Farming remains "something [that] almost every resident in Solwezi engages in, ranging from an herbal garden in town to a field further away on customary land" (Kesselring et al., 2020). The contemporary agricultural situation in Solwezi is multifaced and not straightforward. While some farmers "try to attune their lives to the mine's temporality" by adopting CF practices (Kesselring, 2018), others, frankly, do not or try and revert back to the traditional farming methods once the input support stops.

There is certainly no colonial-informed "backwardness" amongst the farmers; they are open to learning new methods and best industry practices. There must not be an expectation, however, that they immediately change their way of life and be 'grateful' for the knowledge a corporate emissary (once again) has brought them. As the stewards of this land, they have developed methods that have sustained them for a long time, and many if not all the external interventions have not been fruitful. The farmers' caution, if anything, highlights both the adaptability of the community to environmental and market conditions, as well as its resilience to external attempts at dictating land use practices.

Discussion: Feasibility and Corporate Manipulations

To educate farmers on the virtues of CF, FQM distributes a video detailing the preparation required prior to the beginning of the farming season. A farmer must have a rope or string of 10 meters with marks every 60 centimeters, where the marks represent the location of the planting hole in the row. The hole must be 8 centimeters deep and the width of the hoe. The rows must be 75 centimeters apart from each other and go across the slope. Placing rows along the slope prevents the leaching of soil and, subsequently, nutrients. Next, a 5-millimeter cup of lime is applied to a planting hole, though it can be substituted by the double amount of ash because lime is "often overlooked due to difficulties in availability" (*FQML Farmers Corner; Conservation Farming*, 2020).

This process must be done at least a month prior to planting. Then, an 8-millimeter cup of fertilizer is applied to every planting hole. Alternatively, farmers can use a tin of manure or compost, but then the planting hole must be 15 centimeters deep. The preparation must be done before the rainy season. Right after the first sufficient rainfall, 3 seeds per hole are planted and covered with 5 centimeters of dry soil and mulch. After they germinate, farmers are supposed to weed them, leaving only 2 plants per hole. Overall, CF planting is a very precise process.

In the absence of fertilizer, compost or manure are advocated, while lime can be substituted by ash from cooking. Traditional agricultural practices already use compost in the permanent *mapoka* gardens, where root vegetables and legumes are grown. Thus, the practice of organic fertilizer application is known to local farmers, and the application of ash to soil is the main objective behind *chitemene* cultivation. As the stewards of the land where they reside, local farmers have developed techniques that are the most attuned to their environmental conditions, and, given the fact that they already possess some corresponding knowledge, the feasibility of

CF practices is questionable. As such, CF's main contribution, outside of promoting fertilizer use, lies in the row organization and weeding of the germinated seeds.

The reliance on fertilizer, however, is the cornerstone of CF cultivation. As mentioned above, Zambia is an importer of fertilizer, and external shocks (export bans, wars, and supply chain delays) can trigger rising commodity prices. In 2020, Zambia defaulted on its sovereign debt, and, in 2022, it received a bailout from the IMF.[45] The conditions of the bailout include among other things, the removal of energy subsidies and reducing the cost of agricultural subsidies (fertilizer and seeds). Spending on agricultural subsidies accounted for 2.4% of Zambian GDP in 2021 (International Monetary Fund, 2022), and the restructuring agreement aims to reduce it to 1.0% by 2025. The government will reduce the costs by introducing the Comprehensive Agriculture Support Programme (CASP), which will reform and digitize input support while also providing extension services to farmers. However, the reform would ultimately mean that the farmers would bear the increased fertilizer and seeds costs because it would be impossible to introduce CASP and cut government spending without passing the costs onto consumers. The adoption of fertilizer use by Zambian farmers remains constrained by government regulation, debt relief programs, and the acts of God (force majeure).

The educational video produced by the National Agricultural Information Services for FQM contains multiple instances of religious language (*FQML Farmers Corner; Conservation Farming*, 2020). For instance, the application of fertilizer is rationalized with "you have to put back this faith gift of seed and fertilizer into the soil for God to multiply it back to you." The idea of thinning out perfectly normal plants seems to be counter-intuitive to farmers. On that topic,

[45] International Monetary Fund.

the video refers to God twice. As it instructs, putting 3 seeds per hole but leaving only 2 germinated plants "may seem like a waste of seed, but ask the Lord for the wisdom and generosity of spirit to put enough seed." Moreover, instead of reasoning with a farmer, it appeals to the ultimate authority by saying that thinning the shoots "can seem strange, but you will need to pray for God to give you wisdom and to trust in him."

Indeed, Zambia is a predominantly Christian country—95.5% of the population practices the religion (Central Statistical Office, 2012). Moreover, it is one of the very few Sub-Saharan Africa (along with Somalia and the Comoros) to have a state religion. On one hand, referring to God can be employed to manipulate farmers' opinions regarding CF. On the other hand, these tactics can resonate amongst the religious population and be an effective form of communication. Regardless, the use of such language reinforces the dominance of religion in the mainstream narrative.

Endorsements from traditional authorities are also used in getting farmers on board with the CF program. HRH Chief Mumena, for instance, became an ambassador for the project, speaking of it highly in multiple interviews and promotional videos. As per Jaeger's (1981) ethnographic account, traditionally "a [Kaonde] chief enjoys social prestige but his position of authority does not allow him much extra access to resources." Needless to say, the KF through its CSR department supports its (often) warm relationships with traditional authorities by conducting outreach programs, attending festivities, and through in-kind payments. Regardless of the farmers' personal affiliations, an appeal to authority—religious or traditional—is a murky tactic employed by a corporation for conscribing locals into its agenda.

