Article

"When Gold Remains in the Ground, it will not Rot": Corporate Social Responsibility Imbalances between Mining Companies and Host Communities in Ghana

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ABSTRACT

Much as the operations of mining companies have inevitable implications for their hosts, corporate social responsibility (CSR) has become a critical redress channel for engaging stakeholders. With huge amounts of resources dedicated to the implementation of various CSR initiatives, what remains unaddressed is whether those investments really yield their intended outcomes. This study demonstrates how Western conceptualizations of CSR reporting is disconnected from the expectations of indigenous stakeholders. Data from the sustainability and annual reports of large mining companies and in-person interviews with stakeholder representatives drawn from mining communities in Ghana was used to examine the CSR initiatives of mining companies, measuring them against the expectations of their hosts. The findings suggest that although mining companies mostly engage in CSR commitments that seem to align with fundamental regulatory requirements, the expectations of locals remain largely unfulfilled. The key reasons for this include the firm-centric, top-down approach of mining companies in determining their CSR priorities, the discretionary nature of CSR and the lack of cohesion between mining companies' CSR in contrast with the expectations of beneficiary communities. To these findings, a more consultative and participatory approach in carrying out CSR projects by large mining companies is recommended.

KEYWORDS: CSR disclosure; social responsibility gaps; community development; rural livelihoods; local participation; multinational mining companies; resource governance; sustainability reporting

JEL Codes: M14; N57; P28; Q32

INTRODUCTION

As one of the key sources of income to stimulate economic growth, mineral wealth continues to play its crucially needed developmental role [1–3]. Ghana's gold mining industry has existed for several centuries, lending the needed support to the country's economic development as one of its most notable export commodities and earning her the envious reputation as a top global gold-producing country [4–6]. While some authors [7,8] trace the industry's foundations to the sixth century, the peak of the country's popularity in gold mining and trade was perhaps attained around the 15th and 16th centuries when she became known as the 'Gold Coast' by European explorers and later, colonialists [9,10]. Since 1986, Ghana's mining and minerals exploration sector has attracted over US$6 billion direct investment making her one of Africa's foremost producers of gold and in 2022, the country was rated Africa's largest and the world's sixth highest gold producer by production volumes [11].

Equally, the mining sector's input to the socio-economic development of Ghana has been well documented; its contribution to the Gross Domestic Product (GDP) rising progressively over two decades, from 1.3% in 1991 to 14.4% in 2011 [12]. In 2022 however, the contribution of mining to the country's GDP stood at 7.6% and yielded a total of US$482.2 million by the end of the second quarter of 2023 [4]. In terms of participation, the industry has largely been dominated by large foreign mining companies although in recent times, there has been a surge in artisanal small-scale mining (ASM) activities.

It is undeniable that mining operations pose adverse impacts on host communities and undoubtedly threatens the livelihoods of residents in those areas. Incidents of air and water pollution, spillage of hydrocarbons, dust emissions, excessive noise and vibrations have often resulted in community displacements, loss of economic livelihoods, damages to cultural heritage sites and depletion of the ecosystem [13,14].

To make up for some of these ravaging effects of mining on their hosts, many large mining companies continue to design and roll-out CSR projects that end up addressing their self-seeking global or corporate performance goals rather than the socio-economic issues as pertains within their communities of operation [15]. According to [16,17], the unique situations of developing countries require a shift from the typically Western-centric approaches of CSR as has been currently adopted by many of the large mining multinational companies to a regime where the tailored needs of these communities are represented.

As much as developing countries differ from the developed in terms of their cultural, geo-political and socio-economic realities, the needs that inform their CSR expectations are also unique [18,19]. According to [20], the practice of CSR in developing countries is heavily influenced by deep-rooted traditions of philanthropy, ethics and community centeredness. Similarly, [21] observed that, in such settings characterised by 'weak institutions and poor governance', the large multinational companies are expected to use their CSR engagements as vehicles for development in

providing the needed social goods such as: roads, education, electricity and improved healthcare [22]. The growing discourse around these themes notwithstanding, the central issue remains unaddressed, which is what areas of priority do mining host communities want the large multinationals to address and how are those areas of priority determined? [23–25].

Several implementation gaps have been identified by prior literature. First is the noticeable disconnection between mining companies' CSR initiatives and the expectations of their communities [24,26]. Secondly is the top-down approach to CSR implementation adopted by multinational mining companies. According to [23] the direction of CSR commitments of many large mining companies is determined at the global corporate level thereby missing the most pressing needs of their hosts. Thirdly, even in a few cases where these CSR programs seem to be aligned, many of them fail to sustainably provide the needed socio-economic goods to their beneficiaries beyond mine closure. Lastly, others similarly lack a long-term positive outlook [27,28] or miss the involvement of local stakeholders [29].

The Ghanaian case is especially unique for this assessment in that aside a set of well-defined regulatory requirements, it presents a distinctive interplay of interests between the agenda of state agencies, traditional authorities, powerful market players, financiers, political entities and community members who collectively play crucial mediation roles and who exert significant influences in the governance of mining-related CSR [30]. With these gaps unaddressed, this study explores current CSR activities of large mining companies, relating them with the expectations of mining host communities and their sustained livelihood interests.

