

Identifying the Sources, Causes and Costs Of Conflicts in the Prestea Mining Community

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The Prestea mining community in Ghana has produced approximately nine million ounces of gold and ranked the second highest production of any mine in the country. It is a fact that, some communities around the world have been considerably transformed by the mining industry but same cannot be said about Prestea community. Notwithstanding, about a century of mining, Prestea is still a deprived community. There is protracted community-level conflicts in the face of contemporary international standards and growing expectations for the mining industry to convert the rhetoric of corporate social responsibility into actual practice. There have been instances when land use and environmental impact issues have culminated in violent conflicts between the extractive entities and the community, with the mines losing the social licence to operate. The objective of this paper is to establish the sources, causes and the cost associated with conflicts to assist in the rationalization of improved risk management intended for managing conflicts between the local population and Golden Star Resource Limited (GSR). The study was designed utilising the mixed method to collect the needed data for the research and specifically applying survey and stakeholder interviews. The loss of social licence comes with costs to the company and the community. The paper argues that land use and environmental impact are the major sources and causes of conflicts coming with huge cost to both the company and the community. There are underpinning barriers to unwrinkled conflict resolution relative to land use and environmental friendliness in the indigenous area. This paper further contends that conflicts in Prestea community have to do with the power imbalances; unfairness; unfair distribution of risk; GSR's disrespect for local perceptions and worldviews.

Key Words: Conflicts, Community, Indigenous, Mining, Violent clashes, Disputes, Natural resources


Introduction

This article focuses on identifying the sources, causes and costs associated with conflicts to help justify the enhancement of risk management geared towards managing disputes between indigenous Prestea community and Golden Star Resource Limited (GSR) that is the large-scale mining company in the area. Zandvliet and Anderson (2009) observes that usually fingers are pointed at multinational mining entities especially for deliberately or accidentally engaging in disputes or fuelling existing or hidden concerns within indigenous areas. Economic and social welfare of the local populations are usually at the core of such disputes in the communities. A. Bebbington, Hinojosa, Bebbington, Burneo, and Warnaars (2008) point out that, accessibility to land or water, land use or ownership, environmental impacts, gendered impacts, social and cultural dislocation; human rights infractions; inequity and inequality in resource distribution and under-development of the local area as some of the indigenous concerns. As a matter of fact, Calvano (2008) describes the relationship between the local community and large-scale mining company as a battlefield on which the operations of mining entities are disputed. It is an undisputable

fact, that operating in indigenous jurisdictions is associated with diverse and a hosts of inconveniences such as reconciling or balancing the expression of indigenous populations in connection with rights and fairness and application of minimum force to quell violence.

It is not succinctly conspicuous if large-scale mining companies and in this case, GSR have deep knowledge in relation to the sources, causes and costs of conflicts between indigenous communities and large-scale mining companies. These kind of conflicts may erupt at various levels of the operations of large-scale mining company's life span. There is therefore the need to investigate the sources, causes of conflicts in indigenous communities such as the situation in Prestea. The cost and benefit analysis of the entire life cycle of the operations of the mines is also needed.

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Furthermore, transparency, probity and accountability are required in situations of distinct and different organisational involvement in operations to avoid conflicts relative to decisions taken at the initial stages of the operations.

Competing for mineral rich parcels of land in indigenous mining communities is usually one of the sources of conflicts at different levels of the community relations. Other sources of conflict in indigenous mining communities have to do with ownership and control of mineral rich lands. Violent disputes between artisanal small-scale mining (ASM) and large-scale entities over land use due to fluidity in land ownership, control and rights are common in indigenous local populations in the developing world. Normally, there are hidden interests behind the extraction of natural resources in some of these indigenous communities. Buckles and Rushek (1999) observe that natural environment linkages mean that a person can actually influence decisions from afar and mineral resources are susceptible to disputes because its utilization forms a complicated web of users and creating the space for the most powerful to control the resource management. Disputes in indigenous mining communities often comprise of three principal actors, foreign large-scale mining companies, the government and the indigenous community.