Conclusion

Traditional agriculture practices employed by farmers in Solwezi are adapted to local environmental conditions and provide a variety of food sources under normal conditions. Nevertheless, FQM implements CSR policies that target these practices. FQM's CSR policy in agriculture is criticized for its disentanglement from community needs and inability to listen to community members. Furthermore, the lack of proper communication and top-down project implementation has led to the failure of various agriculture projects in the past. This inability to learn from mistakes highlights the flawed decision-making process behind Kansanshi's CSR agenda. The CF project is also criticized for FQM's inability and/or refusal to incorporate local ideas and the company's belief in holding knowledge inaccessible to the people on whose land they operate. Moreover, interviews reveal concerns about corruption and nepotism in CF courses and leadership positions, as well as the overall ineffectiveness of the CF program and anti-burn campaign in Solwezi.

In Solwezi, previous displacement and land dispossession due to the mining operations have led to a loss of sustenance and income generation. The resettled farmers find themselves in precarious occupations, including burning trees for charcoal. Instead of addressing these contingent issues derived from its operations, Kansanshi's CSR policy resorts to preaching sustainability while manipulating the discourse to coopt community members into its vision of corporate-driven development. In essence, portraying locals as inefficient land stewards allows the Kansanshi mine to shift the gaze away from the consequences of its operations, both environmental and social. As such, this presents one of the main components of FQM's CSR policy at Kansanshi.

Chapter 7

Conclusion

This master's thesis has explored the topic of corporate social responsibility (CSR) in large-scale copper mining at the Kansanshi mine in Solwezi, Zambia. The study aimed to understand the extent to which the mine's operator, First Quantum Minerals (FQM), through its CSR policies influences social and spatial relations in a given locale. The impact of these policies on local communities and the environment has also been examined.

The CSR projects of Kansanshi are designed in a way that leaves no room for community input, and the company cooperates with local non-governmental organizations (NGOs) only to implement its own vision of CSR. The decision-making process prioritizes the company's vision of sustainability, devaluing community feedback and grassroots initiatives. The analysis of CSR expenditure corroborates that the company favors its own ideas over those coming from the community and that social spending does not correlate with global copper prices.

As such, Kansanshi disentangles itself from the community where it operates through exclusion and disconnection. This, in turn, forms extractivist enclaves, where CSR decision-making processes take place. By denying the community access to these enclaves, FQM engages in what Appel (2012) refers to as infrastructural violence, which is further exacerbated by the corporate abdication of responsibility for said actions.

Employing a political ecology approach provides an understanding of traditional agricultural practices in Solwezi as diverse, adapted to local environmental conditions, and sustainable. FQM, however, employs a negative interpretation of Africa (Mbembe, 2001) and

Solwezi specifically as devoid of sustainability knowledge. In its agricultural CSR policies, it follows the steps of colonial land use interventions, which have failed most of the time.

The displacement caused by mining operations has resulted in the loss of income-generating activities and worsened food insecurity for the resettled farmers. Instead of addressing these issues, Kansanshi's CSR policy manipulates the discourse and portrays locals as inefficient land stewards to divert attention from the negative consequences of its operations. Acting as an "anti-politics machine" (Ferguson, 1994), CSR programs aim to establish control over land and depoliticize mineral extraction.

Creating a belief system that identifies corporate goals of capital accumulation with the interest of the broader public (Girvan, 1976) allows FQM to propagate visions of corporate-driven development while viewing the opponents as "anti-progress" or "anti-modern" (Frederiksen & Himley, 2020). In fact, corporate attempts at regulating land use practices indicate a neocolonial framework of securing access to resources while suppressing any potential opposition.

This thesis establishes that Kansanshi's CSR projects fail to address the negative effects of its operations and do not contribute significantly to the community's well-being. Therefore, I suggest that CSR at Kansanshi serves as a corporate construct primarily benefiting shareholders in the global North while neglecting the needs of the community. Within this paradigm, acquiring a social license to operate evolves into the cooptation of local community members, namely smallholders, into the corporate interpretation of sustainability.

The contribution of this work lies primarily in advancing the understanding of corporate manipulations in the realm of sustainability on the example of one of the largest copper-gold

mines in Africa. Moreover, it demonstrates the geographic nature of CSR and paves the way for further inquiry into the spatial and land use aspects of corporate sustainable and philanthropic interventions.

Looking forward, I identify three potential avenues of development for this line of research and its application:

1. This work has demonstrated the viability of a political ecology approach to CSR for a more cohesive understanding of its modalities. Since the global green transition is an inherently geographic process, sustainable sourcing of raw materials can benefit greatly from the analysis of spatial aspects of extraction. Furthermore, immediate externalities of extraction and externalities along the supply chains in its procurement are equally important, calling for a geographic approach to the issue. This, I argue, is the only way for the emergence of Fairtrade copper or a Kimberley process for critical minerals.
2. More academic attention is required to northwestern Zambia, especially in an environmental impact assessment of its extractive sector. Zambia Environmental Management Agency (ZEMA) conducts similar research, but it might be experiencing pressure from other actors considering the importance of extraction for the Zambian economy. As such, ZEMA has approved contested Kansanshi projects, including the resettlement of project-affected people during the construction of the smelter access road in Solwezi (Kesselring, 2018). Due to the limited availability of laboratory analysis, independent inquiry from local and regional NGOs is often restricted to basic water testing, such as pH level analysis, which is insufficient to draw definitive conclusions.
3. Lastly, it is important to have a conversation with investors in extractive industries, since the host communities often have little to no voice in the design of CSR projects.

Shareholders, on the other hand, have the ultimate power in determining the direction where the company is headed, including its sustainability policies, by voting with their dollars. Naturally, the goal of investing is maximizing profits but raising awareness about the corporate (in)actions in CSR might resonate with conscious investors concerned with the ethics of their involvement. The allure of global green transition may cloud their understanding of the role extractive industries play in it and the externalities that such operations entail.

Finally, I hope this work finds its place in the critical body of literature on CSR. Without questioning the underlying nature of such interventions, we would not be able to depart from a corporate-centric approach to CSR. Frankly, as long as CSR continues to revolve around the depersonalized process of checking off boxes, it cannot provide more than an appearance of sustainability.