LITERATURE REVIEW

The Context of Gold Mining in Ghana

For many centuries, Ghana has been noted for her rich precious mineral deposits of bauxite, diamond, manganese and quite recently, lithium. Gold has however become the most important contributor to the country's minerals economy, accounting for nearly 95% of the total mineral exports from the country in 2023 alone. Ghana is also currently ranked as the largest producer of gold on the African continent and one of the top ten across the globe [31]. This makes the host communities of these gold mines hot locations of strategic importance to mining companies and to the country's economic development interests [25]. However, a growing awareness among host communities that, beyond being offered occasional handouts, their natural resources should be used primarily to improve their livelihoods has occasioned a lot of dissatisfactions towards large mining companies with deep-seated sentiments of their expectations not being satisfactorily met [28].

Practice of Corporate Social Responsibility in Ghana's Mining Sector

Ghana's mining industry despite attracting huge capital investments overtime, has historically been criticised for not being particularly sensitive to the impact of its activities on the environment and on the livelihoods of affected locals [32–34]. In recent years however, the industry appears to be taking their environmental and social responsibilities more seriously especially among the multinational mining companies [24,35,36].

According to [37] the European Commission defines the CSR concept as "an arrangement that requires organizations to, on their own accord, integrate social and economic concerns in their operations and in how they interact with their stakeholders". Thus, by this definition, CSR goes beyond just a mere fulfilment of the traditional business expectations, to a commitment to stakeholders and the environment—in minimizing the adverse aftermaths of their operations and in maintaining a healthy relationship with all stakeholders [36,38]. While some semblance of CSR towards host communities has always existed among extraction and mining companies, it used to be a less prioritised, voluntary and philanthropic gesture. In 2001 however, there was a widely reported incident of cyanide spillage from one of the mines operated by a multinational mining company in Ghana which heightened the advocacy for such undertakings [24,39–41]. From this point forward, there has been a mix of both responsible and not so trustworthy CSR actions that have impacted on many stakeholders [42].

Current Areas of CSR Interventions among Mining Firms in Ghana

According to [24], the practice of CSR in Ghana's mining industry may be classified under six categories—philanthropy and community involvement, environment, work ethics, health and safety, respect for the law and financial sustainability. Accordingly, the practice of CSR in Ghana has been demonstrated widely through interventions in affirmative action policies (such as employing from host communities, outsourcing sub-contracts to local competent companies and prioritising local procurement value chains), payment of royalties to local authorities and land custodians, statutory payments, the provision of social infrastructure (including schools, healthcare facilities, roads, potable water and electricity) to host communities and the implementation of various alternative livelihood projects (in animal rearing, aquaculture, crop cultivation and batik tie-and-dye making) [29,43,44]. Setting these CSR initiatives against the social and environmental impacts of mining in terms of environmental pollution, threats to the health of locals, the fast-declining employment opportunities and given that, many of these CSR initiatives are not sustainable after mine closure however, there seems to be much more that host communities expect of mining companies [43,45].

Current CSR Reporting Models and their Disconnect from Non-Western Stakeholder Expectations

Given the mining industry's significant impact on host communities, mining companies in Ghana are required to not only balance their economic interests with social and environmental responsibilities but also publicly disclose such commitments. Accordingly, within the Ghanaian context, CSR reporting has evolved significantly with various frameworks, models and guidelines being used to communicate the CSR activities, performance and impact of large mining companies. Key among these models include: the Global Reporting Initiative (GRI), the ISO 26000 Guidance on Social Responsibility, the Equator Principles (EP), the Triple Bottom Line (TBL), the Sustainability Accounting Standards (SAS) and the UN Global Compact (UNGC) [28,46]. Aside these popular frameworks, there are other local content regulations and environmental impact assessment laws that require the disclosure of certain CSR actions by mining companies.

Globally, the GRI is a dominant player in the field of CSR reporting with over 85% of the world's largest corporations adopting its reporting standards and with considerable scholarly attention [47,48]. Within the Ghanaian context however, the GRI model is particularly popular because of its structured and comprehensive ways of reporting both positive and negative outcome of mining operations [49–51]. This model is also preferred as it allows for easier comparability of CSR practices across different mining companies and industries thereby making it a trusted framework among many stakeholders [46]. Added to that, the three features of the GRI framework—environmental disclosure (mandatory reporting of mining companies' intervention to minimize environmental impacts), social impact (data on companies' contributions to local community welfare) and materiality (emphasizes the most significant business issues among stakeholders)—aligns it favourably with both international standards and the engagement of local needs [52].

Despite the popularity and wide usage of the GRI reporting model in Ghana's mining industry, the framework is not without its own inefficiencies. First, the disconnection of the framework from local community needs makes it lack the granular effect on meaningful community involvement. Accordingly, the failure of the framework to ensure the participation of beneficiary communities in CSR-related decision-making processes limits its ability to influence local realities [53]. Because the GRI framework allows that companies report their CSR activities at the corporate or global level, the significance of site-specific issues and local community needs is often diluted [54,55]. Since the GRI framework fails to provide a clear pathway for engaging local stakeholders especially within the Ghanaian context where CSR is an entirely voluntary affair, there is the need for a more inclusive arrangement which gives a stronger voice to locals in ensuring that, CSR initiatives by mining companies are not just a matter of compliance to

regulatory expectations but a genuine tool for advancing local development.

Mining CSR-Related Gaps and Host Community Expectations

The 'resource-curse' thesis has been used repeatedly to explain why communities that hold rich deposits of mineral resources are likely to be disadvantaged in terms of development [56,57]. Particularly in the context of developing economies, a commonly cited factor that accounts for this paradox is the tendency that, wealth gotten from these communities may be easily diverted to addressing other needs which are often not directly related to the developmental needs of these communities [58]. Yet, one of the mechanisms by which this 'curse' may be inhibited is through the instrumental role that CSR plays in ensuring that, the valid expectations of these important stakeholders are not overlooked. While the prerogative to determine which areas to focus their CSR initiatives on remains with the organization, it is important for such initiatives to consider the consultative participation of the people who may be affected by it.

