Journal of Information Systems Engineering and Management
2026, 11(3s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/

Research Article

The Corporate-Led Stake-Fund Innovation as Alternative Policy Framework for the Mining Sector in the Global North and Global South: A Case Study of Four Large-Scale Mining Companies in USA and Ghana.

Francis Kwodwoh Darkoh Baah
American University, School of International Service, USA.
Contact email: fkdbaah@gmail.com

ARTICLE INFO

Received: 30 Dec 2024

Revised: 19 Feb 2025

Accepted: 27 Feb 2025

ABSTRACT

Corporate Social Responsibility (CSR) has been scholarly discussed from the perspectives of zero-sum (cost) and positive-sum (profitability) to business in the mining sector. The study explored stakeholders' experiences of CSR initiatives during production and post-mining life in the host communities, CSR funds (CSRF) mechanisms, its governance and management structure, and multistakeholder co-created funds, and co-management as alternative innovation model for community led-development to the traditional CSR approach notable in the sector. The research study used a qualitative approach, without human subjects interview, based on secondary materials and case studies of four large-scale mining companies from the Global North and Global South - Resolution Copper Mining (USA), Nevada Gold Mines (USA), Newmont Ahafo Gold Mine (Ghana) and AngloGold Ashanti Obuasi Mine (Ghana) - to gain understanding of the larger social phenomenon. The study identified lack of multistakeholder co-created funds and co-management policy framework in the mining sector; mining companies are sole CSR funders of community foundations and trust funds; variability of CSR funding, governance and management mechanisms; gaps in the structured participatory governance and management mechanism partly due to vertical power dynamics obliquing transparency and accountability; government incentives and establishment of trust funds as a permitting condition drive CSR and sustainability practices; voluntary CSR approach being adopted in Ghana and USA; stakeholder value approach as business sustainability case, environmental and social harm; strong stakeholder engagements and grievance mechanism impact mining companies' CSR and sustainability practices; and mining companies' alignments with applicable national laws and international standards which are fragmented and loosely enforced. Recommendations were made for the industry stakeholders for considerations to address the CSRF limitations with an alternative policy model..

Keywords: Mining companies, Corporate Social Responsibility, Corporate Social Responsibility Fund, Stake-Fund, Multistakeholder, Co-creation, Co-management, Governance and Management, Grievance Management, Stakeholder Engagement, Social License, Conflict Free, Social Impacts, and Host Communities

1.0 INTRODUCTION

Modern Corporate Social Responsibility (CSR) in the mining sector is strategically embedded in 'corporate governance to balance stakeholder interests' (Du Plessis, Hargovan, & Harris 2015) to serve as antidotal solution to community adaptation to socio-cultural, economic, environmental, and political experiences of mining in the Global North (USA) and Global South (Ghana). National governments, weighing the overall economic benefits to the national and local economies, in licensing and permitting large-scale mining companies (LMC) and small-scale mining companies (SMC) to operate in the host communities (HCs), where mineral ore deposits exist or by 'default of reserves location' (Eggert 2001; Tsuma 2010), have largely contributed to community adaptation to mineral extractions in the mining areas. Mining companies holding mineral rights usually diminishes local people's access, especially women, to the land and its resources in the concession (Yamoah Tenkorang 2016). Governments rely on Final Environmental Impact Statements (FEIS) to grant mining licenses, but the realities on ground differ

Journal of Information Systems Engineering and Management
2026, 11(3s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/ **Research Article**

(Responsible Mining Foundation 2022; Jackson et al. 2022; J.J. Isacowitz et al. 2022). It has been especially discussed that little is known about what becomes of mining communities during post-mining where resource-dependent communities would undergo economic and population restructuring and adapt to such changes (Yaw Asuah & Aboagye Anokye 2016). The possession of mineral rights is not enough to start mining operations; the mining companies do need social license to operate (SLO) or conflict free to operate (CFO). Yet, the acquisition of the SLO or CFO is non-mechanical until that is acquired by a word of mouth between an individual and a mine, or communities and mining companies by unanimous consensus or tacit agreements (intangible), or sometimes by formal agreement with compensable projects (tangible), but such forms of agreements can be broken upon a whiff of mistrust and rejection from the Project Affected Persons (PAPs) or HCs. 'Social license to operate processes are now commonly used to secure consent and involvement of local community stakeholders. How to secure it is not straightforward exercise. It does not come as a surprise that EY considered it the #1 business risk in 2019-2020' (Pedro 2018; Jamasmie 2018). SLO is used to manage risks of conflict at community level and reputational damage at national and international levels. Mining companies now consider community acceptance (SLO) to be as crucial as the formal licenses and permits granted by governments (Ayuk, Elias T., Pedro, Antonio M., & Ekins, Paul et al. 2020).

Notably, the CSR approach (voluntary or mandatory) varies from mineral-rich countries to countries, and among the multinational companies (MNCs) in the mining sector in driving economic and social missions (Aaronson 2005; Avetisyan & Ferrary 2013; Parekh & Tenneti 2018). However, voluntary approach limits regulatory enforcement allowing the companies to perpetuate harm and pre-empts any hard laws for better social change policies (Gjølberg 2011; Jackson et al. 2022). Mining Corporations have embraced the notion of 'doing well by doing good or win-win strategy' by going beyond legal compliance (Jenkins 2004; Falck & Heblich 2007; Henderson et al. 2014; Mischke et al. 2021). The mining companies with good financial performance derived from mineral revenues support national and local economies through foreign earnings, taxes and royalties, employment, transfer of technology, infrastructure development, and community development (Eggert 2001; Aryeh 2001; Amponsah-Tawiah & Dartey-Baah 2011; Ayelazuno 2014; Yaw Brew et al. 2015). Despite the mining companies' CSRF initiatives, there are still serious concerns of transparency and accountability - the growing phenomenon of "greenwashing" litigation (Sayer, Regan, & Thayer 2025) and "window dressing" (Andrews 2015), limited or exaggerated economic benefits (Power & Power 2013), gaps in governance and management platforms (Community Empowerment Associates 2014; Kasimba & Lujala 2022). Mining communities are among the poorest population in Ghana and sub-Saharan African (Hilson 2019; Lujala & Narh 2020), even some minerals-dependent nations are among worst performing economies (Eggert 2001), and persistent social and environmental damage (Amponsah-Tawiah & Dartey-Baah 2011; Yamoah Tenkorang 2016; Giovannetti & Poku-Boansi 2017; Wells 2021; Witchalls 2022; Giovannetti & Adjei 2024; Setyawan et al. 2025; Rodriguez 2025; Ofosu & Arthur-Holmes 2025). Therefore, businesses' inability to "do the right thing" everywhere they operate risk the consequences, managers should respond to the market forces' signals for responsible work (Aaronson 2025).

The study therefore sought to understand how stakeholders experience the LMC's Corporate Social Responsibility Fund (CSRF) initiatives, governance and management structure, company and stakeholder interactions, and explore multistakeholder co-created and co-managed funds as an alternative policy framework to the classical model (status quo), in order to give the HCs a voice and leverage for a sustainable, scalable, and broader social impacts, while ensuring a sustained SLO for mining operations, during the production and post-mining life in the HCs. Without surveys and human subjects' interviews, the study sought to use a triangulation of qualitative methodologies, based on secondary data and case studies subsuming Resolution Copper Mining (RCM), (Arizona, USA) and Barrick Nevada Gold Mines (NGM), (Nevada, USA) from the Global North and Newmont Ahafo Gold Mine (NAGM) and AngloGold Ashanti Obuasi Mine (AGA OM) in Ghana from the Global South; CSR goal and definitions, mining impacts on national and economies; CSR approach; stakeholder engagement and management, grievance and risks management; governance and management structure, and international standards alignment in mining to find answers to these three analytical questions: *1. What are the experiences of stakeholders about mining companies' CSRF, community engagement interactions, and the and management structure? 2. Should the voluntary CSR approach, status quo, be maintained in the mining governance industry? 3. Can a multistakeholder co-created funds and co-management become an alternative policy framework to the*

Journal of Information Systems Engineering and Management
2026, 11(3s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/
Research Article

traditional CSR model going forward to increase social impacts during production and post-production stages of mining in the mining sector? The objectives of the study therefore include: (1) strengthening CSR funding base through multistakeholder co-creation and co-management as policy framework for community engagements during the production and post-production of mining life. (2) increasing stakeholder transparency, accountability, and participation in CSR spending, implementation, and disclosures through a multistakeholder governance and management structure, and (3) minimizing or creating CFO and SLO environments for the mining companies and their supply chains. The study would more significantly contribute knowledge about private sectors' community engagements in gold and copper mining of different countries to academia, researchers, policymakers, industry-practitioners, and community development professionals.

2.0 LITERATURE REVIEW

2.1 CSR Goal and Definitions

The goal of CSR is to align a company's social and environmental activities with its business purpose and values. If in doing so CSR activities mitigate risks, enhance reputation, and contribute to business results, that is all to the good (Rangan, Chase & Karim 2015). The World Business Council for Sustainable Development (WBCSD**)** defines CSR as the commitment of business to contribute to sustainable economic development, working with employees, their families, the local community and society at large to improve their quality of life (Cramer 2003). CSR in mining is defined as the corporate commitment to sustainable development, with the aim of minimizing negative impacts while maximizing social, environmental, and economic benefits. This model has become a key strategy for operating in a competitive and sustainable manner (Rodríguez 2025). Key focus of CSR dimensions have been explained as (a) environmental sustainability: reducing emissions, conserving ecosystems, rehabilitation, and adopting renewable energies; (b) social commitment: promotion of human rights, employment, strengthening of local economies, and encouraging community participation; and (c) economic viability: efficient use of resources, reducing operating cost, access to new markets, and adoption of advanced technologies. The interdependence and integration of these core CSR pillars spur positive impact of responsible mining (Rodríguez 2025).

2.2 Mining Impacts on National and Local Economies (USA & Ghana)

The 1980s neoliberal reforms package – privatization and deregulation - to the Third World lessoned governments involvement in the economic sectors like mining in Ghana (Pfeiffer & Chapman 2010). The champions (International Monetary Fund & World Bank) of the economic reform argued that the liberalized LMC could bring export earnings and royalties, create employment opportunities, transfer of technology, and improve infrastructure (Ayelazuno 2014). Critics argued that the benefits rarely reached the impoverished communities and the biased LMC policies, not a secret, marginalized the population in sub-Saharan Africa (Hilson 2019). Mineral-dependent nations include some of the poorest and worst performing economies in the world. Mining does not always contribute to sustainable economic development (Eggert 2001). Even with a large mining sector and a well-structured mineral revenue distribution system, mining communities are among the poorest in Ghana (Lujala & Narh 2020). Also, Community benefit is exaggerated and misleading because the jobs associated with metal mining and the high wages associated with mining jobs have not reduced unemployment nor boosted local economic vitality (Power & Power 2013).

National Economies Level (Benefits to State)

The mining sector, strictly governed by national mining laws (e.g., US Mining Law of 1872 and Bureau of Land Management, Ghana Minerals and Mining Act 2006 (Act 703), and regulations), is a major contributor to the growth of national and local economies of the developed countries (Australia, Canada, Sweden and United States) and developing countries including sub-Saharan Africa (Amponsah-Tawiah & Dartey-Baah 2011; U.S. Geological Survey 2025, Awuni 2025). Minerals are a blessing. They are a gift of nature available to be developed, sold and used to better the lot of a nation's citizens (Eggert 2001; Aryee 2001; Amponsah-Tawiah & Dartey-Baah 2011). Mineral production generates income and foreign exchange through exports and can stimulate local economies through the local purchase of inputs, employment, tax revenues to fund education, health care, roads, electricity supply, and other forms of infrastructure development. Mining companies electively provide infrastructure development to the local communities within which they operate without recourse to their tax obligations. By creating jobs and economic growth, mines help catalyze other private investments at the local, regional, and national levels, and they have a huge demonstration effect. The informed consensus by most researchers therefore is that minerals have the potential to contribute significantly to economic development (Eggert 2001; Amponsah-Tawiah & Dartey-Baah 2011; Kpabitey et al. 2020).