Particularly, mining and agriculture which are competing and inconsistent land use issues generate conflicts in some of these areas. Invariably, unfair distribution of resources end up in disputes even though disputes may be triggered by insufficient supply of natural resources. In addition, there are clear indications in many indigenous communities in the developing world that, natural resources are running out. Buckles and Rushek (1999) indicate that the exhausting trend of natural resources supply by local communities and large-scale mines in view of high intensity of utilization, change in the environment and uneven distribution have exacerbated the disputes in indigenous communities. Furthermore, Ayling and Kelly (1997) point out that the notion of 'structural scarcity' disputes are eventually going to intensify the phenomenon. This diminishing state of resource in some communities infuriates the indigenous populations who believe that, there have been many years of natural resource extraction in their areas yet they are deprived populations. In other words, there has not been significant and commensurate transformation of some of these indigenous areas.

Moreover, the right to take part in the decision-making relative to resource management and its beneficiaries also provide the space for conflicts in indigenous communities. Ayling and Kelly (1997) suggest that there is higher degree of disputes in ASM operations than other forms of natural resource related sectors in view of the nuances in competing interest for restricted quantity of re-

sources and usually access to legal rights to the land is missing. Land use conflicts between ASM and large-scale mining entities are just a microcosm of natural resource conflicts that local populations are culturally attached, yet they have no proper legal right of extraction. Furthermore, Buckles and Rushek (1999) add that resources utilization goes beyond livelihood of indigenous populations and usually signifies indigenous lifestyles and cultural identity. The considerable level of illegal nature of substantial proportion of ASM activities in indigenous communities emanates from the intransigence of state agencies to acknowledge ASM operations as lawful. Ayling and Kelly (1997) explain that as the worth of specific natural resources grows, indigenous arrangements for managing conflicts are inclined to collapse and there is minimal or no control by central governments of a number of developing countries where ASM takes place. ASM operations is especially susceptible to disputes in indigenous communities in the developing world and usually located in the deep hinterlands making accessibility to mining sites quite awkward. Switzer (2001) expects violent disputes to extend from trivial violent disputes to civil conflicts in the coming years. This anticipation is hinged on the fact that, the core issues such as livelihoods of local populations, environmental impact, poverty and under-development of these indigenous communities have not been addressed by the major actors.

In view of these issues, many foreign investors are reluctant to move into jurisdictions or terrain with history of violent disputes involving the government, ASM and large-scale miners. The destructive activities of illegal ASM operators in the local communities serve as a disincentive to foreign direct investment in the developing world. ASM operators extract minerals from some of the legally acquired concessions of large-scale mining entities and because of that, many large-scale miners perceive ASM operators as intruders involved in illegality. On the other hand, some of these large-scale mining entities usually promise to perform their corporate social responsibilities to the indigenous populations but that commitment often falls below the expectations of the local people. Some large-scale mining companies also believe that the performance of their financial legal obligations such as payment of royalties and other taxes to national governments should enhance the development and the welfare of the local population of some of these communities.

The environmental and social impact of mining also serve as sources of conflicts in the local communities. The large-scale mining companies are well known for environmental degradation through their operations. The environmental impact of the large-scale mining companies take the form of water bodies' contamination usually through cyanide

spillage and other avoidable environmental pollution of the community. The various degrees of environmental impact to the indigenous lands are sometimes to the extent of rendering the land unusable and unable to support the livelihoods of the local populations. This therefore threatens the livelihood of the local populations through the removal of the top soil, forest and vegetation cover of these communities. This practices have a high propensity for disputes with large-scale mining entities companies in the local communities. The operations of large-scale mining entities are usually considered by ASM as a threat to the indigenous populations' livelihoods which is centred on natural resources extraction. The indigenes perceive mineral resource in the land as their rightful and cultural inheritance. Therefore intruding on the ancestral lands means disrupting the indigenous lifestyles and damaging the indigenous natural environment. Furthermore, indigenous communities hold the perception that, they have been unfairly deprived of their cultural rights and traditional way of life as a people. Many of these communities thereby believe their livelihoods and sustenance as ASM relative to natural resources are under siege by foreign interests. The health status of the indigenous community populations are affected through the activities of these foreign mines.