References

Adeniyi Ogunyankin, G. (2019). Postcolonial Approaches to the Study of African Politics. In G. Adeniyi Ogunyankin, *Oxford Research Encyclopedia of Politics*. Oxford University Press. https://doi.org/10.1093/acrefore/9780190228637.013.830

Andersson, J. A., & D'Souza, S. (2014). From adoption claims to understanding farmers and contexts: A literature review of Conservation Agriculture (CA) adoption among smallholder farmers in southern Africa. *Agriculture, Ecosystems & Environment*, *187*, 116–132. https://doi.org/10.1016/j.agee.2013.08.008

Appel, H. C. (2012). Walls and white elephants: Oil extraction, responsibility, and infrastructural violence in Equatorial Guinea. *Ethnography*, *13*(4), 439–465.

Bank of Zambia. (n.d.). *Historical Series Of Daily ZMW/USD Exchange Rates* [dataset]. Retrieved June 30, 2023, from https://www.boz.zm/historical-series-of-daily-zmw-usd-exchange-rates-zmw.htm

Bayly, S. (2016). Colonialism / Postcolonialism. *Cambridge Encyclopedia of Anthropology*. https://doi.org/10.29164/16colonialism

Bebbington, A. (2012). Underground political ecologies: The second Annual Lecture of the Cultural and Political Ecology Specialty Group of the Association of American Geographers. *Geoforum*, *43*(6), 1152–1162. https://doi.org/10.1016/j.geoforum.2012.05.011

Bebbington, A., Hinojosa, L., Bebbington, D. H., Burneo, M. L., & Warnaars, X. (2008). Contention and Ambiguity: Mining and the Possibilities of Development. *Development and Change*, *39*(6), 887–914. https://doi.org/10.1111/j.1467-7660.2008.00517.x

Blowfield, M., & Frynas, J. G. (2005). Setting new agendas: Critical perspectives on Corporate Social Responsibility in the developing world. *International Affairs*, *81*(3), 499–513. https://doi.org/10.1111/j.1468-2346.2005.00465.x

Bridge, G. (2004). Mapping the Bonanza: Geographies of Mining Investment in an Era of Neoliberal Reform. *The Professional Geographer*, *56*(3), 406–421. https://doi.org/10.1111/j.0033-0124.2004.05603009.x

Bridge, G. (2014). Resource geographies II: The resource-state nexus. *Progress in Human Geography*, *38*(1), 118–130. https://doi.org/10.1177/0309132513493379

Bridge, G., Bouzarovski, S., Bradshaw, M., & Eyre, N. (2013). Geographies of energy transition: Space, place and the low-carbon economy. *Energy Policy*, *53*, 331–340. https://doi.org/10.1016/j.enpol.2012.10.066

Bryant, R. L., & Bailey, S. (1997). *Third World political ecology*. Routledge.

Burawoy, M. (1972). *The colour of class on the copper mines, from African advancement to Zambianization*. Manchester University Press [for] the Institute for African Studies, University of Zambia.

Calvo, G., Mudd, G., Valero, A., & Valero, A. (2016). Decreasing Ore Grades in Global Metallic Mining: A Theoretical Issue or a Global Reality? *Resources*, *5*(4), Article 4. https://doi.org/10.3390/resources5040036

Caramento, A. (2020). Cultivating backward linkages to Zambia's copper mines: Debating the design of, and obstacles to, local content. *The Extractive Industries and Society*, *7*(2), 310–320.

Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, *34*(4), 39–48.

Central Statistical Office. (2012). *2010 Census of Population and Housing* (p. 133). https://web.archive.org/web/20151026014633/http://www.zamstats.gov.zm/report/Census/2010/National/2010%20Census%20of%20Population%20National%20Analytical%20Report.pdf

Chabatama, C. M. (1999). *Peasant farming, the state, and food security in the north-western province of Zambia, 1902—1964*.

Chaput, M. (1968). *Patterns of Elite Formation and Distribution in Kenya, Senegal, Tanzania, and Zambia*. Syracuse University, Program of Eastern African Studies.

Cheelo, K. H. (2008). *Behind the economic figures: Large-scale mining and rural poverty reduction in Zambia, the case of Kansanshi copper mine in Solwezi*. MA dissertation, Massey University, Palmerston North, New Zealand.

Chidumayo, E. (2017). Biotic interactions, climate and disturbance underlie the distribution of two Julbernardia tree species in miombo woodlands of Africa. *Journal of Tropical Ecology*, *33*, 1–11. https://doi.org/10.1017/S0266467416000584

Chief Chibwika praises govt. Over Chingola-Solwezi road. (2016, November 5). *Lusakatimes*. https://www.lusakatimes.com/2016/11/05/chief-chibwika-praises-govt-chingola-solwezi-road/

Choongo, P. (2017). A Longitudinal Study of the Impact of Corporate Social Responsibility on Firm Performance in SMEs in Zambia. *Sustainability*, *9*(8), 1300. https://doi.org/10.3390/su9081300

Christie, M., & Scott, G. (1977). *Zambia: An agricultural development strategy for the next 25 years*.

Copper Prices—45 Year Historical Chart. (n.d.). Retrieved June 30, 2023, from https://www.macrotrends.net/1476/copper-prices-historical-chart-data

DESA, Population Division. (2022). *World Population Prospects 2022*. United Nations. https://population.un.org/wpp/Graphs/DemographicProfiles/Line/894

Dodge, D. J. (1977). *Agricultural policy and performance in Zambia. History, prospects, and proposals for change.*

Fairhead, J., & Leach, M. (1996). *Misreading the African landscape: Society and ecology in a forest-savanna mosaic*. Cambridge University Press.

Ferguson, J. (1994). *The anti-politics machine:" development," depoliticization, and bureaucratic power in Lesotho*. U of Minnesota Press.