In 2024, the U.S. metal mine production was estimated to be valued at US$33.5 billion, a slight increase from US$33 billion in 2023. The principal contributors to the total value of metal mine production in 2024 were gold (35%), copper (30%), iron ore, (16%) and zinc (7%), and molybdenum (5%) (U.S. Geological Survey 2025). In Ghana, the value of gold exports rose by 53.2 per cent to US$11.64 billion, reflecting both volume and price effects. The volume of gold exports increased by 23.7 per cent to 5.10 million fine ounces, largely driven by the responsible and regulated small-scale gold mines, coupled with sustained output of the large-scale mines (Bank of Ghana 2024; International Trade Administration 2025). Ghana is currently the leading gold producer in Africa, and both countries are among the top ten (10) countries globally (World Gold Council 2025; International Trade Administration 2025). Another avenue to see a disclosure of corporate revenue and spending data is via the Extractive Industries Transparency Initiatives (EITI) requiring member nations to consider oversight by multistakeholder group including governments, companies, civil society and multistakeholder group engagements; revenue collection (financial) disclosures including taxes and mineral royalties; and socioeconomic and environmental impacts spending (EITI 2023). To address corruption and transparency concerns, companies and their supply chains should publicly disclose minerals income regulatory payments. Ghana joined in 2007 as Ghana Extractive Industries Transparency Initiatives (GHEITI). GHEITI reconciled mining data and publicly disclosed corporate taxes, mineral royalties, withholding taxes and pay as you earn (PAYE) paid by the mining companies including Newmont Ghana Gold Limited, AngloGold Ashanti (Obuasi) Limited and other LMC.[1] The US Extractive Industries Transparency Initiatives (USEITI) was a signatory and implemented EITI standards in 2014 but withdrew in 2017.[2]

Local Economies Level (CSR)

Mineral resources (including gold, copper, lithium, manganese, bauxite) are localized and concentrated due to their "geologic anomalies" (Eggert 2001) - and extractions are more often close to communities. Mining in such locales have environmental and social impacts and the risks management include CSR investments - and research evidence indicates community engagements by the mining companies in the HCs support community services and infrastructural development in road, education (scholarships and skills training, school classroom blocks), clinics, electricity, water, jobs, alternative livelihood, environmental and cultural programs (Aryee 2001, Cramer 2003; Amponsah-Tawiah & Dartey-Baah 2011; Kasturi Rangan et al. 2015; Yaw Brew et al. 2015; Yeboah 2025, Punsu 2025). For instance, in the USA, while the Resolution Copper Mining spent US$4.9 million,[3] Barrick Nevada Gold Mines spent US$14.9 million in social investments in 2024.[4] In Ghana, AngloGold Ashanti Obuasi Mine spent US$2.91 million[5] while Newmont contributed US$4.46 million in 2024 to the Foundation (Newmont Sustainability Report 2024), and over US$60 million to the foundations for social integrated social interventions (Narh 2024). Beyond the legal factor, May et al. (2007) refers to Corporate Power as the inner-will enabling companies to decide what to do or not do, to say or not say, to think or not think, to feel or not feel. Yet, it must be acknowledged that partly CSR emerged as a corporate response to civil society groups' pressures (Aaronson 2005; Cochran 2007; Ansu-Mensah et al. 2021; M. Yousefian et al. 2023), and from the "prosocial" investors willing to sacrifice part of their profits to allow companies to act in an ethical and socially responsible fashion (Stout 2012, pp.8-9).

Environmental and Social Impacts and Actions

[1] Ghana 2021-2022 EITI Report. https://eiti.org/documents/ghana-2021-2022-eiti-report-mining / and reconciliation mining eiti data -2021.xlsx
[2] The United States withdrew from the EITI. https://eiti.org/sites/default/files/attachments/signed_eiti_withdraw_11-17.pdf
[3] Resolution Copper Invests $4.9M in Local Communities. https://resolutioncopper.com/resolution-copper-invests-4-9m-in-local-communities/
[4] Nevada Gold Mines 2024 Community Benefit Footprint. https://s25.q4cdn.com/322814910/files/doc_downloads/ngm/NGM_2024_Community_Benefit_Footprint.pdf
[5] AngloGold Ashanti plc, Obuasi-Africa, Operational Profile 2024. https://reports.anglogoldashanti.com/24/wp-content/uploads/2025/03/AGA-OP24-obuasi.pdf

Journal of Information Systems Engineering and Management
2026, 11(3s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/
Research Article

Despite the evidence of mining contributions to the national and local economies in the extractive nations globally, there is equal evidence about social and environmental harm which could be ruled out and omitted. In 2020, the top 40 mining companies had accumulated a total revenue of UD$544 billion, which was up 4% on the previous year. However, the process of mining is still intense and invasive, and operations often leave large environmental impacts on the local surroundings as well as wider implications for the environmental health of the planet (Witchalls 2022; Setyawan et al. 2025). These damage results from tailings (often radioactive, toxic, or acidic) leakage, water usage, carbon emissions from trucks, construction of accommodation village for workers (Witchalls 2022). These environmental impacts have significant long-run economic implications. Copper mining is very land and environmentally intensive, causing significant degradation of natural landscapes and the potential for serious pollution problems (Power & Power 2013). Ghana's environment continues to suffer degradation, particularly due to the activities of the Artisanal and Small-Scale Mining (ASM) sector. At the same time, large-scale mining in gold is also associated with significant social and environmental harms, including community displacement (Amponsah-Tawiah & Dartey-Baah 2011; Yamoah Tenkorang 2016; Giovannetti & Poku-Boansi 2017; Giovannetti & Adjei 2024; Ofosu & Arthur-Holmes 2025), loss of sacred sites, spiritual ceremonial and recreational grounds (Well 2021; Rodriguez 2025). Mining is the number one source of toxic pollution in the United States.[6] However, strict international regulations, incorporation of sustainable projects, integration of advanced technologies have reduced impacts on the environment and communities (Witchalls 2022; Rodríguez 2025), unlike the developing countries where there is prevalence of illegal small-scale mining, ASM, using low-tech in mineral extractions (Witchalls 2022).

2.3 CSR Rationale (Shareholder Theory vs. Stakeholder Theory)

While the shareholder theory that meant the corporations' social responsibility's dominant objective is to maximize profits for the shareholders (Levitt 1958; Friedman 1970; Lazonick & O'Sullivan 2000; Tomasko 2006; Stout 2012; McElroy 2012) because social responsibility was considered as a zero-sum (cost to returns on investments), the pro-stakeholder theory scholars counterargued for value creation – benefits for the company and employees, government, and communities - that make sustainable profitability in long-run by doing extra beyond legal obligation to strengthen local communities (May et al. 2007; Porter and Kramer 2011; McElroy 2012; Moon 2014; Du Plessis, Hargovan, & Harris 2015; Carroll 2016; Mischke et al. 2021; Gibson 2022; M. Yousefian et al. 2024). The growth of a company is attributed to its people and a culture of care and respect, and a commitment to CSR - "doing well by doing good" (Henderson et al. 2014). Economic gain means growth in sales of products, expansion and profits making, increase in stock price, but 'bigger isn't always better' (Tomasko 2006) for the HCs' well-being. Corporations that align with legal compliance, social responsibility and profitability will succeed (May et al. 2007). Previous research contributed that the reasons accounting for the shift from corporate-oriented (stakeholder-driven) from corporate-centered (shareholder-driven) include (a) the activities of corporations including their supply chains and their downstream effects; (b) corporations' response to external assessments of what their responsibilities show in performance ranking, and (c) involvement of other actors in governing and managing CSR policies and resources (Moon 2014). Bob Willard (2012) also added that CSR programs promote productivity and engagement. The CSR delivery depends on organizational leadership commitment (Cramer 2003), and appointment of CSR champions (Dobele et al. 2013). However, CSR initiatives can be more impactful if the top management of a company can desist from fraud because the act impacts the company, shareholders, employees, managers, government, local communities and the environment due to embezzlement or misappropriations of funds earmarked for development (Zahra et al. 2005). The risks of fraud and corporate collapse could be reduced through good corporate governance in a well-defined company (Du Plessis, Hargovan, & Harris 2015).

2.4 CSR Approach in USA and Ghana

The CSR approach varies, in India the government mandates companies to spend 2% of annual net profits on social responsibility per the India CSR Law 2013 (Parekh & Tenneti 2018; Schoenberger 2023). Critics, however, have described compulsory spending by companies as additional corporate tax, discouragement of investments, and a threat to capitalism (Karnani 2013). While the CSR approach in the USA is voluntary (Avetisyan & Ferrary 2013)

[6] The Mining Law of 1872. Fast Facts About Mining. https://democrats-naturalresources.house.gov/imo/media/doc/the_mining_law_of_1872_fact_sheet.pdf

and guided by Organization for Economic Corporations and Development (OECD) guidelines through the Bureau of Economic and Business Affairs and Office of International Labor and Corporate Social Responsibility (DRL/ILCSR), under the Department of States. The office of ILCSR engages corporations, multinational, and domestic private companies to commit to responsible conduct. The US also gives Award for Corporate Excellence, the ACE.[7] [8] Likewise, the Ghana Chamber of Mines recognizes best CSR Companies. For instance, Newmont Ghana Gold Limited (NGGL) was recognized as a leader in Corporate Social Investment (CSI) in Ghana's mining industry (Narh 2024). Best CSR performance is complemented by the Environmental Protection Agency's (EPA) "Akoben"[9] program since 2010 by monitoring, auditing, and rating the mines' environmental and social performances (including their CSR and environmental grievance management) with five color-coded ratings criteria (Red, Orange, Blue, Green, and Gold). Green represents well-performed environmental complaint management and community relations, while Gold represents best CSR practices (Sekyi 2011; Bedu-Addo et al. 2019).

2.4 Stakeholder Engagements and Management

Stakeholder is any group or individual who is affected by or can affect the achievement of an organization's objectives (Freeman and Mcvea 2001). Stakeholders are those upon whom a firm depends on its success and who are affected by its fortunes (Moon 2014). Stakeholder engagement is an inclusive process conducted throughout the project life cycle. It should be integrated from the onset of project development process and is an integral part of early project decisions and the assessment, management and monitoring of the project's environmental and social risks and impacts (World Bank 2017). Active participation, transparency, and effective communication strategies are essential to increase the success of CSR programs, but stakeholder engagement is often still undervalued, considered by many companies as a formality rather than as part of an effective strategy (Setyawan et al 2025). A consideration of stakeholders and sustainability is now inseparable from CSR (Carroll 2016; S. Bansal et al. 2024). Multi-stakeholder platforms and partnerships for community engagements exist (Gjølberg 2011; Moon 2014; Yaw Brew et al. 2015; Ansu-Mensah et al. 2021). This usually increases the company's role and responsibility and costs, resulting in poor voluntary involvement by stakeholders (Ansu-Mensah et al. 2021). Stakeholder Mapping is very crucial in stakeholder management as it encourages companies to undertake "identification of stakeholders" based on power dynamics, interests and needs in relationship building and achieving reciprocal objectives of the business and the stakeholders, the need for a local presence to facilitate community engagement, feedback and monitoring the imperative to build trust and social legitimacy within the local community (Mainardes et al. 2012; Dobele et al. 2013). These power dynamics could bring positive or negative relationships, especially in stakeholder engagement and management decision-making (VeneKlasen & Miller 2002).

Categories of Stakeholders

The positive alignment between companies and stakeholders can turn into commercial success (Moon 2014) and stakeholders drive sustainability (Willard 2012). Stakeholders can be identified as primary (regarded as investors, employees, suppliers, and customers, and, depending on the business, government, and communities), and secondary (that might be the media and civil society organizations) (Moon 2014). Ofosu & Arthur-Holmes (2025) also categorized mining companies' stakeholders into three: primary, secondary, and key stakeholders. The primary stakeholders ("local influence beneficiaries" including farmers impacted by the mining operations either positively or negatively with little power and influence; the secondary stakeholders are "intermediaries" who can influence reforms in the mining sector which include nongovernmental organizations, civil society organizations; media, chamber of mines; and the key stakeholders "government and regulators)" who have the power and influence to license, monitor, and sanitize the mining sector under national laws and regulations. Stakeholders play an important role in implementing CSR and have expectations, therefore, the CSR policies designed by the mining companies and management should reflect their needs (Mainardes et al. 2012; Setyawan et al 2025), but the

---

[7] United States Department of State Corporate Social Responsibility. The US supports CSR initiatives under the OECD guidelines (human rights, environment, labor, consumer rights, anti-corruption and taxation) but voluntary.
https://2009-2017.state.gov/documents/organization/197790.pdf
[8] Depart of States Archives. Corporate Social Responsibility, Business and Human Rights. https://2001-2009.state.gov/g/drl/lbr/c26692.htm#:~:text=Business%20and%20Human%20Rights%20Office%20of%20International,practices%20that%20promote%20human%20rights%20and%20democracy
[9] EPA's Akoben program is used to audit and rate best and non-performing large-scale mining companies in Ghana. Akoben is one of the Ghanaian 'Adinkra' symbols, literally meaning "readiness and wariness." http://adinkra.org

Journal of Information Systems Engineering and Management
2026, 11(3s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/
Research Article

stakeholders' lofty demands sometimes become a burden for the mining companies (Ansu-Mensah et al 2021). There are internal and external stakeholders who can influence either way the mining business as shown in Tables 1 and 2.