As alluded to by [59], there is often a disconnection between local priorities and the global or strategic expectations of organizations when their mainstream CSR programs are determined from the top and only according to the strategic priorities of organizational directors. Accordingly, there seem to be a recurring tension between global expectations and local challenges which is partly due to the lack of appreciation that, CSR is not just a way by which organizations allow their stakeholders to share in their gains by meeting certain social obligations. It is also a gauge on the organization's social legitimacy by its stakeholders and thus, requires a reorientation of its focus from an organization-centred perspective to one that is grassroots-oriented [24,58].

It is well known that many host communities to projects that exploit non-renewable resources often have a wide range of expectations which are not necessarily homogenous, and which may largely vary from one community to another [60]. The Ghanaian mining sector laws and policies seem to have set the tone for what mining companies could consider as part of their CSR projects [28,36]. These include sustainable employment and livelihood enhancement initiatives, infrastructural projects, investments in education, health and safety, statutory payments, compensations and royalty payments, human rights and social inclusion as well as environmental stewardship.

It is important to point out however that, several of the CSR expectations of these host communities might as well fall within the scope of government responsibilities. This raises issues of 'political CSR' where organisations are compelled to use their CSR investments to fix what should have been the state's responsibilities [61,62]. As a convenient way through which many governments renege on their developmental responsibilities to host communities, this phenomenon has been found to further deteriorate the plights of locals [58,61]. These blurry lines notwithstanding, some pathways by which private companies may

contribute to national development through their CSR have been identified by previous studies [5,63,64]. These include including job creation and employment, national income contribution, production of needed goods and services, tax revenue contributions, payment of royalties, social interventions, facilitation of capital flow as well as engagement in social infrastructural investments. Whichever way it is realized, an evident gap remains in how mining companies apply their CSR to meet the most persistent expectations of their hosts which this study is intended to address with these research questions:

RQ1. What are the current areas of intervention by mining companies when it comes to their CSR initiatives in host communities?

RQ2. What are the expectations of host communities regarding mining companies' CSR projects?

RQ3. What gaps must be addressed in terms of host communities' expectations and mining companies' CSR undertakings?

METHODOLOGY

Research Setting

The choice of Ghana for this study is informed by her unique profile as a mature mining destination, her reputation as a trendsetter in mining resource governance and mining regulation in Sub-Saharan Africa [65,66] albeit her unimpressive record of not living up to expectations when it comes to advancing the interests of mining communities [39]. Five mining host communities from four administrative districts and three regions of Ghana—Obuasi, Tarkwa-Nsuaem, Wassa East and Prestea-Huni Valley— were selected for this study since these regions have the highest concentration of gold deposits thereby hosting several multinational gold mining companies [67,68]. The total population of these three regions is some estimated 311,000.

Study Design

The qualitative design was adopted as it allows for an in-depth understanding of the issues [68]. A two-staged data gathering approach was also employed—first, a thematic analysis, and secondly in-person interviews. The thematic analysis was conducted of the annual sustainability reports and related publications of sixteen major mining multinationals. The rationale for consulting these reports is in the transparency and accountability they provide [69], their ability to serve as a source of data for longitudinal analysis for benchmarking across different years [70] and for the unique insights they offer as direct sources of CSR data [56].

These reports and publications regarding the CSR activities of the multinational mining companies (over a two-year period from 2021 and 2022) were analysed using the thematic analysis method to find out the nature and trends of their CSR activities. The thematic analysis was preferred because of its ability to capture context-specific situations [71],

data-driven nature [72], its suitability for cross-referencing with interviews [73,74] and by its practicality and flexibility which made it possible to analyse the practice of CSR in these organizations without being constrained by pre-existing coding frameworks [75]. The process of analysis involved categorizing the CSR initiatives as reported by the mining companies into codes based on the GRI framework. The coding framework included themes on the environmental, social and economic impacts of mining, the effectiveness of reported CSR initiatives and the involvement of local stakeholders.

The in-person interviews were held with selected gatekeepers, customary authorities, mining sector experts, local government officials and opinion leaders from the mining communities. Using the purposive sampling technique, a sample of twenty-three independent participants (IPs) was selected from five host communities in the three regions (Ashanti, Western and Western North) where most of the multinational mining organizations operated. Combining the thematic analysis of CSR reports with the interview data was a useful validation strategy that helped to strengthen the trustworthiness of the analysis by cross-verifying information from different data sources [73,74]. Accordingly, a mix of different approaches including using a diversified but representative sample, a culturally sensitive interviewing approach, use of open-ended neutral questioning strategies and employing the techniques such as intra-coder reliability and triangulation were employed to minimize potential biases.

Participant Sampling and Data Collection

The sampling process involved determining the sampling criteria, identifying the target population based on that criteria and selecting the participants who possessed the characteristics that fit the criteria and the study's interests. The inclusion criteria that guided the identification of participants included community leaders with involvement in mining CSR issues over the past three years, individuals who have participated in or benefitted from CSR projects over the past three years, both traditional and elected local community leaders in the selected mining towns, knowledgeable residents affected by the impacts of mining and civil society groups or advocates with a focus on mining. The purposive sampling approach was important for targeting key informants [76,77], achieving representation of various stakeholder segments [78] and for achieving data saturation [79].