First Quantum Minerals. (n.d.-a). *About Us—At a Glance*. Retrieved June 30, 2023, from https://www.first-quantum.com/English/about-us/at-a-glance/default.aspx

First Quantum Minerals. (n.d.-b). *Case Studies—Conservation farming yields results*. Retrieved June 30, 2023, from https://www.first-quantum.com/English/sustainability/case-studies/conservation-farming-yields-results/default.aspx

First Quantum Minerals. (n.d.-c). *Kansanshi*. Retrieved June 30, 2023, from https://www.first-quantum.com/English/our-operations/default.aspx#module-operation--kansanshi

First Quantum Minerals. (2021a). *Annual Information Form as at December 31, 2020* (p. 139). https://minedocs.com/21/First-Quantum-AIF-12312020.pdf

First Quantum Minerals. (2021b). *Consolidated Financial Statements* (p. 54). https://s24.q4cdn.com/821689673/files/doc_financials/2022/Q4-2021-FQM-Financial-Statements-FINAL.pdf

First Quantum Minerals. (2022a). *2021 Annual Report* (p. 168). https://s24.q4cdn.com/821689673/files/doc_financial/2021/First-Quantum-2021-Annual-Report.pdf

First Quantum Minerals. (2022b). *Extractive Sector Transparency Measures Act—Annual Report* (p. 4). https://s24.q4cdn.com/821689673/files/doc_downloads/tax-transparency/2022/2021-ESTMA-report.pdf

First Quantum Minerals. (2023a). *Annual Information Form as at December 31, 2022* (p. 158). https://s24.q4cdn.com/821689673/files/doc_downloads/2022-annual-report/AIF-2023-FINAL.pdf

First Quantum Minerals. (2015, October). *Kansanshi Mining Plc*. https://s24.q4cdn.com/821689673/files/doc_presentations/Kansanshi-October-2015-FINAL.pdf

First Quantum Minerals. (2022c, May 5). *First Quantum Minerals Announces Tristan Pascall as New Chief Executive Officer and Board Changes*. https://www.first-quantum.com/English/announcements/announcements-details/2022/First-Quantum-Minerals-Announces-Tristan-Pascall-as-New-Chief-Executive-Officer-and-Board-Changes/default.aspx

First Quantum Minerals. (2022d, December 31). *Kansanshi Reserves & Resources*.

First Quantum Minerals. (2023b). *Kansanshi Production Statistics*. https://www.first-quantum.com/English/our-operations/operating-mines/kansanshi/production-statistics/default.aspx

First Quantum Minerals Budgets $50 million for Chingola-Solwezi Roadworks. (2016, October 29). *Lusakatimes*. https://www.lusakatimes.com/2016/10/29/first-quantum-minerals-budgets-50-million-chingola-solwezi-roadworks/

First Quantum Minerals Ltd Profile. (n.d.). SEDAR. Retrieved June 30, 2023, from https://www.sedar.com/DisplayProfile.do?lang=EN&issuerType=03&issuerNo=00006237

First Quantum Minerals plans 2,500 layoffs in Zambia over tax hikes. (2018, December 21). *Thompson Reuters*. https://www.reuters.com/article/us-zambia-mining-idUSKCN1OK18H

FQML Farmers Corner; Conservation Farming. (2020). NAIS Production. https://www.facebook.com/watch/?v=398803991183959

Francis, P. A. (1997). *Listening to farmers: Participatory assessment of policy reform in Zambia's agriculture sector* (Vol. 375). World Bank Publications.

Fraser, A., & Lungu, J. (2007). *For whom the windfalls? Winners & losers in the privatisation of Zambia's copper mines*.

Frederiksen, T. (2019). Political settlements, the mining industry and corporate social responsibility in developing countries. *The Extractive Industries and Society*, *6*(1), 162–170. https://doi.org/10.1016/j.exis.2018.07.007

Frederiksen, T., & Himley, M. (2020). Tactics of dispossession: Access, power, and subjectivity at the extractive frontier. *Transactions of the Institute of British Geographers*, *45*(1), 50–64. https://doi.org/10.1111/tran.12329

Fundraiser by Nora Richards: Kansanshi Cycling Team. (2022, September 30). GoFundMe. https://www.gofundme.com/f/kansanshi-cycling-team

Gann, L. H. (1964). *A History of Northern Rhodesia: Early Days to 1953* (Issue т. 1). Chatto & Windus. https://books.google.ca/books?id=yHshAAAAMAAJ

Garnaga, A. F., & Yarulin, I. F. (2020). Formation of vernacular areas in large city (case of Khabarovsk). *IOP Conference Series: Materials Science and Engineering*, *775*(1), 012016. https://doi.org/10.1088/1757-899X/775/1/012016

Girvan, N. (1976). *Corporate Imperialism: Transnational Corporations and Economic Nationalism in the Third World*. London: Monthly Review Press.

Gray, D., Lawlor, M., & Briggs, A. (2020). *NI 43-101 Technical Report* (p. 233). Kansanshi Operations. https://s24.q4cdn.com/821689673/files/doc_downloads/2021/NI-43-101/NI-43-101-Technical-Report-Kansanshi.pdf

Hackett, J. (2019, May 23). *Colorado Woman Helps Start Zambia's First Pro Cycling Team*. 303Endurance. https://303cycling.com/colorado-woman-helps-start-zambias-first-pro-cycling-team/

Hamann, R., & Kapelus, P. (2004). Corporate Social Responsibility in Mining in Southern Africa: Fair accountability or just greenwash? *Development*, *47*(3), 85–92. https://doi.org/10.1057/palgrave.development.1100056

Hasimuna, O. J., Chibesa, M., Ellender, B. R., & Maulu, S. (2021). Variability of selected heavy metals in surface sediments and ecological risks in the Solwezi and Kifubwa Rivers, Northwestern province, Zambia. *Scientific African*, *12*, e00822. https://doi.org/10.1016/j.sciaf.2021.e00822

Hematon Agro Services Ltd. (n.d.). *Farming for Beginner's Workshop*. Retrieved June 30, 2023, from https://drive.google.com/file/u/0/d/1tPIWFjgq-AlAel9zCuLk97PA_eg0nwLI/view?pli=1&usp=embed_facebook

Hilson, A., Hilson, G., & Dauda, S. (2019). Corporate Social Responsibility at African mines: Linking the past to the present. *Journal of Environmental Management*, *241*, 340–352. https://doi.org/10.1016/j.jenvman.2019.03.121

Hilson, G. (2006). Championing the Rhetoric? 'Corporate Social Responsibility' in Ghana's Mining Sector. *Greener Management International*, *53*, 43–56.