Table 1: Category of Stakeholder in relations to Power Dynamics

Primary (Community) Stakeholders ***"Who are affected?***	Secondary (Intermediary) Stakeholders ***Who can affect the gold or copper project?***	Key Stakeholders (Government) ***Who are affected" as a country and "Who can affect the gold or copper project Licensing and Regulations?***
Traditional Rulers (Paramount Chiefs and Divisional Chiefs and Elders), Affected Farmers Groups (male and females) - farmland owners, Women's Group, Youth Groups, Community-Based Associations	Non-governmental Organizations (NGOs), Civil Societies (e.g., anti-environmental and human rights abuses), Chamber of mines, Media outlets, etc.	President, Regulators: EPA (USA, Ghana), Minerals Commission (Ghana), Forest Commission (Ghana), Water Resources Commission (Ghana), USDA Forest Service, Tonto National Forest Service, Bureau of Lanad Management, Parliamentarians, Politicians, Senators, Lawmakers, etc.
Role & Power : Informal or tacit grantor of social license or conflict free activities	**Role & Power:** Pressure Groups for responsible mining.	**Role & Power:** Permit approvals and issuers to the mining companies

Table 2: Internal Stakeholders and External Stakeholders

Internal Stakeholders	**External Stakeholder**
Mining company: Executive Directors, Board of Directors, Chief Executive Officers, Managers, Shareholders, and Employees	Governments / Regulating Agencies, Regional Ministries, District/Municipal Assembles, Financial Institutions- Creditors (Banks), Suppliers/Contractors, NGOs, Media, International Bodies like WGC, ICMM, UN, WB, IMF, OECD, ILO, EITI)

2.4.1 Government Participation in CSR Agenda in Mining

National laws, US Mining Law of 1872 - Section 21a which establishes national mining and minerals policy, and Ghana's Minerals and Mining Act 2006 (Act 703), Environmental Protection Acts, and other relevant legislations, mandate the governments / agencies to lease and regulate mineral rights holders (LMC and SMC) in return for mineral revenues for economic development. For example, in Ghana, Act 703 requires payments of property taxes, annual ground rents and royalties,[10] whereas US government takes taxes, but "mining companies pay zero royalties for minerals taken from our public lands thanks to the Mining Law"[11] from the mining companies. Corporations are "legal persons, not natural persons" and that corporate social responsibility is a function of law, and the law is a function of corporate social responsibility. Abiding by legal obligation is the first social responsibility of citizens - individual or corporate (May et al. 2007). The role of government in shaping CSR in the mining sector is key

[10] Ghana Government collects by the stipulations of Minerals and Mining Law 2006, (Act 703), Sections 22-25 and 48 – taxes and royalties from a holder of mineral lease (large-scale and small-scale) or mining license. https://resourcegovernance.org/sites/default/files/Minerals%20and%20Mining%20Act%20703%20Ghana.pdf
[11] According to The Mining Law Of 1872. Fast Facts About Mining, the US Government does not require royalties payment from the mining corporations. https://democrats-naturalresources.house.gov/imo/media/doc/the_mining_law_of_1872_fact_sheet.pdf

because of inconsistent delivery of commitments. When it comes to CSR, there is often a gap between what companies say they do and what they do on the ground (Responsible Mining Foundation 2022; Jackson et al. 2022; J.J. Isacowitz et al. 2022). Critics have argued that the voluntary nature of CSR has meant that companies are often unwilling to change their negative practices or invest in resources required to account for their impact on local communities even after adopting CSR standards (Jackson et al. 2022).

Are governments interested in CSR? Whether legally or voluntarily, businesses, governments, and civil society have interests or a stake in making sure that CSR management and objectives are well-coordinated and reshaped (Steurer 2009; Wirba 2023). Government role in CSR implementation through regulations and legal requirements, and incentives support social-economic distribution of mineral benefits to the communities (Jackson et al. 2022). Empirical studies show the importance of government subsidies, tax incentives, and government support for CSR. Government motivates private enterprises to be socially responsible and engage in CSR, perform environmental activities and serve the community (Khattak et al. 2025). When a government establishes clear sustainability goals or social welfare targets, companies are more likely to tailor their CSR initiatives to support these objectives.[12] **CSRFs could be funded by businesses, individuals, or foundations**. Businesses may choose to fund CSR funds to give back to the community, improve their public image, or meet regulatory requirements. Individuals and Foundations may choose to do so to support causes that they care about.[13]

2.4.2 Host (Affected or Impacted) Communities

A key stakeholder for all mining companies, and therefore a strong focus for their CSR initiatives, is 'the community' (Jenkins & Obara 2008). A community is defined as a group of people with diverse characteristics who are linked by social ties, share common perspectives, and engage in joint action in geographical locations or settings (MacQueen et al. 2001). The Project Affected Communities (PAC) are located far and near, 'whether cities, towns, and villages' (Cole & Broadhurst 2020) mining establishments, made up of Indigenous peoples who are critical development partners, hold tenure rights, and yet despite their role in conservation, they experience extreme poverty, and face severe barriers to accessing basic social services, education, infrastructure, and job opportunities (World Bank 2025). The protection of Indigenous Peoples and Tribal Peoples' land rights of ownership and possession, and engagement with them requires *free, prior* and *informed consent* (FPIC) prior to projects development, and their access to basic amenities (ILO 1989).[14] The governments and corporations are required to respect and protect human rights and include them in decisions that affect them (UNGPs 2011). Geographically, the local communities, as shown in Table 3, that fall within the boundaries of the mineral rights or licensed lease (land) or concession areas are called the HCs directly affected by mining activities because of the 'location of geological anomalies or default location of ore reserves' near the communities (Eggert 2001; Tsuma 2010). Mines are not distributed evenly among or within nations around the world. Mining is locally concentrated, and most communities do not have a mine (Eggert 2001). The reputation of Multinational Companies (MNCs) is tied to community. CSR in the community is often disparaged as a tax-free publicity opportunity, but it is unavoidably integral to MNCs' policies. The companies' neighbors are regarded as vital to their SLO. SLO can also meld into legal licenses to operate when companies seek planning permission to locate or extend premises and operations (Moon 2014).

Table 3: The Mining Communities and Indigenous People

No	Company	Affected Communities/Towns
1	NAGM	Ntotroso, Kenyasi No.1, Kenyasi No.2, Wamahinso, Adrobaa, Afrisipa, Susuanso, Terchire, Gyedu, and Yamfo. (Source: Newmont NADeF 2008 Website)
2	NGM	Elko, Battle Mountain, and Winnemucca (closest towns)

[12] https://indiacsr.in/csr-funds-for-ngos-get-plan-top-10-practical-tips/
[13] Ibid
[14] ILO Convention, 1989 (No. 169) on Indigenous Peoples and Tribal Peoples Rights. https://www.ohchr.org/en/instruments-mechanisms/instruments/indigenous-and-tribal-peoples-convention-1989-no-169

Journal of Information Systems Engineering and Management
2026, 11(3s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/
Research Article

3	AGA OM	Obuasi, Anyinam, Abompekrom, Koffikrom, Sanso, Dokyiwaa, Binsere, Bedieso, Mamiriwa, Biakoyeden, Wioso, Biediem, Kokoteasua and Ntonsua (Awuni 2025)
4	RCM	**Copper Triangle Communities:** Superior, Miami, Globe, Kearny, Winkelman, Hayden, Florence, Queen Valley, Apache Junction, Gold Canyon, and San Carlos (Source: Resolution Copper Website).
		These 15 tribes who participated in the RCM's Programmatic Agreement: 1.Ak-Chin Indian Community, 2. Fort McDowell 3.Yavapai Nation, 4.Fort Sill Apache, 5.Gila River Indian Community, 6. Hopi Tribe, Mescalero Apache Tribe, 7. Pascua Yaqui Tribe, 8. Pueblo of Zuni, 9. Salt River Pima-Maricopa Indian Community, 10. San Carlos Apache Tribe, 11. Tohono O'odham Nation, 12. Tonto Apache Tribe, 13. White Mountain Apache Tribe, 14. Yavapai-Apache Nation, and 15. Yavapai-Prescott Indian Tribe. (USDA Forest Service 2021)

2.5 Grievance and Risks Management Mechanism

When a grievance mechanism works well, it serves as an antenna, helping companies flag and address potentially serious issues before they escalate. It was this notion of preventing potential crises that sparked the idea of grievance mechanisms."[15] When people express misgivings and dissatisfaction about their experiences of what is done or about to be done to them socially, economically, culturally, environmentally, they register their complaints for remediations. Grievance can be an allegation, actual or perceived, concerns which requires effective grievance handling mechanisms including judicial and non-judicial remedies (UNGPs 2011; Agarwal 2013). The companies taking land for projects should respond to concerns and grievances of project-affected parties related to the environmental and social performance of the project in a timely manner, create a platform to receive and facilitate resolution of such concerns and grievances, and resort to both informal and formal grievance mechanisms (World Bank 2017). Grievance procedure in resolving mining related problems could go through stages: first -between a mine's grievance officer and individual complainant, second - involvement of a Third-Party Grievance Committee for arbitration, if the grievance officer is unable to resolve it, and third – the complainant takes the complaint to Court for justice, if the Committee cannot handle (Desjardins-Charbonneau 2014). Effective grievance resolution management takes time, money, and manpower (Agarwal 2013).

The sources of risks and complaints could stem from legal, environment, social and cultural resulting from mining operations. Legal: failure to comply with laws, regulations and directives; environment: land degradation, dust/air and water pollution and exposure to excessive blast-induced vibration hazards (fly rocks, vibration causing building defects), resettlement projects; social: limited local employment and training avenues, limited community engagements, inattention to community welfare, non-compliance with local development agreements, delay in compensation payments, and delay resolving reported minor and major complaints. Ransford Sekyi (2011) contributed that non-environmental complaints are those that may be related to crop compensation, land ownership issues, and other resettlement related issues specifically for mining companies. Environmental complaints are an integral part of the concept of community monitoring of mining operations, and it complements EPA's regulatory inspections in important ways. "Mining displacement and the concomitant threat to human rights are present in many countries worldwide. Mining-induced displacement and resettlement is not only an issue of individual human rights violations, but also of collective rights, community-company conflicts, the struggle for resources, access to land, indigenous rights, the question of self-determination of tribal people and local

[15]Communities, January 08, 2016, Barrick's Grievance Mechanism Officers Share Experiences, Best Practices and Challenges. John Ruggie, author of the U.N. Guiding Principles on Business and Human Rights and special advisor to Barrick's Corporate Social Responsibility Advisory Board shared his experience when he visited a mine in Peru in early 2006 not long after being named U.N. Special Representative (on Business and Human Rights) explained the relevance of grievance mechanisms at mining sites-level). https://www.barrick.com/English/news/news-details/2016/Barricks-Grievance-Mechanism-Officers-Share-Experiences-Best-Practices-and-Challenges/default.aspx

Journal of Information Systems Engineering and Management
2026, 11(3s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/ **Research Article**

communities, and sustainable development" (Aboagye 2014, p.2). According to Owen & Kemp (2023), industrialization in the mining sector occurs in remote areas (in most cases) where there are weak applications of the laws because the miners do oversee community concerns themselves with community grievances which is unavoidable and that causes the mining companies to generate a grievance mechanism to manage them. Jenkins & Obara (2008) explained that the CSR programs of mining companies tend to focus on community initiatives as their impact on economic, social, and environmental terms is felt greatest at the local level. The risk in undertaking CSR creates a dependency on the company. Sanjay Agarwal (2013) disclosed that the risks of grievance management may create tensions between citizens and project authorities and making it easy to complain increases grievance volume.

Significance of Effective Grievance Redress Management

Agarwal (2013) describes the importance of grievance redress to have "intrinsic value" and "instrumental value." The "intrinsic value" provides voice to the marginalized and builds greater trust and mutual respect between the citizens and project authorities, while the "instrumental value" helps project management by enhancing efficiency as resources are targeted properly, provides feedback as systematic and timely manner, generates awareness and demands among citizens to utilize their services properly, deters project-related fraud and corruption, and allows beneficiaries to express their voices creating a sense of ownership. Desjardins-Charbonneau (2014) argued that addressing human rights thoroughly and with an effective grievance mechanism could help avoid costly litigation, evade extensive reputational damage, prevent delays or interruptions in operations, causing loss of opportunity costs (new projects, expansion, sale of assets) and reduce the amount of time senior staff spend in managing conflicts. CSR policies and grievance mechanisms may seem costly at first, figures show they are a financially positive long-term investment for MNCs.

2.6 International Alignments & Disclosures

Mining companies align with the UN Sustainable Development Goals (SDGs) – Goals 1, 8, 12, 13, 14, and 15 (S. Bansal et al. 2024; Barrick Mining Corporation Annual Report 2024, p.12). They also align with International Council on Mining and Metal (ICMM) principles,[16] Global Reporting Initiative (GRI), Sustainability Accounting Standard Board (SASB), Task Force on Climate-related Financial Disclosures (TCFD), World Economic Forum (WEF) standards,[17] WGC Responsible Gold Mining Principles (RGMPs),[18] Extractive Industries Transparency Initiatives (EITI), and UNGPs (Newmont Sustainability Report 2024; AGA Sustainability Report 2024). The companies are advised to keep communication open to avoid and backlash from dissatisfied groups and negative media criticisms (Dobele et al. 2013). CSR and communication/reporting are inseparable, and not a "trick," it adds value to a company's economic performance (Cramer 2003). CSR reporting or sustainability reporting is the practice of businesses and organizations disclosing information about their Environmental, Social, and Governance (ESG) performance and impacts (Ndemena 2023). Previous research reported five (5) key reasons for mining companies to align, implement, and publicly disclose CSR actions to include: (1) standards and regulations, (2) legitimacy theory, (3) public pressure from society and NGOs, (4) Political economy theory, and (5) stakeholder theory (M. Yousefian et al. 2023). CSR disclosure has positive impact on corporate performance, build stakeholder trust and loyalty, leads to increased investment, better social license, creates room for continuous improvement and intensify sustainable practices, higher profitability and increase financial performance, thus it benefits the companies and their stakeholders (Ndemena 2023; Theo 2025).