The participants offered very useful perspectives on the issues being investigated by this study. With the help of an already pre-tested interview guide (the pre-testing involved six informants selected from two different mining community which were not part of the main study) based on the study objectives and which was intended to give some formal structure to the conversations [80], different viewpoints were captured from participants on the subject matter of host communities' understanding and expectations of CSR.

The interview questions included what the current areas of CSR interventions by multinational mining companies are, the most important host community expectations that mining companies' CSR plans should address, and possible gaps with hosts' expectations versus mining companies' CSR that needed to be addressed. To contextualize the discussions, the interviews also briefly touched on the challenges posed by mining activities to host communities. Participants' consents were sought, and the conversations were held only upon the permission of respondents and recorded for later transcription and analysis purposes [81].

Data Processing

Using the *ATLAS.ti* version 9.1.7 software, a thematic analysis of the responses was conducted to identify the main ideas as well as new insights on the issues raised [82,83]. The coding practice implemented in this analysis involved the development of a coding framework which was based on the themes of the research objectives. These themes included CSR practices of mining companies, host community expectations, impact of mining operations on host communities and the challenges posed by mining to host communities. Further, the *ATLAS.ti* software used for the qualitative analysis served as an intra-coder reliability measure that helped in ensuring transparency and reliability in the coding practice. This tool has special features that aided in keeping track of codes and themes and in ensuring their consistent application throughout the analysis.

With these reports serving as the main unit of analysis of mining companies' CSR, an analysis of the alignment of their CSR activities was conducted based on the guidelines of GRI 14 which spells out the specifics for the mining sector. The reporting themes of this framework included the environmental, social and economic impacts of mining. Added to that, the coding rules also considered the reporting of local stakeholder involvement where emphasis was placed on community consultation, evidence of dialogue and local collaboration, evidence of the support for local initiatives as well as community feedback mechanisms. This way, the coding rules helped assess whether the reported CSR activities were predominantly global or local in focus.

An interpretive analysis process was also applied to the qualitative interview responses since this allowed the researchers to separately analyse each interview and categorize the responses into general themes that addressed the research questions [84,85]. Direct quotations from some of the interviews were also cited in the discussions to contextualize, clarify and enrich the discourse [86,87].

RESULTS

Areas of Intervention by Mining Companies through CSR Initiatives

The sustainability and corporate responsibility report as well as other related publications of sixteen multinational mining companies were analysed over a two-year period (2021 and 2022). It was observed that, the

CSR activities of these companies were typically revolving around ten general themes. These include employment of locals, involvement of local suppliers in procurement and sub-contracts, environmental stewardship, investment in alternative livelihood projects, human capital development, healthcare and safety, investments in physical infrastructure, grievance management, resettlement and compensation payments and the preservation of cultural heritage and sacred sites. These CSR initiatives were further observed to be centred around specific United Nations' (UN) sustainable development goals (SDGs) no poverty (SDG 1), zero hunger (SDG 2), good health and wellbeing (SDG 3), quality education (SDG 4), clean water and sanitation (SDG 6), decent work (SDG 8), sustainable communities (SDG 11), responsible production (SDG 12), climate action (SDG 13) and peace, justice and strong institutions (SDG 16). Nonetheless, these CSR initiatives largely focus on the social dimension of the triple bottom line.

In terms of the level of commitment to the non-mandatory CSR initiatives however, the results suggest a rather low involvement by mining companies to four of the ten identified areas of intervention. Aside the ones that are obligatory demands placed on them by the Minerals and Mining Regulations LI 2173 (2012) and the Local Content Legislation LI 2204 (2013), many of the other voluntary initiatives were largely ignored, although some of them (i.e., resettlement and compensation, preservation of cultural heritage and grievance management) were largely occasional. A summary of mining companies engaged in each of these CSR activities is presented in Table 1.

Table 1. Areas of CSR activities as reported by mining companies in 2021 and 2022.

Nature of CSR initiative	Main Dimension(s) of Sustainability Covered	No. of Mining Companies Engaged in Initiative	Percentage of total sample (%)
Employment of residents*	Social, economic	15	100
Inclusion of local suppliers in sub-contracts and procurement*	Social, economic	15	100
Environmental and biodiversity stewardship*	Environmental	15	100
Alternative livelihood projects and support to small businesses	Social, economic	5	33
Education and human capital development	Social, economic	4	27
Community relations and grievance management	Social	3	20
Resettlements and payment of compensations*	Social, economic	2	13
Preservation of cultural heritage and sacred sites	Social	2	13
Physical infrastructural investments	Social, economic	3	20
Healthcare and safety	Social, economic	5	33

* Mandatory activities.

Host Communities' Expectations of Mining Companies' CSR Projects

The legitimacy theory suggests that an organization is likely to achieve acceptance when it behaves in a manner that is in line with the established norms and expectations of its stakeholders [88,89]. Thus, by engaging in CSR that addresses host communities' most important needs, mining companies may improve their relationship with these communities. It is particularly important to do so because host community expectations could form a basis for supportive or disruptive community actions towards mining companies [90]. The most highlighted themes by host communities as measured by coding frequency related to issues of employment and livelihood, health and security, human capital development, infrastructural investments, environmental stewardship and community involvement.

Sustainable alternative livelihoods and employment

The mining policies and regulations in Ghana insist on mining companies engaging in alternative livelihood projects and employing locals as a way of addressing the imbalances and disruptions that may arise out of their activities. According to [82], this gesture is important in addressing the potential local impacts of mining. Interactions with community informants revealed some areas that they would like mining companies to direct their CSR attentions to. Key among these include investments in human capital, sustainable livelihoods and employment. An informant indicated that,

"The most important thing we need from them is employment. Many of our youth have finished school but they are at home. It is only a few of them that have been employed by the mines. Even that, they have started laying-off people since last year. Things are hard. Those are the people you see doing galamsey". (Subchief 3, November 13, 2023).