Hilson, G. (2012). Corporate Social Responsibility in the extractive industries: Experiences from developing countries. *Resources Policy*, *37*(2), 131–137. https://doi.org/10.1016/j.resourpol.2012.01.002

Hilson, G. (2014). 'Constructing' Ethical Mineral Supply Chains in Sub-Saharan Africa: The Case of Malawian Fair Trade Rubies: Fair Trade Rubies in Malawi. *Development and Change*, *45*(1), 53–78. https://doi.org/10.1111/dech.12069

Idahosa, P. (2002). Business Ethics and Development in Conflict (Zones): The Case of Talisman Oil. *Journal of Business Ethics*, *39*(3), 227–246. https://doi.org/10.1023/A:1016546308886

IEA. (2021). *Minerals used in electric cars compared to conventional cars*. https://www.iea.org/data-and-statistics/charts/minerals-used-in-electric-cars-compared-to-conventional-cars

International Labour Organization. (2021). *Employment in agriculture (% of total employment) (modeled ILO estimate)—Zambia* [dataset]. The World Bank. https://data.worldbank.org/indicator/SL.AGR.EMPL.ZS

International Monetary Fund. (2022). *Zambia: Request for an Arrangement Under the Extended Credit Facility-Press Release; Staff Report; Staff Supplement; Staff Statement; and Statement by the Executive Director for Zambia* (Country Report No. 2022/292, p. 135).

https://www.imf.org/en/Publications/CR/Issues/2022/09/06/Zambia-Request-for-an-Arrangement-Under-the-Extended-Credit-Facility-Press-Release-Staff-523196

Jaeger, D. (1981). *Settlement patterns and rural development: A human geographical study of the Kaonde, Kasempa District, Zambia*. AmsterdamRoyal Tropical Institute. https://dare.uva.nl/search?identifier=f71f40da-1b75-4b9d-a49f-a12638186205

Jenkins, H. (2004). Corporate social responsibility and the mining industry: Conflicts and constructs. *Corporate Social Responsibility and Environmental Management*, *11*(1), 23–34. https://doi.org/10.1002/csr.50

Johnson, O. E. A., Zalik, A., Mollett, C. S., Sultana, F., Havice, E., Osborne, T., Valdivia, G., Lu, F., & Billo, E. (2021). Extraction, entanglements, and (im)materialities: Reflections on the methods and methodologies of natural resource industries fieldwork. *Environment and Planning E: Nature and Space*, *4*(2), 383–428. https://doi.org/10.1177/2514848620907470

Johnson, P. C. (1994). Ecology and Change in the Agricultural System of the Kaonde of Northwestern Zambia. *Singapore Journal of Tropical Geography*, *15*(1), 1–16. https://doi.org/10.1111/j.1467-9493.1994.tb00241.x

Kalinda, C., Moses, Z., Chama, L., Lwali, C., Zulu, D., Darius, P., & Exildah, C.-K. (2015). Economic Impact and Challenges of Jatropha curcas L. Projects in North-Western Province, Zambia: A Case of Solwezi District. *Sustainability*, *2015*, 9907–9923. https://doi.org/10.3390/su7089907

Kansanshi Mines truck accident pollutes Kifubwa River. (2017, August 28). *Lusakatimes*. https://www.lusakatimes.com/2017/08/28/kansanshi-mines-truck-accident-pollutes-kifubwa-river/

Karen, M., Dr. El-Fahem, T., & Museteka, L. (2015). *Groundwater Resources for Lusaka and selected Catchment Areas. Hydrogeology of the Town Area of Solwezi—Baseline Study on Hydrogeology and Hydrochemistry* (4).

Kay, G. (1967). *A Social Geography of Zambia: A Survey of Population Patterns in a Developing Country*. University of London Press.

Kemp, D., & Owen, J. R. (2022). Corporate social irresponsibility, hostile organisations and global resource extraction. *Corporate Social Responsibility and Environmental Management*, *29*(5), 1816–1824. https://doi.org/10.1002/csr.2329

Kesselring, R. (2017a). The electricity crisis in Zambia: Blackouts and social stratification in new mining towns. *Energy Research & Social Science*, *30*, 94–102. https://doi.org/10.1016/j.erss.2017.06.015

Kesselring, R. (2018). At an extractive pace: Conflicting temporalities in a resettlement process in Solwezi, Zambia. *The Extractive Industries and Society*, *5*(2), 237–244. https://doi.org/10.1016/j.exis.2018.02.008

Kesselring, R. (2021). Beware the Mineral Narrative: The histories of Solwezi town and Kansanshi Mine, North-Western Zambia, c. 1899-2020. In *Across the Copperbelt Urban & Social Change in Central Africa's Borderland Communities*. James Currey.