2.7 CSR Funding Models, Governance and Management and Gaps in Mining Sector

CSR Funding Models

---

[16] ICMM Members/Principles: Position Statement: Indigenous Peoples (8th August 2024).
https://www.icmm.com/en-gb/our-story/our-members.https://www.icmm.com/en-gb/our-principles/position-statements/indigenous-peoples
[17] Mining Sector ESG Reports: Rio Tinto vs. BHP Compared.
https://reportsesg.com/mining-sector-esg-reports-rio-tinto-vs-bhp-compared/
[18]Responsible Mining Foundation Assessment of World Gold Council member companies in RMI Report 2022 with respect to WGC Responsible Gold Mining Principles, May 2022 – Updated: 18/05/2022.
https://www.responsibleminingfoundation.org/app/uploads/RMF_World-Gold-Council_Member-companies-performance-in-RMI-Report-2022.pdf

Journal of Information Systems Engineering and Management
2026, 11(3s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/ **Research Article**

The creation of foundations and trust funds could be a reactionary (not initiative-taking) response from the MNCs in the mining industry to the call from the stakeholders (activists, communities, and investors) concerned with social risks, reputation, social license to operate, and improvement in the distribution of the benefits of mining operations (McElroy 2012; J.J. Isacowitz et al. 2022). The Fund's objective supports community development for the primary benefit of the community members impacted by a mining company's project by investing in sustainable community development projects supporting infrastructure and relevant services including health, education, and agriculture (Jurewicz 2015).

The mining companies are funders of their CSRFs through US$/per ounce produced and a certain % of net profit of gold sold (NADeF 2008, Awuni 2025; Yeboah 2025; Punsu 2025), and by legal or mining licensing agreement connected with the RCM (USDA Forest Service & Tonto National Forest 2021) or by annual budgetary allocations for social investments common among the RCM and NGM, as well as voluntary dedication of funds for establishments of specific heritage and wildlife funds connected with NGM per the case study. However, there are instances when both the mining companies and sub-Contractors team up to sponsor specific social programs (Community Empowerment Associates 2014; NADeF & Liebherr 2025). Thus, the mining companies are the sole fundraisers to the community trust funds or foundations (McElroy 2012; Community Empowerment Associates 2014; Jurewicz 2015; Yeboah 2025; Punsu 2025; USDA Forest Service & Tonto National Forest Service 2021). A researcher previously invited participation of multistakeholders in the entire mineral supply chain, foundations, government donors, international aid agencies, and others to contribute to exploring the potential for implementing a Trust Fund model subject to prototyping (Jurewicz 2015). Additionally, a multistakeholder governance structure is needed in mining areas for socio-economic transition - 'community-level transition initiatives and social investment transition foundations, trusts, and funds' - of the HCs' life after mine closure (ICCM 2025).

Existing Governance and Management Structure

Trust funds or foundations are institutionalized or formed legally, and some corporate foundations can be prevented to manage funds and the disbursements, while others are part of its implementation of developmental projects. Most corporate foundations are structured such that they receive their funding from the corporations and are governed to varying degrees of independence by their own boards and management teams, which is distinct from the traditional corporate giving (McElroy 2012). With the Tenke Fungurume Mining (TFM) Social Community Fund in the Democratic Republic of Congo, the Fund is governed by a seven-person board made up of community, provincial government, and TFM representatives. The community submits project proposals for review to a 40-person stakeholder forum, which has four working groups focused on: education, health, infrastructure, and agriculture. The forum then submits proposals to the board for final review and approval (Jurewicz 2015). Similarly, NAGM and AGA OM have same participatory governance and management models in Ghana (Community Empowerment Associates 2014; Kasimba and Lujala 2022). On the other hand, the CSRF could be delivered with NPOs via cross-sector collaboration (MacDonald & Young 2012; McElroy 2012), a model very rife among the RCM and NGM in the USA.

Exiting Gaps and Limitation

Community Empowerment Associates (2014) highlighted the NADeF limitations: lack of clarity of roles and duties of the Board of Trustees (BoT) and Tender Boards - a concern shown by the traditional leaders and people needing sensitization; late submission of projects and approvals; and annual projects execution plan limits community legacy projects due to limited funds. Kasimba and Lujala (2022) also found three key challenges including legitimacy, knowledge, and power relations with the participatory governance platforms of both NADeF and OCTF. Firstly, community members and NGOs saw weak legitimacy of platforms due to their exclusion from the processes that established the platforms, low trust in elite capture (chiefs and other authorities) due to unclear structures for how platform representatives are selected. Secondly, low confidence in the quality of the decisions made by the platforms because participants lack relevant knowledge on issues. Finally, power asymmetries perpetuated on the platforms, limiting meaningful participation of community members because the mining companies have a strong influence on platforms and their decisions, and the community and NGO representatives feel compelled to agree with the traditional authorities' points of view.

The government, traditional and mining authorities matter in making governance and accountability of sharing local benefits from mining easy by recognizing the citizen's voice and being open to change (Kasimba and Lujala 2022). What is presently rife is vertical accountability in the industry (Kasimba and Lujala 2022; Fox 2015). Vertical accountability refers to political accountability relations between citizens and their elected representatives, while horizontal accountability refers to the mutual oversight embedded in the state's institutions of checks and balances - relatively co-equal relationships that do not fit easily into principal-agent models (Fox 2015). Social accountability strategies should harness multilayered and coordinated efforts and enhance collective action for sustainable impacts– thus, combine citizen "voice" with government "teeth" (capacity to respond) horizontally across communities (Fox 2015). For Trust Fund to be successful there needs to be a strong rule of law (Jurewicz 2015). The current practice managed by most mining companies takes the form of a traditional corporate foundation. Research thus far has not uncovered any Foundations, Trusts, and Funds (FTFs) created by a mining company that operate independently (Jurewicz 2015). Other gaps are: voluntary CSR influences weak regulation and enforcements resulting in severe environmental and social impacts (Setyawan et al. 2025; Pedro 2018; Gjølberg 2011; Jackson et al. 2022), tokenistic stakeholder engagement due to the LMC's preconceived and biased thoughts at meetings which make the PAPs feel counterproductive (Gjølberg 2011; J.J. Isacowitz et al. 2022; Setyawan 2025) and lack of harmonized CSR measurement metrics using either risk-based or performance-based methodologies inhibiting compatible and consistent results in the mining industry (M.G. Fikru et al. 2024; J.J. Isacowitz et al. 2022).

3.0 METHODOLOGY

3.1 Policy research design and methods

The design was appropriate for policy-oriented research with the objectives of examining existing institutional CSR practices, governance and management models, comparing policy approaches across countries and firms, deriving transferable lessons for policy framework, and informing evidence-based policy recommendations. That would be done through qualitative research methodology, devoid of human subject interviews and surveys, which deployed only secondary and case studies data to support comparative analyses. Qualitative research helped to explore and understand the larger phenomenon with intensive examination of specific example (Rossman & Rallis 2003), and laid emphasis on context, existence, experience, perspective, meaning, and subjectivity, offered a unique lens through which to explore and interpret the complexities of social phenomena, which was in contrast to quantitative research, not as a contradictory, but as a complementary, each with its distinct strengths and areas of application (Lim 2025).

The case study used multiple sources of information, including documentary, organizational records, secondary sources, and publicly available data to examine CSR governance and management, stakeholder engagement, best practices, grievance mechanism and making suitable for studies without human participants (Yin 2018). Case studies, statistical methods, and formal models were complementary rather than competitive (George & Bannett 2005). Additionally, in information policy, utilizing existing data could allow the researcher to answer important time-sensitive-policy related questions quicker (Johnston 2014). Also, the secondary data was good for policy-oriented research because secondary analysis of qualitative data entailed reusing data created from previous research projects for new purposes, less established than secondary analysis of quantitative data but a growing methodological field, "sufficiently accepted that it must now be regarded as mainstream." "Primary qualitative studies rarely 'exhaust' their data… Not collecting new data when usable relevant data exists and informs policy where new research is not feasible or rapid information is required" (Irvine & Lovelock 2024). These methodological approaches supported the researcher to gain in-depth knowledge and understanding of findings that would influence a CSR Fund governance and management framework. The data were obtained from publicly available policy documents, CSR disclosures, and international standards and analyzed through systematic review. Document analysis is a systematic procedure for reviewing or evaluating documents - both printed and electronic (computer-based and Internet-transmitted) material. Like other analytical methods in qualitative research,

Journal of Information Systems Engineering and Management
2026, 11(3s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/

Research Article

document analysis requires that data be examined and interpreted to elicit meaning, gain understanding, and develop empirical knowledge. (Bowen 2009). Findings were analytically generalized to theoretical, broader governance and policy frameworks rather than statistically generalized (Yin 2018).

3.2. Source of Data, Case Study Selection Criteria, Limitations, and Ethical Considerations

The research depended on peer-review of academic literature, institutional policy documents, and corporate sustainability disclosures consistent with policy-oriented research and governance and management analysis. For example, the Institutional and Policy Document -National regulatory and policy document (e.g., National Mining Laws, USA, and Ghana), and international organization guidelines (e.g., ILO, OECD, World Bank, UNGPs, UN SDGs, GRI, EITI); Company CSR policy and reporting: CSR and sustainability reports; and academic literature: scholarly publications and journal articles, and NGO reports. The study considered these factors as case study selection criteria: (1) sectoral relevance (large-scale metal and mining firms), (2) Commitment to CSR engagements, (3) variation in governance and management models (differences in CSRF establishments, decision-making bodies, and implementation strategies), (4) geographical diversity from the Global North and Global S (representation across regions to capture and understand institutional variation), and (5) data availability (sufficient publicly documented information to enable systematic comparison).

The methodological limitations included reliance on literature and archival information and public disclosures might have missed some other information; the absence field data collections from qualitative interviews with community, government and company representatives, and contractors limited deeper insights into real stakeholders' CSR experiences; corporate self-reporting might contain prejudiced disclosures and equally vital missing information leading to greenhushing; and also, time to search for data was short. The study depended exclusively on secondary materials. Therefore, there were no human subjects involved, no ethical clearance for primary research was required. However, all sources are appropriately cited to ensure academic integrity.

4.0 Selected Case Studie from USA and Ghana

4. 1 Resolution Copper Mine (Redevelopment Project, Arizona USA) – owned by *BHP (45%) and Rio Tinto (55%) since 2004*[19]

Resolution Copper Mine (RCM) has proposed 7000ft underground mining, 60 miles east of Phoenix, Arizona, near the town of Superior, covering the Oak Flat (sacred site) within the Copper Triangle, and would involve land exchange, but attracted tribal resistance. The total economic output of the project is estimated at US$61billion, creates 1,500 direct and 2,200[20] indirect jobs[21] and projected to last for 60 years (Power & Power 2013).To facilitate the copper extraction approval, President Trump signed an Executive Oder 14157 in March 2025 under the National Environmental Policy Act (NEPA) permitting process (Shapiro & Chung 2025), and the contested land is transferred to RCM after the Supreme Court's ruling (Bryan 2026). The exercise of '*power over*' (dominion) notable in personal relationships, communities, and institutions could produce positive or negative impacts. Therefore, alternatives like '*power with*' (finding common ground among different interests and building collective strength), and '*power to*' (based on mutual support or joint action) provide positive ways for forming more equitable relationships (VeneKlasen & Miller 2002).

4.1.1 Community Investment Using Normal Annual Budgetary Allocations

The company spent US$4.9M in 2024 and US$3.5M in 2016 on social investments. The RCM's Corporate Giving (Philanthropy) & Partnerships initiative supports communities where it operates in the Arizona's Copper Triangle including Apache Junction, Florence, Globe, Gold Canyon, Hayden, Kearny, Miami, Queen Creek, Queen Valley, San Carlos, San Tan Valley, Superior, and Winkelman.[22] RCM's strategies include empowering future generations in human capital development via partnerships in education - training and capacity building in Science, Technology, Engineering and Mathematics (STEM) and scholarships for college education and apprenticeship

[19] Resolution Copper Mining Ownership - https://resolutioncopper.com/about-us/
[20] https://projects.gbreports.com/western-usa-mining-2025/resolution-copper-company-profile
[21] Resolution Copper Mining Project Economic Impacts https://resolutioncopper.com/economic-impact-2/
[22] RCM Philanthropy & Partnerships - Corporate Giving and Partnership Guidelines for applications, and what the fund does not support. Link the site: https://resolutioncopper.com/philanthropy-partnerships/

programs, employee volunteerism in communities, and supporting causes and organization approach.[23] Volunteerism increases employees engagement and productivity, and satisfaction with career progression and the employer (Willard 2012).

4.1.2 Copper Triangle Community Development Fund and Endowment Funds (CTCDF & EF)

The Copper Triangle Community Development Fund (CTCDF**)** for economic development for communities in Arizona, was created with the support of Resolution Copper in January 2021 (USDA Forest Service 2025). The Fund is meant to address effects of RCM's undertaking on historic properties and community infrastructure within the communities of Superior, Miami, Globe, Kearny, and Winkelman.[24] The Programmatic Agreement (PA) ensured tribal-based Endowment Funds (EFs) and were to be set up and funded only by the RCM including the (a) Tribal Cultural Fund (address physical effects on the Chí'chil Biłdagoteel and other properties significant to the tribes), (b) Tribal Education Fund (offer scholarships to the tribal youths at colleges, universities and vocational school), and (c) Foundation for Tribal Program Funding Initiative (Tribal monitors' salary and training, Emory Oak Restoration, and Tribal Youth Programs) (USDA Forest Service & Tonto National Forest Service 2021).