On that same theme of employment and livelihood support, another respondent expressed how unsustainable some of the livelihood support projects by the mining companies may be when he stated that,

"Honestly, the mining companies employ local people and train others to start their own trades. In this community, I know a few people who have benefitted from the vegetable farming and piggery projects sponsored by Anglogold. However, many of the projects become unsustainable beyond mine closure and leaves many of their beneficiaries worse off. Some even stop their businesses to engage in galamsey. The general feeling among many of these people is to be employed in the mines". (Mining Industry Expert 2, November 12, 2023).

Healthcare and security

Howsoever well it is managed, mining operations have a long history of adverse health impacts and insecurity to the environment and human societies [3]. Several studies have demonstrated many adverse health impacts of mining on affected communities [91,92]. While the wider

determinants of human health and safety in mining host communities are quite widespread and complex, the voices of affected communities seem to be heavily underrepresented [93]. The views and experiences expressed by respondents showed how concerned they were about the situation of their communities' healthcare and security. A participant for instance lamented that,

"The companies use various explosives and dangerous chemicals in their activities. I know these things have some effect on us. Do you remember what happened last year at Appiate when some chemical explosion wiped out almost an entire village? So, it is equally a big worry to us, and we expect them to handle those things more responsibly". (Mining Community Resident 5, November 18, 2023).

Another expressed his frustrations about the situation of declining health and rise in insecurity when he re-echoed similar sentiments that,

"There is so much to worry about when it comes to our health and security. Aside their chemicals contaminating our water and soil, they produce a lot of dust which is not good for our breathing. I have also seen that criminal activities are on the increase in mining areas because it attracts all manner of people into our communities". (Opinion Leader 2, November 15, 2023).

Investment in social infrastructure

According to [94], a proactive way to minimize the adverse impacts of mining on host communities is to embark on social infrastructural investments that facilitate rural development. These investments could be construction of road networks, educational facilities, healthcare facilities and the provision of potable water and electricity. While these social projects may not adequately compensate for the damages caused, they are one of the ways to make life in these areas more bearable [95]. Respondents bemoaned the weak contributions of mining companies to social infrastructural investments in their host communities. In his reflection, one of the participants asserted that,

"Elsewhere in other mining communities in Ghana, mining companies construct roads, build schools, provide electricity, water and even give scholarships to students. I am saying they should do similar things here too because the same laws that regulate those other companies there applies here too". (Local Government Representative 2, November 11, 2023).

Similar sentiments were reiterated by another opinion leader who observed that,

"Before Asanko company established a hospital in Bontefufuo this year, we always travelled several kilometres to Nkawie to access healthcare. Because of that, many people depended on self-medication or herbal medicine. Thanks to the intervention of Nana Asantehene, who some years ago demanded from the mining company to establish a hospital for us. We would still have been without one. But mining has been going on here for several years". (Mining Community Resident 3, November 15, 2023).

A third respondent added that,

"You saw the deplorable roads you travelled on before getting here? Do they look like something that leads to a mining community? We still drink water from boreholes and some still fetch raw from the streams. But this is where they take most of the gold from". (Subchief 2, November 10, 2023).

Environmental stewardship and protection of water bodies

The interview with respondents further revealed their concerns about the environmental impacts of mining. According to [91], surface mining is one of the most widely used methods of mining in Ghana and involves the removal of the topsoil and vegetation with heavy machines. This way, the land is rendered infertile and unproductive for agricultural purposes. Even after mine closure, this approach of mining leaves behind deep pits and trenches that renders such sites inaccessible due to the potential hazards they pose. Other studies similarly reiterated that mining excavations have led to significant destructions to the ecosystem and loss of biodiversity which might take several decades to restore [96,97]. Reflecting on the devastations to the environment and ecosystem by mining activities, one respondent explained that,

"The mines occupy large portions of our farmlands and destroy our water bodies. Many plant and animal species get endangered by their activities and the land becomes useless for many years because you can't farm on them even if they do reclamation". (Mining Industry Expert 3, November 17, 2023).

Aside destructions to land and vegetation, mining operations have also been responsible for significant air and noise pollution. The release of dust, chemical gases and dangerous fumes from the use of explosives and other heavy machines as well as the noise from those activities has been linked to increased risks of respiratory infections, breathing disorders and hearing impairment [98,99]. Moreso, the use of chemicals like cyanide, lead, mercury and other heavy metals have equally leached into water bodies and farmlands, posing health threats to both humans and the aquatic ecosystem [100]. This sentiment was succinctly captured by one participant who asserted that,

"Growing up there were certain sicknesses that were unheard of among us. Today, such conditions like strange skin diseases, lung and kidney diseases and asthma have become common. Many old people have lost their hearing and sight. Babies have been born deformed. And when we go to the hospital, they tell us it is because our foods and drinking water have been contaminated with chemicals". (Mining Community Resident 2, November 10, 2023).

Community involvement and participation

According to [101], the protests, tensions and conflicts that often characterise the relationship between mining companies and their impacted communities could be significantly reduced when they work together to identify their mutual needs and collaborate to resolve them.

Engaging host communities also helps mining companies to build enduring partnerships that foster both business and community outcomes [101].