Kesselring, R. (2017b, August 21). Disenclaving the Planners' Enclave: The housing project Kabitaka in Solwezi, Northwestern Zambia. *Comparing the Copperbelt*. https://copperbelt.history.ox.ac.uk/2017/08/21/disenclaving-the-planners-enclave-the-housing-project-kabitaka-in-solwezi-northwestern-zambia-rita-kesselring/

Kesselring, R., Hohn, J., Martin, C., Huber, M., Karsko, A., Hobi, A.-S., Kimura, M., Oliveira, D., Everwijn, A., Monnier, M., & Christen, A. (2020). *Ethnographic Vignettes: Social*

Change and Social Encounters in Solwezi, Northwestern Zambia. https://doi.org/10.5451/UNIBAS-EP76534

Kesselring, R., Leins, S., & Schulz, Y. (2019). *Valueworks: Effects of Financialization along the Copper Value Chain (Working Paper)*. https://doi.org/10.5451/UNIBAS-EP69142

Khan, F. R., & Lund-Thomsen, P. (2011). CSR As Imperialism: Towards a Phenomenological Approach to CSR In the Developing World. *Journal of Change Management*, *11*(1), 73–90. https://doi.org/10.1080/14697017.2011.548943

Kohl, E., & McCutcheon, P. (2015). Kitchen table reflexivity: Negotiating positionality through everyday talk. *Gender, Place & Culture*, *22*(6), 747–763.

Kumwenda, M., & Chileshe, P. R. K. (2019). Mining Induced Displacement and Resettlement (MIDR): A Case of Muzabula Compound in Solwezi Mining District Zambia. *Journal of Natural and Applied Sciences*, *3*(1), Article 1. https://doi.org/10.53974/unza.jonas.3.1.464

Langmead & Baker Communications. (2022a, May 31). FQM Discloses Record Contributions to Zambia in 2021. *Langmead & Baker Communications*. https://www.langmead.com/?p=2213

Langmead & Baker Communications. (2022b, October 11). FQM Unveils Solwezi's Newest Beacon for Education and Spiritual Development. *Langmead & Baker Communications*. https://www.langmead.com/?p=3097

Langmead & Baker Communications. (2022c, October 20). FQM Calls for Enhanced Sustainable Agricultural Production. *Langmead & Baker Communications*. https://www.langmead.com/?p=3190

Lanning, G., & Mueller, M. (1979). *Africa Undermined: Mining companies and the underdevelopment of Africa*. penguin Books Harmondsworth and New York.

Liboiron, M. (2021). *Pollution is colonialism*. Duke University Press.

Lungu, J., & Mulenga, C. (2005). *Corporate social responsibility practices in the extractive industry in Zambia*. Mission Press Ndola,, Zambia.

Makwara, T., Dzansi, D. Y., & Chipunza, C. (2023). Contested Notions of Ubuntu as a Corporate Social Responsibility (CSR) Theory in Africa: An Exploratory Literature Review. *Sustainability*, *15*(7), Article 7. https://doi.org/10.3390/su15076207

Mamdani, M. (2018). *Citizen and Subject: Contemporary Africa and the Legacy of Late Colonialism*. Princeton University Press. https://doi.org/10.23943/9781400889716

Mapapayi, J. (2017, August 31). Kifubwa River Acid Spillage Contained [Facebook.com]. *Daily Nation Zambia*. https://www.facebook.com/dailynationews/posts/1106738722789445/?comment_id=1106930082770309

Matenga, C. R., & Hichaambwa, M. (2017). Impacts of land and agricultural commercialisation on local livelihoods in Zambia: Evidence from three models. *The Journal of Peasant Studies*, *44*(3), 574–593.

Mayondi, W. (2014). *Mining and Corporate Social Responsibility in Zambia: A case study of Barrick Gold Mine*. http://researcharchive.vuw.ac.nz/handle/10063/3354

Mbembe, A. (2001). *On the postcolony*. University of California Press.

Mbilima, F. (2021). Extractive industries and local sustainable development in Zambia: The case of corporate social responsibility of selected metal mines. *Resources Policy*, *74*, 101441. https://doi.org/10.1016/j.resourpol.2019.101441

McGee, N. (2021, November 15). Stressing independence of search, First Quantum Minerals taps son of chairman as next CEO. *The Globe and Mail*.

https://www.theglobeandmail.com/business/article-stressing-independence-of-search-first-quantum-minerals-taps-son-of/

Mitimingi, T. C., & Hill, M. (2021, October 29). Zambia Announces Mining Tax Breaks, Pares Deficit in 2022 Budget. *BNN Bloomberg*. https://www.bnnbloomberg.ca/zambia-announces-mining-tax-breaks-pares-deficit-in-2022-budget-1.1674113

Moore, H. L., & Vaughan, M. (1994). *Cutting down trees: Gender, nutrition, and agricultural change in the Northern Province of Zambia, 1890-1990.* James Currey Publisher.

Mühr, B. (2018, May 28). *Solwezi*. Klimadiagramme Weltweit. https://www.klimadiagramme.de/Afrika/Plots/solwezi.gif

Namwanja, K. M., Siachoono, S. M., Yambayamba, A. M., & Chama, L. (2018). The Impact of Mine Effluents on the Water Quality and Macrophyte Plant Communities in the Kifubwa Stream, Solwezi, Zambia. *Natural Resources*, *09*(05), 198–211. https://doi.org/10.4236/nr.2018.95013

Negi, R. (2011). The micropolitics of mining and development in Zambia: Insights from the Northwestern province. *African Studies Quarterly*, *12*, 27–44.

Noyoo, N. (2016). *Corporate Social Responsibility Forays in Southern Africa: Perspectives from South Africa and Zambia* (pp. 69–83). https://doi.org/10.1007/978-3-3-319-26668-8

O'Callaghan, M. (2019). *Copperfields: A history of the impact of the first decade of mining boom in the North Western province of Zambia CIRCA 2002-2005.* Canberra.

Rattray, J. M., & Wild, H. (1961). Vegetation Map of the Federation of Rhodesia and Nyasaland. *Kirkia*, *2*, 94–104.

Rodney, W. (1973). *How Europe Underdeveloped Africa*. Bogle-L'Ouverture Publications, London and Tanzanian Publishing House.

Said, E. W. (1979). *Orientalism*. Vintage.

Saunders, R., & Caramento, A. (2018). An extractive developmental state in Southern Africa? The cases of Zambia and Zimbabwe. *Third World Quarterly*, *39*(6), 1166–1190.