4.1.3 Governance and Management Structure

The RCM's sponsored projects are managed by NPOs recognized as exempt under Internal Revenue Service Code (IRSC) section 501(c)(3) - company-funded projects but implemented independently by NPOs. Applications are submitted quarterly for review and approval for social investments, while disbursements are between 10 and 12 weeks. Those requests from other major cities in the Valley are not eligible confirming the argument that 'CSR means something, but not always the same thing to everybody' (Moon 2014). The EFs would be governed by a separate agreement with the Secretary of Agriculture in line with the Southeast Arizona Land Exchange and Conservation Act (USDA Forest Service & Tonto National Forest 2021). CTCDF would financially support a revolving loan program administered by experienced NPOs under the IRSC section 501(c)(3). An appropriate governance structure would be in place to oversee implementation and funding, a CTCDF committee made up of representatives from State Historic Preservation Office (SHPO), the applicable administering organization, and the affected communities would review all applications.[25]

4.1.4 Environmental Impacts & Actions

Resolution Copper Mining proposed mine site situates at Tonto National Forest known as Oak Flat (Chi'chil Biłdagoteel) serving as recreational and sacred sites to the Apache people (Wells 2021; Rodriguez, 2025). However, they are confronted with legal challenges and opposition over mining associated socio-economic and environmental harm, especially from the San Carlos Apache Tribe delaying the project since the copper ore was discovered 20 years ago (Rodriguez 2025; Snow & Daly 2024). The Oak Flat was protected by the Federal Government since 1955, but the National Defense Act 2014 provided for a land swap of 2,422 acres of the Tonto National Forest to Resolution Copper Mining in exchange for 5,459 acres of conservation land in Arizona (USDA Forest Service & Tonto National Forest 2025) in order to supply up to 25% of U.S. copper demand, make the US energy-independent and support the Arizona economy. The Oak Flat designated as a Traditional Cultural Property by the National Park Service and listed on the National Register of Historic Places (NRHP) would be affected by mining and its access would be restricted to the Indigenous people (Wells 2021). In 2025, the FEIS stated the Oak Flat would be directly and permanently damaged and loss of irreparable historical, cultural, and spiritual sites (Pietrorazio 2025). RCM is cognizance of its mining impacts and the need for responsible mining, and mitigation measures[26] against air (dust) and water pollution, land disturbance, subsidence, tailings, reclamation. Relocation of some planned facilities will affect hundreds of ancestral sites, medicinal plants, seeps, and springs. However, RCM would be responsible for reclamation of impacted areas after 40 years - "maximum expected area" of about 1,800 acres (Rhodes 2023; Rodriguez 2025).

---

[23]RCM Community Engagement. Link to the site: https://resolutioncopper.com/community-engagement/
[24]RCM Copper Triangle Community Development Fund https://www.lawinsider.com/clause/copper-triangle-community-development-fund
[25] Ibid
[26] RCM's Environmental Conservation impacts & mitigation plants. https://resolutioncopper.com/environmental-conservation/

Journal of Information Systems Engineering and Management
2026, 11(3s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/
Research Article

RCM's copper mining measures, among others, include (1) signing of a *Good Neighbor Agreement* in March 2024 comprising members from RCM, communities and organizations around Superior, Arizona, to foster a two-way dialogue on local economy, support regional infrastructure, and plan for anticipated growth.[27] (2) Stakeholder consultations and engagements by the US Forest Service (USFS) and RCM on the Final Environmental Impact Statement (FEIS) and redevelopment of the copper project (USDA Forest Service & Tonto National Forest 2025). (3) Signing of the *Programmatic Agreement (PA)* in 2021 as a mitigation measure for Tribal cultural heritage by multistakeholders - USDA Forest Service, Tonto National Forest (TNF), Resolution Copper Mining LLC, Bureau Of Land Management (BLM), U.S. Army Corps of Engineers, Arizona State Land Department (ASLD), Salt River Project Agricultural Improvement and Power District and 15 Native American Tribes (*shown Table 3*) as signatories - which sought to shape the project design and construction and bring long-term benefits for the partners involved.

The PA associated with the RCM sought the following: (a) ensured compliance with the National Historic Preservation Act (NHPA); (b) provided for identification, evaluation, and mitigation of adverse effects on historical properties (e.g., archaeological sites, traditional cultural properties, and other tribal cultural resources resulting from the RCM project and federally mandated Arizona Land Exchange; and (c) provided responsibilities, consultation requirements, especially with affected tribes, mitigation measures, mandatory procedures, and long-term commitments to protect cultural heritage throughout 20 years duration of the PA (USDA Forest Service & Tonto National Forest 2021; USDA Forest Service & Tonto National Forest 2025).

4.2. Nevada Gold Mines (USA) - *Barrick (61.5%) and Newmont (38.5%) own NGM, but being operated by Barrick*

4.21 Environmental Impacts & Actions

The BLM has completed the FEIS for NGM's proposed Robertson Mine Project in the Shoshone Range of Lander County. Upon approval, the surface disturbance was estimated at 4,177 out of 5,990 total acres through mining operations on public lands resulting from three open pits mining infrastructural facilities. The expected life of mine (LOM) would be 12 years, and reclamation would occur in stages, but the final reclamation was expected three years after conclusion of the project. Reclamation would be completed in accordance with the BLM and Nevada Division of Environmental Protection regulations. The BLM has issued a Record of Decision (ROD) for the Robertson Mine Project in November 2024 (Bureau of Land Management 2024).

4.2.2 Community Investments, Heritage Fund & Wildlife Endowment Fund

In December 2020, NGM provided 7000 employees with US$25 to start giving account as a Heritage Fund with US$500k to kick-start the program from the mine.[28] The Fund allowed the employees to donate to NPOs of their choice driving community development course. In 4 years, over 1,000 employees had participated in the Heritage Fund and raised $4.6 million, benefiting 315 organizations.[29] NGM has established a Wildlife Endowment Fund to cater for sustainable environmental conservation fund - supporting wildland fire prevention, restoration, and riparian and stream health initiatives across Nevada. NGM dedicated US$20 Million to the course and US$5 Million of it was approved already for wildlife funding. NGM would invest US$150,000 annually in the DOW for fire restoration and prevention projects until the Wildlife Endowment is fully funded.[30] NGM also made financial donation/grant (US$35k) to the Community Foundation of Elko County to be added to County's Endowment to strengthen communities as financial legacy.[31] Since September 2020, NGM together with the CDC supported US$5 million in Nevada focusing on economic development, education, environment, health and cultural Heritage.[32]

---

[27] SUPERIOR, AZ, March 22, 2024.Resolution copper and the Superior, AZ community working group sign landmark good neighbor agreement. https://resolutioncopper.com/resolution-copper-and-the-superior-az-community-working-group-sign-landmark-good-neighbor-agreement/
[28]https://nevadamining.org/nevada-gold-mines-establishes-employee-giving-program-the-heritage-fund-with-500000-initial-investment-to-support-local-communities/ and https://nma.org/heritage-fund-at-nevada-gold-mines-2/
[29] NGM's 2024 Community Benefit Footprint. https://s25.q4cdn.com/322814910/files/doc_downloads/ngm/NGM_2024_Community_Benefit_Footprint.pdf
[30]Barrick Nevada Gold Mines Heritage Fund Wildlife Endowment will support habitat enhancement and restoration projects, July 07, 2023 https://s25.q4cdn.com/322814910/files/doc_news/2023/07/NGM_Heritage_Fund_Wildlife_Endowment_07072023.pdf
[31] Community Foundation of Northern Nevada. https://nevadafund.org/post/nevada-gold-mines-contributes-35000-community-foundation-elko-county/
[32] Community Development Committees Supporting Nevada With Over $5 Million Contributed. Press Release (2022) https://s25.q4cdn.com/322814910/files/doc_news/2022/10/Community_Development_Committees_Supporting_Nevada_With_Over_5_Million_Contributed.pdf

Journal of Information Systems Engineering and Management
2026, 11(3s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/
Research Article

4.2.3 Governance and Management Structure

The Heritage Fund is a 501(c) (3) managed by an Executive Director and governed by a nine-member Board of Directors,[33] while with the Wildlife Endowment Fund would be managed by a 9-member Board in partnership with the Nevada Department of Wildlife (NDOW).[34]

4.3 Newmont Ahafo Gold Mine (Ghana), owned by Newmont Ghana Gold Limited (NGGL)

4.3.1 Environment Impacts & Actions

Newmont Ahafo Gold Mine (NAGM) started the Ahafo South gold project from a greenfield surface mining and impacted on the environment and communities as a result of mine infrastructural development (construction of mine pits, waste rock disposal facilities, a mill and processing plant, water storage for the processing plant, a tailings storage facility, environmental control dams, storm water and sediment control structures and ancillary facilities (buffer zones, bypass and haul roads, accommodation and mine services), and involuntary resettlement or displacement of PAC at Kenyasi No.1, Kenyasi No.2, and Ntotroso. An area of 2,994ha was impacted. A total of 1,701 households made up of about 9,575 persons were affected - 823 households (5,185 persons physically displaced) and 878 households (4,390 persons economically displaced) through the loss of settlements and agricultural fields to the mine area (Barclay & Salam 2015; Frédéric Giovannetti & Bennett Adjei 2024; Newmont Sustainability Report 2024). Research shows that loss of access to land for farming constituted the most significant effect on the women, with 67.8% to 90% of respondents reporting loss of land culminating in reduction in the production of the three (3) most important food crops in the district: cassava, yam and plantain, pushing their prices up in the locality (Yamoah Tenkorang 2016; Giovannetti & Poku-Boansi 2017). Loss of land for mining activities is a reality (Giovannetti & Poku-Boansi 2017). Nevertheless, NGGL's supported Agriculture Improvement and Land Access Program (AILAP) program resulted in 2,591 hectares put under cultivation as compared to 2,426 hectares of land access for the company's mine using 2 acres per household. 47.6% women benefitted (Giovannetti & Poku-Boansi 2017).

NAGM is committed to compliance with national laws and internationally accepted standards, collaboration with the EPA and Water Resources Commission, and environmental monitoring programs including water quality, blast, noise, air quality, precipitation, and other meteorological parameters, concurrent reclamation to restore biodiversity and provide multiple beneficial land uses post-closure. Ahafo's concurrent reclamation began in 2009, with native and exotic tree species planted and more than 150 hectares of waste rock dump reclaimed by the end of 2018. Newmont's mines are ISO 14001 EMS certified, and the Ahafo mine is under the International Cyanide Management Code, though subscription to the code is voluntary.[35]

4.3.2 Newmont Ahafo Development Foundation (NADeF)

In May 2008, Newmont Ahafo Development Foundation (NADeF) was established and signed between NGGL and the Ahafo Social Responsibility Forum (ASRF) represented by ten (10) Ahafo Mine Communities, Local Government, Regional Government, and Civil Society) with the goal of sharing resources granted to the Foundation by Newmont to support community development programs (infrastructure and social amenities, economic development, human resource development, natural resources, cultural heritage, and sports) within the HCs. The **source of NADeF** was the annual contribution from Newmont, which comprises **US$1 per ounce of gold produced and 1% of net profit from the Ahafo Mine**.[36] Newmont Ahafo Mine is the sole contributor of funds into the Fund for CSR initiatives. "Contributions to the Newmont Ahafo Development Foundation (NADeF) in 2024 totaled US$4.46 million" (Newmont Sustainability Report 2024, p.105). A similar vehicle for community investments is the Newmont Akyem Development Foundation with flagship educational project under construction in 2024 – "Akyem Vocational Training Institute (AVTI), accredited by the Ministry of Education's Technical and Vocational Education and Training Services" (Newmont Sustainability Report 2024, p.105). On the hand, the

---

[33] NGM's Employees Heritage Fund/Nevada Mining Association. https://nevadamining.org/nevada-gold-mines-establishes-employee-giving-program-the-heritage-fund-with-500000-initial-investment-to-support-local-communities/

[34]Barrick Nevada Gold Mines Heritage Fund Wildlife Endowment will support habitat enhancement and restoration projects, July 07, 2023 https://s25.q4cdn.com/322814910/files/doc_news/2023/07/NGM_Heritage_Fund_Wildlife_Endowment_07072023.pdf

[35] Newmont Ghana: Environment and Concurrence Reclamation. https://operations.newmont.com/africa

[36] Newmont Ahafo Development Fund (NADeF 2008) in Ghana. https://nadef.org/about-us/

Journal of Information Systems Engineering and Management
2026, 11(3s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/
Research Article

investment stability agreement between the Republic of Ghana and NGGL allowed the latter to employ skilled Ghanaians and train Ghanaian citizens for technical, administrative and financial positions, procure goods and services from Ghana, secure the health and safety of those engaged and connected with the operations by complying with the Chief Inspector of Mines' instructions, adopt all necessary and practical precautionary measures to protect rivers, potable water, humans or animals or fresh water fish or vegetation (Republic of Ghana & Newmont Ghana Gold Limited 2014).