The respondents echoed their concerns about the weak ability of mining companies to consult and engage their hosts in determining their CSR initiatives. In the opinions of these respondents, it seems the CSR plans of many of the mining multinationals assume a top-down 'gift' approach—one that is largely driven by global strategic imperatives rather than connecting to the real situations of their hosts. Even in situations where there is some semblance of community consultation, it was found that such interactions are often limited, less inclusive and inadequate. Consequently, many of these undertakings by the mining companies are in most cases, detached from the development plans of their host communities [102]. From the interactions with respondents, it was clear that host communities desire higher levels of participation when it comes to identifying, designing and implementing mining companies' areas of CSR priorities. Perhaps, this lack of involvement is what has resulted in the observations that, the nature of CSR activities in many host communities is similar across different companies, differing only in terms of scope and largely having very little impact on the livelihood outcomes of intended beneficiaries [16,103]. One respondent for instance acknowledged that,

"When someone wants to do something for you, it is important that they involve you to know what you want. In many instances, they already decide what they want to do from Accra and only consult our traditional leaders for the land. Even with employment, there are a lot of people who work with these companies that are not from here. So, settlers come from other places to take our jobs and this happens because they don't engage us in their recruitment activities". (Subchief 1, November 6, 2023).

Another respondent echoed these feelings from the angle of the unsustainability of CSR projects beyond mine closure due to lack of the involvement of host communities when he explained that,

"The companies do not consider our views when they want to do something for the community. I am not saying they should go house-to-house asking everyone for their opinions but we have 'Nananom' (the chief and his elders), assemblymen, unit community members and other family heads here. Why don't they consult them in their planning? This is why when they finish their work here and close the mines, many of our people become worse-off". (Local Government Representative 1, November 8, 2023).

According to [104] framework, four levels of organizational obligations can be used to understand and prioritize societal expectations. Illustrating these levels with a four-layered pyramid, [104] identified economic, legal, ethical and philanthropic responsibilities as four areas that organizations can apply their CSR. Forming the base of the pyramid, the economic responsibilities involve organizational commitments to profit generation, achieving financial viability and delivering economic value to shareholders [105]. The legal responsibilities stress organizational compliance with local, national and international laws, regulations, codes

of best practices and other legal requirements such that their operations do not pose any threats to individuals, communities or the environment. Third is the ethical level of responsibility which requires organizations to engage in moral conducts even when it is not explicitly invoked by any laws. The final and highest level of [106] CSR pyramid addresses organizations' commitment to voluntary acts of giving back to the society and addressing critical issues of those societies. While the economic and legal responsibilities have always existed and have been mostly met by many of the mining companies, commitment to the ethical and philanthropic dimensions have largely been lacking [16] and it is important that, the CSR initiatives of the mining industry is directed at establishing actionable strategies that helps them navigate each of these four levels.

Gaps between Host Expectations versus Mining Companies' CSR

According to [24], the stakeholder theory predicts a negative relationship among stakeholders when there is a disconnect between expectations and reality. Thus, although mining companies generally engage in some direct CSR activities that may be of interest to their hosts, many of these engagements are lacking in depth and scope and at best, seem to fulfil only regulatory and policy requirements. While many of the foreign mining companies seem to lack an appreciation of the exact outcomes their hosts expect from their CSR activities, it appears the most important thing to them is ticking the boxes of regulatory obligations, many of which already create confusions about what locals should expect [106]. Accordingly, while the sectors of host community expectations are generally aligned with the regulatory demands of mining companies' CSR, a weak local governance system coupled with a dodgy enforcement of regulatory requirements conspire to render the priorities of the benefactor communities vague and unsustainable [106]. Here are three direct quotes to buttress this sentiment:

"The mining laws say they should create employment for our people, involve them in procurement, take care of the environment and all that. But looking at the situation on the ground, that is not the reality. Yes, they might have done some things to represent to the authorities that they are committed to these demands but these things they do don't really address any issues. For example, you take the farmland of many households and then you employ one or two people from the community to work in your mines. Does that really solve the livelihood problems of the others who are left out? But they will record it in their books that they have created employment for locals". (Mining Industry Expert 2, November 12, 2023).

Another participant submitted that:

"It is worrying to see some of the so-called investments in education being in the form of school uniforms, exercise books and donations of chocolate to school children when the obvious need of some of these communities is actually decent school buildings". (Opinion Leader 3, November 18, 2023).

Expressing concerns about the environmental devastations posed by mining activities to the communities, a third respondent added:

"I agree that mining companies do some work to recover the damage they cause to our environments, but does it make any sense to you that whole forests and water bodies are being destroyed because of mining yet our leaders only provide community standpipes and engage a few young people to plant trees? How sustainable is that? Everybody is losing sight of the long-term effects of these things we are doing today and it is not fair to the generations after us". (Environmental Activist, November 18, 2023).

Challenges Posed by Mining Activities to Host Communities

First, participants were asked about the challenges that activities of mining companies pose to their communities as previous literature portrays diverse challenges posed by mining activities to their hosts [13,107]. The trend of responses suggests three broad areas into which the concerns were categorized—economic, social and environmental. Regarding economic issues, the concerns raised by informants centred around their loss of farmlands and the livelihoods that depended on traditional income sources coupled with the attendant high cost of living in those areas. Consistent with an earlier study by [28], the informants suggested that their investments of many years in agriculture especially in cocoa, oil palm and rubber plantations have largely been interrupted by mining activities. One informant for instance asserted that:

"We used to work on our parents' cocoa and oil palm farms which were handed down to us because those lands belonged to the family. Many of us have benefited from these farms and have used that to also support our children through school. Today, they give us a compensation that does not come anywhere close to what we would have gotten from those farms. Tell me, how many years would all of us with our dependents survive on a small compensation that was paid onetime?" (Mining Community Resident 5, November 18, 2023).