Schultz, J. (1976). *Land use in Zambia. Part I: The Basically Traditional Land Use Systems and their Regions*.

Simon, D. J., Pletcher, J., Siegel, B. V., & Grotpeter, J. J. (2008). *Historical dictionary of Zambia* (3rd ed). Scarecrow Press.

Soils Section, Research Branch, Department of Agriculture, Zambia. (1967). *Soils map of the Republic of Zambia. The Republic of Zambia. Atlas Sheet No. 12.* [Map]. Surveyor General, Ministry of Lands and Mines, Republic of Zambia.

Southern Africa Resource Watch. (2020). *First Quantum Minerals Corporate Governance And Social Responsibility: Kansanshi Mine*.

Taylor, C. (1971). Interpretation and the Sciences of Man. *The Review of Metaphysics*, *25*(1), 3–51.

The Government of the United States of America, The Government of the Democratic Republic of the Congo, & The Government of the Republic of Zambia. (2022). *Memorandum of Understanding*. https://www.state.gov/wp-content/uploads/2023/01/2023.01.13-E-4-Release-MOU-USA-DRC-ZAMBIA-Tripartite-Agreement-Tab-1-MOU-for-U.S.-Assistance-to-Support-DRC-Zambia-EV-Value-Chain-Cooperation-Instrument.pdf

United States Environmental Protection Agency. (2023, April). *Greenhouse Gas Equivalencies Calculator*. https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results

Velásquez, T. A. (2012). The science of corporate social responsibility (CSR): Contamination and conflict in a mining project in the southern Ecuadorian Andes. *Resources Policy*, *37*(2), 233–240. https://doi.org/10.1016/j.resourpol.2011.10.002

Wainaina, B. (2019, May 2). How to Write About Africa. *Granta*. https://granta.com/how-to-write-about-africa/

Watts, M. J. (2005). Righteous Oil? Human Rights, the Oil Complex, and Corporate Social Responsibility. *Annual Review of Environment and Resources*, *30*(1), 373–407. https://doi.org/10.1146/annurev.energy.30.050504.144456

Whitfield, S., Dougill, A. J., Dyer, J. C., Kalaba, F. K., Leventon, J., & Stringer, L. C. (2015). Critical reflection on knowledge and narratives of conservation agriculture. *Geoforum*, *60*, 133–142. https://doi.org/10.1016/j.geoforum.2015.01.016

Zalik, A. (2004). The Niger delta: 'Petro violence' and 'partnership development.' *Review of African Political Economy*, *31*(101), 401–424. https://doi.org/10.1080/03056240420005512

Zalik, A. (2009). Zones of exclusion: Offshore extraction, the contestation of space and physical displacement in the Nigerian Delta and the Mexican Gulf. *Antipode*, *41*(3), 557–582.

Zambia. (1996). *Lands Act*. https://zambialii.org/akn/zm/act/1995/29/eng@1996-12-31

Zambia Extractive Industries Transparency Initiative. (2012). *Independent Reconciliation Report for the Year 2009* (p. 80). https://zambiaeiti.org/wp-content/uploads/2017/05/2009-Reconciliation-Report.pdf

Zambia Extractive Industries Transparency Initiative. (2014). *Reconciliation Report for the Year 2011* (p. 103). https://zambiaeiti.org/wp-content/uploads/2017/05/2011-Reconcilation-Report.pdf

Zambia Extractive Industries Transparency Initiative. (2015a). *Eighth Report* (p. 80). https://zambiaeiti.org/wp-content/uploads/2017/05/ZEITI-2015-Reconcilation-Final-Report-220217-3.pdf

Zambia Extractive Industries Transparency Initiative. (2015b). *Seventh Report of the Zambia Extractive Industries Transparency Initiative (ZEITI)* (p. 279). https://zambiaeiti.org/wp-content/uploads/2017/05/ZEITI-2014-Reconcilation-Final-report-December-15-2015.pdf

Zambia Extractive Industries Transparency Initiative. (2018). *9th Zambia EITI Report* (p. 97). https://zambiaeiti.org/wp-content/uploads/2018/12/Zambia-EITI-Report-2016.pdf

Zambia Extractive Industries Transparency Initiative. (2019). *10th Zambia EITI Report* (p. 193). https://zambiaeiti.org/wp-content/uploads/2019/12/2017_ZEITI_Report.pdf

Zambia Extractive Industries Transparency Initiative. (2020a). *11th Zambia EITI Report* (p. 153). https://zambiaeiti.org/wp-content/uploads/2020/06/ZEITI-Report-2018.pdf

Zambia Extractive Industries Transparency Initiative. (2020b). *Zambia EITI Report 2019* (p. 168). https://eiti.org/sites/default/files/attachments/zeiti_report_2019.pdf

Zambia may be taxing the mines to death, says Outgoing First Quantum Minerals Chairman Matt Pascal. (2019, January 2). *Lusakatimes*. https://www.lusakatimes.com/2019/01/02/zambia-may-be-taxing-the-mines-to-death-says-outgoing-first-quantum-minerals-chairman-matt-pascal/

Zambia Statistics Agency. (2022). *2022 Census of Population and Housing*.

Zelinsky, W. (1980). North America's Vernacular Regions. *Annals of the Association of American Geographers*, *70*(1), 1–16.

Appendices

Appendix A. Interview Questions

Open-ended questions:

- Could you please tell me how you came to live here in Solwezi?
- Could you please tell me about your relation to the Kansanshi mine?
- Could you please tell me about your experiences with the Kansanshi mine?
- Could you please describe your experiences with the corporate social responsibility programs of First Quantum Minerals (FQM)?
- Could you please tell me what mining companies in North-Western province, like FQM, do for the communities where they work?
- Could you please share your understanding and ideas about what mining companies should do for the people living near the mine?

Prompts for clarification should specific answers not have arisen in the above semi-structured discussion:

General information

- What do you do for work?
- How far from the Kansanshi mine do you live?
- How long have you lived in this particular place?
- How long have you been living in Solwezi?