4.3.3 Governance and Management Structure

Existing evidence indicates that the governance structure of NADeF uses participatory governance and management structure. They have Board of Trustees (BoT), a Secretariat and Sub-committees (Tender Board and Project Committees), and a Sustainable Development Committees (SDCs) in all the communities linked with the local government authority - District Assembly (Community Empowerment Associates 2014). NADeF's BoT serves as the highest decision-making body who presents the annual reports of the Foundation at an Annual General Meeting to the ASRF constituting fifty-four (54) member stakeholder representatives made up of traditional leaders, local and regional government representatives. Other groups that are represented include the Youth, Women, Farmers, local NGOs, and NGGL. The ASRF is the body that developed the agreement for the establishment of NADeF. An assessment of the overall governance structure of NADeF indicates that it exhibits characteristics of best practices in its operations. The ASRF draws the general framework within which the BoT works through the Secretariat (Community Empowerment Associates 2014).

4.4. AngloGold Ashanti Obuasi Mine (Ghana)

4.4.1 Environmental Impacts & Actions

Since 1897, Obuasi has been the host community of the oldest mining site in Ghana (J.M. Sarpong 2014; Yaw Asuah & Aboagye Anokye 2016). The underground mining operations were stopped in 2014 and redeveloped in 2019[37]. AngloGold Ashanti Obuasi Mine (AGA OM) is committed to limit its impacts on the environment through climate actions, tailings management, water stewardship, rehabilitation, and prevention of biodiversity loss in alignment with best standards (AngloGold Ashanti Sustainability Report 2024). AGA would relocate or compensate for assets belonging to the PAPs of Binsere community within a 100m buffer zone due to proximity to the mine's earmarked Tailings Storage Facility (TSF) following the EPA's determination. The relocation process was underway. The mine would do so in collaboration with the community leaders, Municipal Assembly, etc. (AngloGold Ashanti Sustainability Report 2025).

4.4.2 AGA Obuasi Community Trust Fund (OCTF)

AGA Ghana launched the Anglogold Ashanti Obuasi Community Trust Fund in 2012 as per the stability agreement between the mining firm and the Government of Ghana to contribute 1% of profit after tax. As part of the revised agreement under the Development Agreement signed with the Government of Ghana in 2018, the mine was to contribute US$ 2 of each ounce of gold produced into the Trust Fund to develop communities within its catchment area. Since 2019, AngloGold Ashanti Ghana has contributed US$2 per ounce produced to the Trust Fund (Awuni 2025; Yeboah 2025) and contributed over GH₵20million to the Obuasi Community Trust Fund (OCTF). Before this agreement, AGA was required to contribute 1 % of its profit after tax to the Fund under the 2004 Stability Agreement. This contribution was the primary source of funding for the OCTF, which was established in 2012 (Awuni 2025; Punsu 2025). For public disclosure and transparency, the company commits to empowering communities because that gives the mine SLO. Their community investments include social infrastructure – construction and refurbishment of schools, hospitals, public roads, installation of renewable energy and access to water (boreholes), education, health including the AGA malaria program, training skills development, and enterprise development /livelihood empowerment (AngloGold Ashanti Sustainability Report 2024; Awuni 2025; Yeboah 2025). The rationale of the Trust Fund is to offer alternative livelihoods and create pathways for growth

[37]AGA Obuasi, Ghana, A Brief History. https://www.anglogoldashanti.com/portfolio/africa/obuasi/, https://www.obuasimine.com/about

beyond the mining industry, where each member is equipped with the skills to overcome life's challenges (Punsu 2025).

4.4.3 Governance and Management Structure

The AGA OCTF is governed by an independent board and a steering committee, with community representatives and AGA representatives ensuring community participation and oversight of the fund's operations and spending in education, health, water and sanitation, alternative livelihoods (Awuni 2025; Yeboah 2025). The sites have 100% stakeholder engagement and socio-economic development plans in place (AGA Sustainability Report 2024). Multi-stakeholders are appointed to govern and manage the OCTF including the company, community leaders, and government representatives (Kasimba & Lujala 2022). Like the Community Empowerment Associates (2014), Kasimba and Lujala confirmed the gaps in the NADeF and OCTF participatory governance platforms and sharing of profits.

5.0 FINDINGS AND DISCUSSIONS

The research findings support previous research works including: *one*, lack of multistakeholder co-created funds and co-management policy framework in the mining sector. *Two***,** the mining companies are sole CSR funders of community foundations and trust funds in the mining sector as confirmed by NADef 2008 and USDA Forest Service & National Forest Service (2021). *Three*, there is variability in CSR funding, governance, and management mechanisms. CSR projects funding is either by means of a budgetary allocation in the instance of RCM and NGM in the USA or a well-defined and institutionalized structure in the case of Newmont Ahafo and AngloGold Ashanti Obuasi Mines in Ghana which could easily enhance future community investments planning and executions. Financial collaboration exists between NAGM and Liebherr for capacity building but not considered as main source of CSR funding. Similarly, NGM and RCM have capped funds for dedicated services like the NGM's Wildlife Endowment Fund and the RCM's Endowment Funds and CTCDF. However, the RCM's Endowment Funds and CTDCF have been politically tied to mining licensing and permitting in reference to the Programmatic Agreement signed in 2021. The seed capital mechanism used by the NGM to set up the employee Heritage Fund was laudable in that regard. In all, the CSRF are being administered as revolving funds. The CSRF governance and management also vary across the regions and MNCs. NAGM and AGA OCTF in Ghana use a more participatory approach with boards and management committees including community representations. RCM and NGM also use board with limited community representations, and more of 501 (c) (3) charitable organizations (NPOs) under IRSC exempt and applicable Act, and departments confirming cross-sector collaboration and improved accountability with the US IRS.

Four, there are gaps in the structured participatory governance and management of NADeF and AGA OCTF and a 501 (c) (3) mechanism. *Five*, government incentives and tax credits, and establishment of trust funds as a permitting condition drive CSR and sustainability practices. *Six*, there is evidence of voluntary CSR approach adopted in Ghana and USA by the LMCs, but that precludes robust sustainable, scalable, and broader social impact policy and regulation. *Seven*, clear evidence of contemporary stakeholder value approach for business sustainability case and environmental and social harm at the mining sites considering the literature reviews and case studies. Corrective actions are being taken to manage environmental and social concerns by the LMC, except the illegal miners. *Eight*, evidence of strong stakeholder engagements and grievance mechanism impact mining companies CSR and sustainability practices. *Nine*, the prevailing power dynamics affect CSRF governance and management, and impact transparency and accountability. The elite capture and vertical accountability beget mistrust and non-transparency. *Ten*, evidence of alignments with applicable national laws and international standards and disclosures but feebly enforced.

6.0 CONCLUSION AND RECOMMENDATIONS

Traditional CSR approach has had mixed and competitive reactions from scholarship contributions and the stakeholders in the mining sector from the Global North and South. Host Communities' adaptation to mining operations relates to national mining laws and regulations, voluntary CSRF initiatives, and stakeholder interests in improvements of local and national economies. Mining companies use CSRF as antidotal mechanism for the social

Journal of Information Systems Engineering and Management
2026, 11(3s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/

Research Article

and environment risks and impacts, a safe vault for the mines' reputation (Aqueveque et al. 2018), and access to investment opportunities. CSR alignments with social development strategies aiming to transform institutions to empower people by leveraging existing assets (natural, social, physical, financial, and human resources) and institutions (inclusion, cohesive society with equal opportunities for men and women, and accountability and transparency) enhance poverty reduction (World Bank 2005). Today, mining companies consider CSR and sustainability as integral part of their corporate governance. However, there are still concerns of transparency and accountability with the CSRF governance and management structure and real benefits to the HCs. Whatever it is, it is better mining companies have the CSRFs in place than not having them at all, but an alternative action is required going forward to end the status quo and soar CSR effectiveness. The methodologies adopted for the study revealed little or no strong emphasis on socio-economic transition life of the HCs after mine closure. CSRF initiatives focuses more on during the LOM because of the LMC's high interests in the social license to operate, lacks multistakeholder co-created funds and co-management policy framework, LMCs are sole CSR funders variability of CSR funding, gaps governance and management mechanisms, weak regulations, and enforcements evident in environmental and social harm and the importance of government role and incentives. The study puts forward recommendations for consideration with the potential to strengthen the CSRF establishments by multistakeholders, a governance and management structure led by the community themselves during and post-mining life for the desired social impacts in the HCs.

Policy Recommendations

1. Making **Social Bond or Trust Fund a licensing and permitting condition as Independent Fund** to eliminate the voluntary funding limitations. This confirms the statement of melding social licenses and formal licenses when companies seek planning permission to locate or extend premises and operations (Moon 2014), and for a Trust Fund to be successful there needs to be a strong legal provision (Jurewicz 2015), as well as legal compliance per the Programmatic Agreement (USDA Forest Service & Tonto National Forest 2021).

2. Adoption and implementation of the **Corporate Sector Stake-Fund Innovation (CoSSFI) Policy Framework** lacking in the mining sector as alternative model to achieve a multistakeholder co-created funds, governance, and management structure with the potential for major social impacts.

   The Stake-Fund "Wallet" Pot Diagram and Significance: The Stake-Fund (Corporate-led Multistakeholder Co-created Fund or Stakeholder Fund) would operate like a Three-legged pot in the mining sector with the primary goal of supporting the HCs during the production and post-production of mining life. The Three legs represent the "multistakeholders" while the "Pot" represent the "Stake-Fund Wallet" - co-created funds expected from governments' tax credits and incentives, well-defined and earmarked company social funds, donations from other individuals including employees, contractors/supply chain, and philanthropists who are committed to transparency and sustainable community development in the affected HCs. The Stake-Fund will become a 'Ring-Fenced' and Revolving Fund – only the accrued interests will be approved for community projects funding. By design, the pot cannot function properly on one leg, it will require the other two legs to stand firm when it is used to serve community needs. More significantly, the symbolic stake-fund three-legged pot depicts these traits: reliability, firmness, continuity, sustainability, scalability, broadness, transparency, accountability, insurance, and social impacts. Thus, the CoSSFI leverages stakeholder collaboration and management in the interests of the LMCs and HCs as illustrated in Figure:1 below.

Journal of Information Systems Engineering and Management
2026, 11(3s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/ **Research Article**

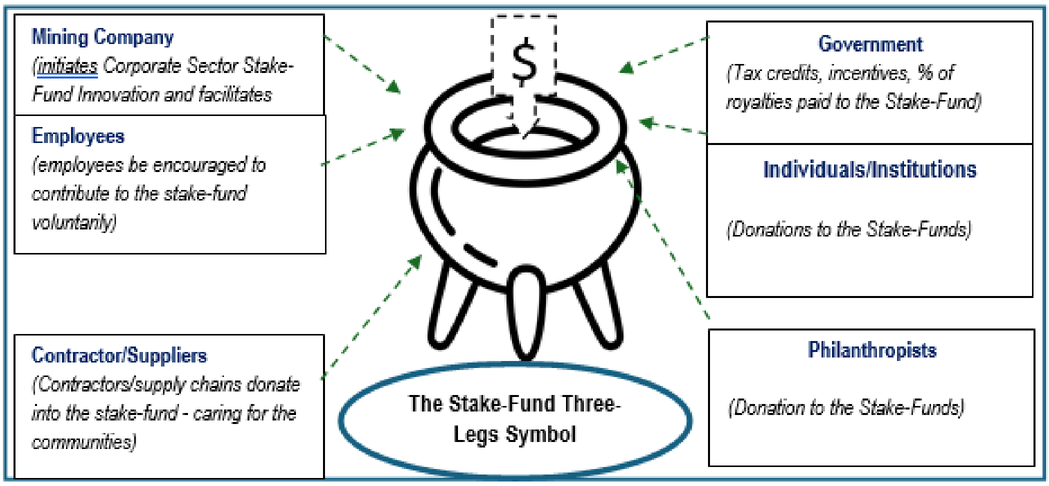

Figure 1: Three-legged Stake-Fund "Wallet" pot diagram

The Corporate Sector Stake-Fund Innovations requires **collective design thinking process** - define the problem, empathize with the real and prevailing experiences of the CSRF beneficiaries, prototype, iterate, experiment and test, implement and deliver (IDEO 2015) the model for the mining sector because innovation for social change is procedural.

3. The **Governments should provide incentives and tax credits** to reduce mining companies' financial burdens and encourage them to consider initiating this alternative policy with the potential for far reaching social impacts.
4. **Governance and Management Structure**: Mining companies should embrace horizontal accountability (Fox 2015) by enabling collaborative efforts to achieve a sustained and broader social impacts, better governance, and management structure.
   i. To enhance visibility, transparency, and accountability, non-representation of mining companies on the Board of Trustees (BoT) is advised. The Stake-Fund, BoT and management committees must exist independent of the co-founders and donors to address power asymmetries.
   ii. The representatives of mining companies and all the fund contributors, local government, communities (gendered), NGOs, and Media must create and sit on the Sustainable Community Development Advisory Committee (SuCDAC) to keep the BoT and management teams at bay.
   iii. The composition of the BoT and Committees must integrate community-level representatives who are knowledgeable and technically skilled people.
   iv. Involvement of an **external auditor** to audit all expenditures.
   v. Use of **Transparency and Accountability Consent Form** and **Grievance Resolution Performance Form** endorsed by key stakeholders and captured in the mines' annual sustainability reports.
   vi. **Quarterly Community Participation Forum (COPAF)** should be held in the HCs participated by the BoT, SuCDAC, Fund Managers, External Auditors, and Committees with the goal of updating the HCs about roles and responsibilities, funds, and social impacts projects or interventions.
5. National governments should work with mining companies to harmonize, develop and review a common social performance monitoring, evaluation, and measurement metrics per the prevailing conditions in extractive countries for the sector.
6. **Areas of Investments:** The CoSSFI should focus on Social Development - Human capital development research and development, and technological innovation, physical infrastructural projects, socio-cultural Events; Economic Development– Local Employment, Agriculture and Small Businesses, and Environment

– Water and Sanitation, Afforestation and Reforestation for Biodiversity Conservation, Cultural Sites Preservation priorities, and Area-Specific Environmental Management Programs.