In terms of the social problems, the participants were of the belief that the activities of mining companies have brought disruptions to their cultural and traditional values (through displacements, resettlements and the infiltration of their localities by migrant mine workers), conflicts between communities over competition for benefits and an unequal distribution of wealth. The practice of relocating settlements as is often occasioned by certain mining operations also seem to have some implications on the indigenes' cultural attachments to certain heritage sites like burial grounds, original places of settlement, etc. According to one participant for instance,

"The communities around here started as little cottages by our earlier relatives who settled here to farm. Today, we are fighting among ourselves over little tokens they give our traditional leaders. I cannot say that we are the same people ten or twenty years ago because people have been relocated into different communities and strangers keep coming here to work in the

mines. But I am not surprised that our community values have now reduced to selfishness, corruption and greed". (Subchief 1, November 6, 2023).

Another informant was concerned about the worsening family values, bonds of a strong social fabric and collective culture that used to be characteristic of their communities. He mentioned that,

"One thing that we used to value a lot growing up was how almost everyone in the community looked out for the other and there was little emphasis on social status. As a child, every elderly person was potentially your parent. Today, we have become individual households, and everyone is struggling to grab more. There are now very rich people here as well as extremely poor ones and nobody cares about the other person. I am not saying getting more money is bad but why should it make us not care about each other?" (Opinion Leader 1, November 13, 2023).

Regarding the environmental dimensions of the concerns raised, many of the sentiments had to do with deforestation, water pollution, poor air quality management and poor handling of chemicals, explosives and heavy metals. An informant retorted:

"For me, until we find a more sustainable way to manage this whole mining thing, government should stop all mining and exploration activities—whether by the big companies or by those who do galamsey. When the gold remains in the ground, it would not get rotten. After all, the benefits don't match our losses in any way. All the miners are guilty of bad environmental practices. They destroy our forests, use harmful chemicals on our waterbodies and use explosives that destroy our buildings. Even local government authorities and state institutions don't do much about it. The biodiversity of our hitherto rich rainforests has been depleted and many species of animals and plants have been compromised; the rivers are polluted, and we can't even eat fish from them. We breathe-in dust and polluted air every day. I know about the talk on CSR but how much compensation can one pay for all these destructions?" (Environmental Activist, November 18, 2023).

Although from the reports and publications of the mining companies it is evident that there are some CSR commitments toward the environmental, economic and social expectations of host communities, there seem to be a general view among the participants that many of these efforts are mere 'window dressings' lacking any serious commitments and cohesion with community expectations. In many instances, the informants lamented about the fact that there are no binding obligations placed on the mining companies to consult their host communities for any inputs to be made regarding such matters and thus, lacking in social legitimacy.

DISCUSSION OF FINDINGS

Previous studies have shown that mining companies may never be able to compensate enough for the adverse impact their activities visit on the lives of their hosts and the environment. This study used data across five mining host communities in three regions of Ghana and lends some

support to the observable realities and challenges faced by residents of mining communities in a way that contextualizes the problems from the perspectives of local gatekeepers.

Areas of Intervention by Mining Companies' CSR

This study established the undoubted engagement of multinational mining companies in CSR projects as an important source of rural development and a way to nurture good neighbourliness with host communities [28,108]. While it demonstrates the involvement of mining companies in various CSR initiatives in employment and alternative livelihood programs, sourcing goods and services from local suppliers, human capital and skills development, investments in social infrastructure, efforts at grievance management and the preservation of local culture, the study finds that the focus of the mining companies is on satisfying the mandatory CSR demands as required by law. Thus, many of their CSR interventions fail to address the core needs of their hosts thereby lacking the intended positive impacts. This is reflective of earlier arguments that, although many mining companies engage in CSR initiatives, the scope and impact of several of such investments remain insignificant [109]. As mining companies continue to support infrastructural investments and make contributions to local and national government funds in the name of CSR, tangible results are expected to be seen among the intended beneficiaries. While this study does not disregard the important contribution of mining companies' CSR to local livelihoods, it finds that large mining companies continue to operate within a self-serving economic enclave that fails to deliver the most important CSR priorities of their hosts [110].

Expectations of Host Communities versus CSR Gaps of Mining Communities

While it was generally admitted that the CSR of mining companies in the past has been focused on providing alternative livelihoods, infrastructural investments and human capital development, there seem to be an overwhelming sentiment about the sustainability and prospects of those CSR commitments especially beyond mine closure [28,111]. Reckoning from the respondents' perceptions about mining companies' CSR addressing their most important expectations, the picture is painted of a persistence of manifold problems but also efforts at addressing issues related to interventions in sustainable economic livelihoods, protection of the physical and natural environment and investment in social infrastructure. More importantly and as already highlighted by previous studies [27,112], the participants widely acknowledge the importance of mining companies' engagement with stakeholders in determining and prosecuting their CSR agendas.

As it seems however, many of the mining companies are engaged in specific kinds of CSR because they are compelled by the mining laws to address such issues—employment of locals, sourcing from indigenous

suppliers, environmental safety, grievance management and resettlement and the payment of compensations. Hence, although the locals see these mining companies as the ones to fulfil their livelihood and developmental needs, the situational circumstances of the guiding laws seem to limit the scope of mining companies to prioritize pressing community demands. As CSR is fast becoming an indispensably essential part of mining [26,113], there is need to readjust existing mining laws and operational frameworks on CSR in such a way that aligns and reflects the pressing needs of beneficiaries.