- If applicable, when did you move to Solwezi? Why?

Corporate social responsibility

- Do daily operations of the Kansanshi mine affect you or your household? In what ways?
- Are you aware of FQM corporate social responsibility programs?
- Have they affected you or your household in everyday life? If so, in what ways?
- How did they affect your community?
- How effective are these practices?
- Did they affect your relations with neighbours and other townspeople?
- What are your views on the Kabitaka and the Golf Estate housing?
- Has your access to water changed recently? (Or as a consequence of the FQM project?)
- Has your access to education changed recently? (Or as a consequence of the FQM project?)
- Has your access to healthcare changed recently? (Or as a consequence of the FQM project?)
- In the past, if you had any concerns or grievances with the Kansanshi mine, did you share them with anyone? What will you do if any were to come up in future?
- What kinds of actions, if any, do you think mining companies should take to improve the living conditions and well-being of the communities where they operate?
- If so, what issues, in particular, should FQM address?
- What kinds of actions, if any, do you think mining companies should take action in reducing the negative impact of their operations on society and the natural environment?
- What issues in its operations should FQM address/change?

Appendix B. Nkana-Kitwe Map

Figure 11. *Land use regions within and around Nkana-Kitwe, 1963*

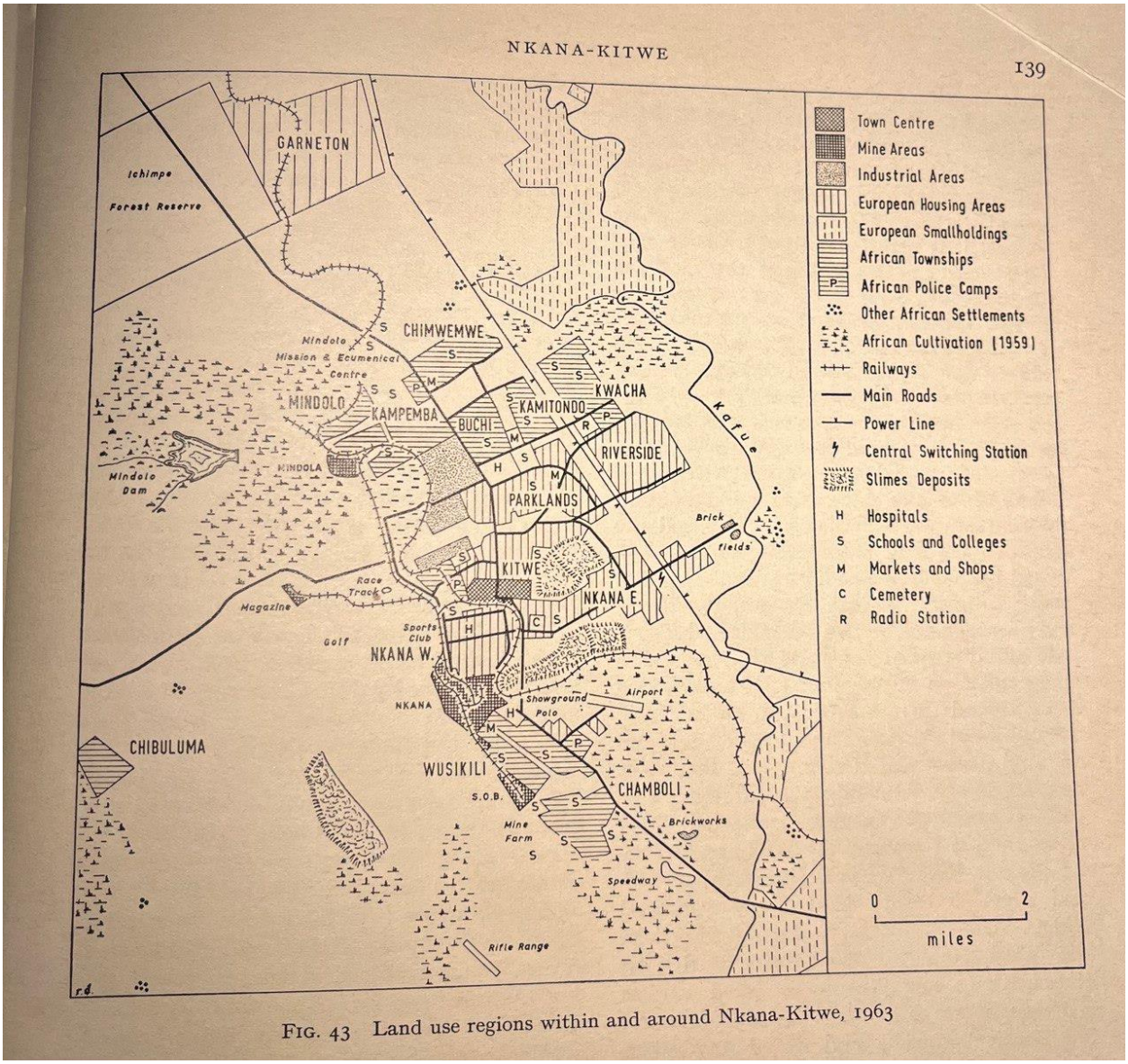


FIG. 43 Land use regions within and around Nkana-Kitwe, 1963

Note. Retrieved from Kay (1967), p. 139.

Appendix C. Fire-Related Land Use Vignettes in Solwezi, July 2022

Fires in July are seldom.

They are usually not associated with chitemene and are burnt to clear the plot from weeds.

Or a part of the plot.

Sometimes, the fire can spread onto neighboring fluvial valleys and dambos that become dry during winter months.

Appendix D. Life Around Extraction

In Kabwela.

At the Congo Road.

The reservoir that was promised to the displaced farmers.

A stream, tributary to the Kifubwa River, flows out of the reservoir at the Kansanshi mine.

A truck carrying acid leaves Kansanshi.

Ore truck headed to the Copperbelt.

A small tornado picks up dust at the mine.