7. **Mining companies must avoid these mistakes to build trust and strengthen transparency and peaceful co-existence:**

1) Undervaluation of the power of the HCs including dishonesty and disrespectfulness.
2) Over-reliance on past laurels publicity without adding new projects overtime.
3) Miscommunication and infrequent community/stakeholder engagements
4) Disdainfulness and irresponsiveness to community needs and complaints
5) Misaligning and mismatching community projects and expectations.
6) Hiring of incompetent CSR officials and disregard for progressive staff development
7) One-sided story-telling of CSR initiatives by the mines.
8) Overpromising causing lofty and mammoth community expectations.
9) Opting for elite capture in executing projects at the expense of the other stakeholders
10) Use of force, rapid militarization of concessions, and brutalization of the PAPs eschewing stakeholder dialogue, peaceful co-existence, and tranquility in the HCs.

Finally, further research should consider a Legislative Instrument (L..I.) for Corporate Sector Stake-Fund Policy Framework to strengthen enforcement, compliance, and societal gaze in the mining areas. The US government may consider royalties from the mines to support the Stake-Fund for the PAPs to build trust for the old and new mines. Research into the implementation of RCM's Funds, governance and management structure in future is encouraged.

BIBLIOGRAPHY

[1] Aaronson, S.A. (2005). "Minding Our Business": What the United States Government has done and can do to Ensure that U.S. Multinationals Act Responsibly in Foreign Markets. J Bus Ethics 59. 175–198. https://doi.org/10.1007/s10551-005-3414-z

[2] Aboagye, Stephen (2014). Mining and resettlement of communities in Ghana: Exposing the harm caused by forced displacement and relocation. MiningWatch Canada. 1-10

[3] Agarwal, Sanjay (2013). Effective Grievance Redress Mechanisms. Social Development Department. The World Bank, 1-28.

[4] Amponsah-Tawiah, Kwesi & Dartey-Baah, Kwasi (2011). The Mining Industry in Ghana: A Blessing or a Curse, International Journal of Business and Social Science. Center for Promoting Ideas, USA, Vol.2, No.12, 63.

[5] Andrews, Nathan (2015). Challenges of corporate social responsibility (CSR) in domestic settings: An exploration of mining regulation vis-à-vis CSR in Ghana. Resources Policy 47 (2016) 9-17. http://dx.doi.org/10.1016/j.resourpol.2015.11.001

[6] AngloGold Ashanti Limited (2024). Sustainability Report. 17-58.

[7] AngloGold Ashanti (2025). Sustainability Report: Mining to Empower People and Advance Societies. 62.

[8] Ansu-Mensah, P., Marfo, E.O., Awuah, L.S. et al. (2021). Corporate social responsibility and stakeholder engagement in Ghana's mining sector: a case study of Newmont Ahafo mines. Int J Corporate Soc Responsibility **6**:1, 1-22

[9] Aryee Beniamin N. (2001). Ghana's mining sector: its contribution to the national economy. Resource Policy 27 (2):61-75.

[10] Aqueveque, Claudio., Rodrigo, Pablo., & Duran, Ignacio J. (2018). Be bad but (still) look good: can controversial industries enhance corporate reputation through CSR initiatives? Bus Ethics: Eur Rev 27(3):222–237.

[11] Avetisyan, E. & Ferrary M. (2013). Dynamics of Stakeholders' Implications in the Institutionalization of CSR Field in France and in the United States. Springer Nature, Journal of Business Ethics, Vol.115, No.1. 115-133. DOI 10.1007/s10551-012-1386-3

[12] Awuni, John (2025, April 9.). AngloGold Ashanti Obuasi Community Trust Fund: The special vehicle driving grassroot development in Obuasi.
[13] Asuah, Augustine Yaw & Anokye, Prince Aboagye (2016). The Resilience of Mining Communities in Obuasi, as AngloGold Ashanti Shifts Position. Journal of Poverty, Investment and Development. An International Peer-reviewed Journal, Vol.22. 80-90
[14] Ayelazuno, Jasper Abembia (2014). "The 'new Extractivism' in Ghana: A Critical Review of Its Development Prospects." The Extractive Industries and Society1, no. 2 (2014): 292-302. doi:10.1016/j.exis.2014.04.008
[15] Ayuk, Elias T., Pedro, Antonio M., & Ekins, Paul et al (2020). Mineral Resource Governance In The 21st Century: Gearing Extractive Industries Towards Sustainable Development. UN Environmental Programme, International Resource Panel. 7
[16] Bank of Ghana (2024). Annual Report & Financial Statements. 19.
[17] Bansal, Sanchita, Singh, Shifali, Nangia, Priya, Chanaliya, Nisha & Sala, Dariusz (2024). Sustaining the mining industry through the lens of corporate social responsibility: Resources Policy, 99(2024) 105387. 1-13 https://doi.org/10.1016/j.resourpol.2024.105387
[18] Barclay, Robert & Salam, Tasneem, (2015). Ahafo South Resettlement and Livelihood Restoration Completion Audit Final Report: For Newmont Ghana Gold Limited. Ahafo South Rap Completion Audit Rev. 2 Final, ii-viii.
[19] Bedu-Addo, Kenneth et al.(2019). The AKOBEN programme as a tool towards responsible gold mining in Ghana, business as usual or a commitment towards sustainable development. Published by Elsevier Ltd., Heliyon, Volume 5, Issue 6, e01925. 2. https://doi.org/10.1016/j.heliyon.2019.e01925
[20] Brew, Yaw., Junwu, Chai., & Addae-Boateng, Samuel (2015). Corporate Social Responsibility Activities of Mining Companies: The Views of the Local Communities in Ghana, American Journal of Industrial and Business Management, Scientific Research Publishing Inc. 457-465. http://dx.doi.org/10.4236/ajibm.2015.56045
[21] Bowen, Glenn A., 2009, 'Document Analysis as a Qualitative Research Method', Qualitative Research Journal, vol. 9, no. 2, pp. 27-40. DOI 10.3316/QRJ0902027.
[22] Bryan, Susan Montoya (2026, March 16.). Apache women seek court intervention as federal land is turned over for copper mining.
[23] Carroll, Archie B. (2016): Carroll's pyramid of CSR: taking another look. International Journal of Corporate Social Responsibility (2016) 1:3. DOI 10.1186/s40991-016-0004-6, 1-8.
[24] Community Empowerment Associates (2014). Abridged Report For The Evaluation Of NADeF Operations In Its Ten Host Communities. Submitted To Newmont Ahafo Development Foundation. 1-13
[25] Cochran, Philip L. (2007). The Evolution of Corporate Social Responsibility. Indiana University, Indianapolis, Elsevier Publishing, 449-451.
[26] Cole, Megan J. & Broadhurst, Jennifer L. (2020). Mapping and classification of mining host communities: A case study of South Africa. The Extractive Industries and Society. 1-11. https://doi.org/10.1016/j.exis.2020.06.007
[27] Cramer, Jacqueline (2003). Corporate Social Responsibility: Lessons Learned. Wiley Periodicals, Inc. Environmental Quality Management. 59-66. DOI: 10.1002/tqem.10110. https://doi.org/10.1002/tqem.10110
[28] Desjardins-Charbonneau, Anaïs (2014). Operational-Level Grievance Mechanisms: A New Approach to Human Rights for Mining Corporations.33-65.
[29] Dobele, Angela R., Westberg, Kate., Steel, Morion, & Flowers, Kris (2013). An Examination of Corporate Social Responsibility Implementation and Stakeholder Engagement: A Case Study in the Australian Mining Industry. John Wiley & Sons Ltd and ERP Environment. Bus. Strat. Env. 23, 145–159 (2014) DOI: 10.1002/bse.1775
[30] Du Plessis, J. J., Hargovan, A., & Harris, J. (2015). Principles of contemporary corporate governance (3rd ed.). Cambridge University Press.13
[31] Eggert, Roderick G. (2001). Mining and Economic Sustainability: National Economies and Local Communities. MMSD Project, IIED and WBCSD, 6, 14,18-21, 75

Journal of Information Systems Engineering and Management
2026, 11(3s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/

Research Article

[32] EITI (2023). The global standard for the good governance of oil, gas, and mineral resources: Part 1: Principles and requirements. 10, 25, 31-35

[33] Falck, Oliver & Heblich, Stephen (2007). Corporate social responsibility: Doing well by doing good. Business Horizons (2007) 50, 247–254. doi:10.1016/j.bushor.2006.12.002

[34] Fikru, M. G., Brodmann, J., Eng, L., & Grant, J. A. (2024). ESG Ratings in the Mining Industry: Factors and Implications. Extractive Industries and Society, 20 Elsevier. 5. https://doi.org/10.1016/j.exis.2024.101521

[35] Fox, Jonathan (2015). Social Accountability: What Does the Evidence Really Say? American University, Washington, DC, USA, World Development Vol. 72, 346–361, 2015 0305-750X.. http://dx.doi.org/10.1016/j.worlddev.2015.03.011

[36] Freeman, R. Edward & Mcvea, John F. (2001). A Stakeholder Approach to Strategic Management. SSRN Electronic Journal. DOI: 10.2139/ssrn.263511 CITATIONS 5,083, .5.

[37] Friedman Milton (1970). A Friedman doctrine - The Social Responsibility of Business Is to Increase Its Profits. The New York Times Archives.

[38] George, Alexander L. & Bennett, Andrew (2005). Case Studies and Theory Development in the Social Sciences.

[39] Gibson, Lydialyle (2022). What Does It Mean To Be a Corporate Citizen? Published in Harvard Magazine. 4

[40] Giovannetti, Frédéric, Adjei, Bennett (2024). Project Resettlement, Compensation, Livelihood Re-Establishment Completion Audit Final Report: For Newmont Ghana Gold Limited Ahafo-Draft Report.

[41] Giovannetti, Frédéric & Poku-Boansi, Michael (2017). Review of the WACAM Report "Assessing the Social and Economic Effects of Mining on Women Affected by NGGL" Final. For Newmont Ghana Gold Limited.

[42] Gjølberg, Maria (2011) "Explaining Regulatory Preferences: CSR, Soft Law, or Hard Law? Insights from a Survey of Nordic Pioneers in CSR," Business and Politics: Vol. 13: Iss. 2, Article 4. DOI: 10.2202/1469-3569.135. 1-3.

[43] Henderson, Rebecca, Sadun, Raffaela, Sesia, Aldo, & Eisenstat, Russell (2014). Henry Shein: Doing Well by Doing Good. HBS. 1

[44] Hilson, Gavin (2019). Why is there a large-scale mining 'bias' in sub-Saharan Africa? Land Use Policy. Volume 1. 852-861. https://doi.org/10.1016/j.landusepol.2017.02.013

[45] ICMM (2025). Multistakeholder Approaches to Socio-Economic Transitions in Mining. 1-3

[46] IDEO (2015). The Field Guide To Human-Centered Design: Design Kit. 09-192

[47] ILO (1989). Indigenous and Tribal Peoples Convention (No. 169)

[48] International Trade Administration (2025, June 10). Ghana Mining Gold Rush. Historical Role of Gold in Ghana.

[49] Irvine, A. & Lovelock, C. (2024). Qualitative secondary analysis: An introduction. HKU Methods Hub.

[50] Isacowitz, Jenna Jade, Schmeidl, Susanne, Tabelin, Carlito (2022). The Operationalisation of Corporate Social Responsibility (CSR) in a mining context. Elsevier Ltd.1-7. https://doi.org/10.1016/j.resourpol.2022.103012

[51] Jackson, S., Poelzer, G., Poelzer, G. et al. (2022). Mining and Sustainability in the Circumpolar North: The Role of Government in Advancing Corporate Social Responsibility. Environmental Management 72, 37–52. https://doi.org/10.1007/s00267-022-01680-1

[52] Jamasmie, Cecilia (2018, December 6.). Losing licence to operate new and biggest threat to miners - EY

[53] Jenkins, Heledd (2004). A Critique of Conventional CSR Theory: An SME Perspective. Journal of General Management Vol. 29 No. 4 Summer 200437. 43. https://doi.org/10.1177/030630700402900403

[54] Jenkins, Heledd & Obara, Louise (2008). Corporate Social Responsibility (CSR) in the mining industry - the risk of community dependency.1-20

[55] Johnston, M. P. (2014). Secondary data analysis: A method of which the time has come. Qualitative and Quantitative Methods in Libraries, 3, 619–626.
[56] Jurewicz, Patricia (2015). Resource Sharing in the DRC: Exploring the Role of Trusts. Published by Responsible Sourcing Network. 21-25. www.sourcingnetwork.org
[57] Karnani, Aneel (2013). Mandatory CSR in India: A Bad Proposal. Looked at from the perspective of the political right, and the left, and the center, the proposed law making. Stanford Innovation Review.