Challenges Posed by Mining Activities to Host Communities

Inasmuch as mineral exploration and mining activities pose many risks to local communities, it is fair that mining companies take steps to contribute to addressing some of the key challenges faced by their hosts. This is particularly essential because the participation of mining companies in finding solutions to the problems of their hosts has been found to be one of the ways by which community-related tensions are minimized [113]. This finding reveals a deep disjuncture between the harsh daily realities of mining host communities and the attempts by mining companies to fulfil some socio-economic demands of perhaps, the populations that their operations have the most impact on.

The major challenges highlighted by the interview participants include health and socio-economic issues, environmental concerns regarding land degradation, water pollution and air pollution, concerns over the lack of local participation. These corroborates earlier findings [101,113] and brings to the fore, the active discussions for equitable mining regimes that do not threaten the continuous survival of this important industry while at the same time, advocates for equitable redistribution of mining wealth to affected stakeholders.

Disconnect between Current CSR Reporting Practices and Expectations of Local Stakeholders

The disconnect between current conceptualizations of CSR reporting—especially as recommended by the GRI framework—and African stakeholder expectations has been demonstrated largely by the mining companies' strong focus on satisfying global best practices, investor interests and broad sustainability metrics at the expense of local, context-specific concerns. Whereas local stakeholders expect mining companies to address community-specific needs, involve them in decision-making processes and deliver long-term sustainable developmental outcomes, the GRI framework of CSR reporting adopted by many of these mining companies seem to promote global corporate governance standards. In the end, the CSR reports seem to be generic and fails to address the distinct needs of their local stakeholders. Similarly, the local stakeholders appear to be more interested in CSR activities that contribute to their long-term socio-economic development while the GRI framework does not require companies to link their CSR initiatives to any long-term development

plans. Finally, this study reveals how local communities desire to partner mining companies in their CSR projects as against how these companies conceptualize CSR as a philanthropic gesture. This disconnect leads to frustrations and feelings of marginalization among stakeholders who wish to be treated as co-creators rather than beneficiaries of CSR programs.

IMPLICATIONS AND POLICY RECOMMENDATIONS

Mining operations are growing and so are their social and environmental footprints which certainly has implications on the continuous survival of this all-important industry. While there has already been many accounts of tension and opposition towards mining companies by their hosts, this study finds that a contributing factor lies in the generally isolated and less coordinated approach to CSR by multinational companies which is revealed through their inabilities to align their CSR agenda with the larger developmental expectations of their hosts. As many of the communities seem left out in the determination, design, implementation and evaluation of these CSR projects, the top-down nature of GRI-based reporting seem to advance the companies' self-interests only. This re-echoes earlier sentiments expressed by [114] about how although CSR initiatives could hold some positive potentials for the achievement of the SDGs in Sub-Saharan African mining regions, they are often very short-term in outlook, lack coordination and are habitually devoid of meaningful community participation. With many of these CSR investments continuing to yield very poor outcomes, it appears the practice of CSR in mining and exploration is fast becoming a failing model rather than a strategic tool for advancing business and stakeholder ties. This study makes the point for a more meaningful participation of local stakeholders in CSR because it directly impacts their livelihoods.

Recognizing the potentials of CSR to reconcile the far-reaching implications of these developments on all stakeholders, a broader, consultative and more sustainable approach to executing mining-related CSR is recommended. Particularly, the GRI framework of CSR reporting needs to be aligned with local expectations. This could be achieved through strengthening local stakeholder participation, enhancing transparency from the grassroots level (as opposed to the existing GRI focus on data aggregation at the corporate or regional levels), emphasizing long-term local development, adapting the GRI framework to include region-specific guidelines and enforcing stronger monitoring mechanisms to ensure compliance with community-focused CSR reporting. Added to that, the use of culturally sensitive approaches to CSR communication that fosters enduring trust is recommended as an alternative to the broad, one-size-fits-all GRI CSR reporting framework. This way, a stronger case is made for enduring and extra positive cooperation among all actors in this valuable industry.

LIMITATIONS AND FUTURE DIRECTIONS

The greatest limitation of this study is the authors' reliance on CSR disclosures self-reported by mining companies in their sustainability and similar reports. Similarly, this study would have benefitted from the inputs of local government departments, mining regulatory authorities and the mining companies themselves although that could potentially also defeat the intent of the authors to independently assess the expectations and needs of host communities about mining companies' CSR. A quantitative approach involving a larger sample of residents of the mining communities could have also made room for more reliable generalizations. These would be potential areas that future studies may explore.

STATEMENT OF ETHICAL APPROVAL

No ethical approval was taken for this study due to the lack of such strict requirements for ethical clearance for similar studies within the Ghanaian context and the low risks this study posed to participants. Respondents, however, gave their consents for participation in the study as well as for the publication of its results and the ethical best practices regarding such studies were upheld.

DATA AVAILABILITY

The data that support the findings of this study are available from the corresponding author, EJD upon reasonable request.

AUTHOR CONTRIBUTIONS

Conceptualization and design, EJD, SAN and GNS; Methodology, EJD and SAN; Software, EJD; Data Analysis and Interpretation, EJD and SAN; Drafting of Paper, EJD and SAN; Revision for Intellectual Content, EJD and GNS; Supervision and Final Approval of Published Version, GNS. All authors have read and agreed to the published version of the manuscript.

CONFLICTS OF INTEREST

The authors declare that they have no conflicts of interest.

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