[58] Kasimba, Sam A. & Lujala, Päivi (2022). Community based participatory governance platforms and sharing of mining benefits: evidence from Ghana. Oxford University Press and Community Development Journal Vol 57 No 4 2022. 635–654. https://doi.org/10.1093/cdj/bsab021
[59] Khattak, Sualeh Mohammed, Wu, Quiang & Ahmed, Maqsood (2025). Exploring the knowledge structure between government incentives and corporate social responsibility: Competitiveness Review. International Business Journal, 1059-5422, Volume 36, Issue 1. https://doi.org/10.1108/CR-03-2024-0062
[60] Kpabitey, Solomon, Xie Zhong, Ampadu, Seth, and Amoako, Richard (2020). "Evaluating Corporate Social Responsibility in Ghana; Evidence from the Mining Sector." Journal of Finance and Economics, vol. 8, no. 1 (2020): 1-5. doi:10.12691/jfe-8-1-1
[61] Lazonick, William & O'Sullivan, Mary (2000). Maximizing shareholder value: a new ideology for corporate governance. Economy and Society Volume 29 Number 1 Feb. 2000: 13–35.
[62] Levitt, Theodore (1958). The Dangers of Social Responsibility. Harvard Business Review. 49-50.
[63] Lim, Weng Marc. (2025). "What Is Qualitative Research? An Overview and Guidelines." Australasian Marketing Journal 33 (2): 199–229. https://doi.org/10.1177/14413582241264619.
[64] Lujala, P., & Narh, J. (2020). Ghana's Minerals Development Fund Act: addressing the needs of mining communities. Journal of Energy & Natural Resources Law, 38(2), 183–200. https://doi.org/10.1080/02646811.2019.1686250
[65] MacQueen, Kathleen M., McLellan, Eleanor, Metzger, David S, Kegeles, Susan., Strauss, Ronald P., Scotti, Roseanne, Blanchard, Lynn, & Trotter, Robert T. II. (2001). What Is Community? An Evidence-Based Definition for Participatory Public Health. 1926-1943
[66] Mainardes, Emerson Wagner., Alves, Helena., & Raposo, Mário, (2012),"A model for stakeholder classification and stakeholder relationships", Management Decision, Emerald Group Publishing. Vol. 50 Iss: 10 pp. 1862 – 1869. http://dx.doi.org/10.1108/00251741211279648
[67] May, Steve, Cheney, George, & Roper, Juliet (2007).The Debate Over Corporate Social Responsibility. Oxford University Press, New York, 59-62, 179-180.
[68] McDonald, Sharyn & Young, Suzanne (2012). Cross-sector collaboration shaping Corporate Social Responsibility best practice within the mining industry. Elsevier Ltd. Journal of Cleaner Production 37 (2012) 54-67, https://doi.org/10.1016/j.jclepro.2012.06.007
[69] McElroy, C. A. (2012). Corporate foundations in the mining industry: the relationship between responsible investment and social investment. Journal of Sustainable Finance & Investment, 2(3–4), 240–256. https://doi.org/10.1080/20430795.2012.742636
[70] Mischke, Jan, Woetzel, Lola, and Birshan, Michael (2021, April 12.). The necessity of doing well by doing good. Milken Institute Review.
[71] Moon, Jeremy (2014). Corporate Social Responsibility: A Very Short Introduction (Very Short Introductions). UK, Oxford University Press. 3, 17, 20-45, 116-117.
[72] NADeF & Liebherr (2025, May 14.). NADeF/Liebherr Excellence Scholarship Awards. https://nadef.org/publications/
[73] Narh, William (2024, November 25.). Newmont recognised for leadership in Corporate Social Investment at 2024 Mining Industry Awards.
[74] Ndemena. Peter. (2023). The Effect of CSR Disclosure on Corporate Performance with Respect to Mining Companies in Zambia. Austin J Bus Adm Manage. 2023; 7(3): 1066.
[75] Newmont (2008). Newmont Ahafo Development Foundation (NADeF). https://nadef.org/about-us/
[76] Newmont (2024). Realizing Our Potential: Annual Sustainability Report. 7, 54, 60-61,105-108

[77] Ofosu, George. & Arthur-Holmes, Francis (2025). Transforming Ghana's ASM industry: The intersection of 'mining schemes and stakeholder collaboration. Elsevier Ltd., p.4
[78] Owen, John R. & Kemp, Deanna (2023). Corporate Responses to Community Grievance: Voluntarism and Pathologies of Practice. Journal of Business Ethics (2024) 189:55–68. https://doi.org/10.1007/s10551-023-05332-0
[79] Parekh, Anushree & Tenneti, Sandhya (2018). New Frontiers in Indian Corporate Social Responsibility: The timing is opportune for CSR to catalyze impact in India's development sector. Stanford Social Innovation Review.
[80] Pedro, A. (2018). Mineral Resource Governance in the 21st Century [PowerPoint presentation]. International Resource Panel (IRP).
[81] Pietrorazio, Gabriel (2025, March 19.). Government report: Oak Flat would be 'directly and permanently damaged' by Resolution Copper. KJZZ.
[82] Pfeiffer, James & Chapman, Rachel (2010). Anthropological Perspectives on Structural Adjustment and Public Health. The Annual Review of Anthropology., p.150. doi:10.1146/annurev.anthro.012809.105101
[83] Porter, M.E. & Kramer, M.R (2011). Creating Shared Value. How to reinvent capitalism—and unleash a wave of innovation and growth. Boston, Massachusetts, Harvard Business School Publication, USA. 6-7
[84] Power, Thomas Michael & Power, Donovan S. (2013). Exaggerating the Net Economic Benefits of the Proposed Resolution Copper Mining, Superior, Arizona: A Critical Review of Resolution's Economic Impact Analysis - A Report Prepared for the San Carlos Apache Tribe San Carlos, Arizona. 3-5.
[85] Punsu, Elizabeth (2025, April 3.). AngloGold Ashanti supports Obuasi Community Trust Fund with over GH₵20m.
[86] Rangan, Kasturi, Chase, Lisa, and Karim, Sohel (2015). The Truth About CSR: Most of these programs are not strategic—and that's OK. Harvard Business Review. 4-5.
[87] Steurer, Reinhard (2009). The role of governments in corporate social responsibility: characterising public policies on CSR in Europe. Policy Sci (2010) 43:49–72. DOI 10.1007/s11077-009-9084-4
[88] Republic of Ghana & Newmont Ghana Gold Limited (2014). The Republic Of Ghana And Newmont Ghana Gold Limited Revised Investment Agreement. Dated 24th November, 2024. 4, 12, 18.
[89] Responsible Mining Foundation (2022). Assessment of World Gold Council member companies in RMI Report 2022 with respect to WGC Responsible Gold Mining Principles.
[90] Rossman, B. Gretchen & Rallis, Sharon F. (2003). Learning in the Field: An Introduction to Qualitative Research (2nd Ed), Sage Publications, Inc., California. 8-9, 104-106.
[91] Rhodes, Jeanne Eder (2023, September 27.). Copper Mine or Sacred Land: The Fight for Oak Flat: The group Apache Stronghold rallies against an Arizona copper mine that would create a nearly 2-mile-wide crater of public land at Oak Flat. National Wildlife Federation.
[92] Rodríguez, Mayuly (2025, January 8.) CSR as the key to sustainable mining of the future: Evaluating how CSR drives sustainable mining through advanced technologies and renewable energy.
[93] Rodriguez, Paola (2025, May 7.). Apache Strongholds asks court to temporarily halt Oak Flat land swap. AZPM.
[94] Sarpong, Justice Michael/Graphic Online (2014, June 5). The realities of Obuasi mine.
[95] Sayer, Richard N., Regan, Sayer & Thayer, LLP (2025, July 3.). Corporate Social Responsibility: Legal Implications and Best Practices.
[96] Schoenberger, Chana R. (2023). Research: India's Corporate Philanthropy. Stanford Social Innovation Review. 61-62.
[97] Sekyi, Ransford (2011). AKOBEN: Ghana's New Initiative for environmental performance rating and disclosure in the mining sector. Environmental Protection Agency, Government of Ghana, Accra, Ghana. 3-11.
[98] Setyawan et al. (2025). Stakeholders and Corporate Social Responsibility in the Mining Sector Over Eight Years: A Systematic Review (2018–2025). Volume 08. DOI:10.47191/ijmra/v8-i04-46. Page No. 1918-1927
[99] Shapiro, K. & Chung, Ha (2025, April 18.). Trump Administration Accelerates Resolution Copper Mining Approval, Advancing Domestic Mineral Agenda.

Journal of Information Systems Engineering and Management
2026, 11(3s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/

Research Article

[100] Snow, Anita & Daly Matthew (2024, March 1.). A US appeals court ruling could allow mine development on Oak Flat, land sacred to Apaches.

[101] Stout, Lynn A. (2012). The Shareholder Value Myth: How Putting Shareholders First Harms Investors, Corporations And The Public. Berrett-Koehler Publishers Inc., San Francisco, California. 2-7, 8-9.

[102] Theo, Kael (2025, June 30). Mining Sector ESG Reports: Rio Tinto vs. BHP Compared.

[103] Tomasko, Robert M. (2006). Bigger Isn't Always Better: The New Mindset for Real Business Growth. AMACOM, New York. 11, 28-32**.**

[104] Tsuma, William (2010). MINING-SECTOR REFOERMS IN GHANA: Institutionalizing and legitimizing Large-Scale Deals and Acquisitions in Rural Communities of Western Ghana. 1-10.

[105] United Nations (2011). Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework. 1- 42

[106] US Bureau of Land Management (2024, October 3.). BLM issues final environmental analysis for proposed gold mine.

[107] USDA Forest Service & Tonto National Forest (2021). Programmatic Agreement Among The USDA Forest Service Tonto National Forest, Arizona State Historic Preservation Officer, The Advisory Council On Historic Preservation, Regarding Compliance With The National Historic Preservation Act On The Resolution Copper Project And Southeast Arizona Land Exchange Near Superior, Arizona. 1-56.

[108] USDA Forest Service & Tonto National Forest (2021, April 13.). Final EIS Programmatic Agreement Summary: Process & commitments. In Final Environmental Impact Statement for the Resolution Copper Project and Land Exchange. Volume 6. Programmatic Agreement Appendix).

[109] USDA Forest Service &Tonto National Forest (2025). Final Environmental Impact Statement: Resolution Copper Project and Land Exchange. Coconino, Gila, Maricopa, Pinal, Santa Cruz, and Yavapai Counties, Arizona. Volume 6. Programmatic Agreement Appendix).

[110] U.S. Geological Survey (2025, January 31). Value of U.S. Minerals production edged up in 2024.

[111] US Mining Law (1872). TITLE 30—MINERAL LANDS AND MINING Section 21a. National mining and minerals policy; "minerals" defined; execution of policy under other authorized programs. 7-8.

[112] VeneKlasen, L., Miller, V. (2002) Power and empowerment. PLA Notes, 43: 39-41

[113] Wirba, Asan Vernyuy (2023). Corporate Social Responsibility (CSR): The Role of Government in promoting CSR. Journal of the Knowledge Economy (2024) 15:7428–7454.

[114] Wells, James (2021). The Proposed Resolution Copper Mining and Arizona's Water Future. 1-16.

[115] Willard, Bob (2012). The New Sustainability Advantage: Seven Business Case Benefits of a Tripple Bottom Line. New Society Publishers, 5, 102-105

[116] Witchalls, S. (2022, April 3.). The Environmental Problems Caused by Mining.

[117] World Bank (2005). Empowering People By Transforming Institutions: Social Development in World Bank Operations. 1-2

[118] World Bank (2017). The World Bank Environmental and Social Framework. 97-100.

[119] World Bank (2025). Indigenous Peoples Overview: Indigenous Peoples are critical partners for the development solutions needed to end extreme poverty and boost shared prosperity on a livable planet.

[120] World Gold Council (2025). Global Mine Production.

[121] Yamoah Tenkorang, Emmanuel (2016). Assessing the social and economic effects of mining on women affected by Newmont Ghana Gold Limited's Operations..3, 15, 51.

[122] Yeboah, Clinton (2025, April 8). AngloGold Ashanti Obuasi Community Trust Fund, The special vehicle driving grassroot development in Obuasi.

[123] Yin, Robert K. author. (2018). Case study research and applications : design and methods. SAGE Publications, Inc.

[124] Yousefian, Mohammad., Bascompta, Marc., Sanmiquel, Lluís., Vintró, Carla (2023). Corporate social responsibility and economic growth in the mining industry. 5.

Journal of Information Systems Engineering and Management
2026, 11(3s)
e-ISSN: 2468-4376
https://www.jisem-journal.com/ **Research Article**

[125] Yousefian, Mohammad., Bascompta, Marc., Sanmiquel, Lluís., Vintró, Carla., & Sidki-Rius, Nor (2024). Corporate social responsibility and total factor productivity: the case of European mining industry. Mineral Economics (2024) 37:149–161.

[126] Zahra, Shaker A., Priem, Richard L., & Rasheed, Abdul A. (2005). The Antecedents and Consequences of Top Management Fraud. Published by SAGE: Journal of Management 2005 31: 803-828.