There are certain factors that are the immediate triggers or causes of violent conflicts between miners both ASM and large-scale mines and other industries such as forestry and usually peasant farming that compete with mining for large parcels of land in the indigenous communities. One can make reference to the unfriendly posturing and policies of many governments in the developing world towards ASM. The posturing of governments and mineral policies are conspicuously aimed at enticing into the country, foreign direct investment in the mining sector. There is usually associated social, economic and environmental dislocation of indigenous populations with the entry of these foreign large-scale mining companies. These large-scale mining entities normally secure the quality sites of feasibly extractable natural resources or best part of the land which also impacts on indigenous farmers as they rip off the top soil, vegetation and forest cover of the local communities. A. Bebbington et al. (2008) indicate that that the debate on the mining sector hinging on self-regulation, corporate social responsibility and risk management is delicate and prolonging unrest in indigenous mining communities implying that significant number of players are unconvinced by their corporate social responsibilities in the community in which they operate.

In addition, the emergence of large-scale mining companies in many communities in the developing world has led to operation sites of ASM being granted to the former since the entire mining

sector has now been regularized. The regularization of the sector by the government have resulted in the practice of the state security agencies descending heavily on the activities of unregistered and illegal ASM. More often than not, ASM operations do not take place within the legal framework of the state and are typically connected with non-mechanized, crude and rudimentary methods. Many of these group of ASM operators do not possess the appropriate licenses to operate on this sites. ASM operators sometimes invade the concessions of these large-scale mining companies and extract the mineral resources. In many instances, the foreign large-scale mining entities consider these sites as their legally acquired concessions leading to the forceful ejection of the ASM with the support of the state security agencies. WHO (2002) estimates 5 million individuals have lost their lives in the last decade in connection with violent clashes over land use. In many occasions, the application of brute force to eject ASM operators from sites believed to be concessions of foreign large-scale mining entities is borne out of law even though, it has human rights connotation as well. Usually, the ASM who have been operating on these sites for many years regard this as deprivation of their livelihoods. Basically, limited job openings and low level of education of indigenous rural populations in the developing world is widespread and it is normally associated with poverty stricken ASM occupation. This phenomenon worsens the danger of negative environmental impact in some of these indigenous mining communities. Many of these migrants do not possess the requisite licenses in many instances and operate in small parcels of lands sometimes belonging to the large-scale mining companies. Significant number of these ASM operators have been criminalized and marginalized in some of these indigenous mining communities. Notwithstanding, many of the ASM operators believe they have ancestral rights to the land to which they have cultural and emotional attachments. The participation of significant number of indigenous populations in artisanal small-scale mining features prominently in global discussion of the mining industry in the developing world. This practice usually have the potential of triggering violent clashes between the two groups. Broadly, this offers a conspicuous indication that violent disputes provides a substantial hindrance to the smooth operations of the mining industry in these local communities.

Furthermore, Hilson (2002) observes that the immediate triggers or causes of violent disputes between large-scale mining companies and indigenous populations are in connection with land use and more of inadequate communication, inability of companies to meet its corporate social responsibilities and accidental but preventable environmental impacts rather than normal environmental issues such as erosion, degradation and sedimentation.

ASM operators have also bad reputation for its environmental behaviour in some of these indigenous mining communities. The prevalence of land use disputes in ASM are usually at the levels to impact negatively on the environment and the welfare of indigenous people. As a matter of fact, the operations of ASM is not environmental friendly and sometimes leads to the contamination of river bodies and land degradation. In recent times, many stakeholders in the mining industry have been critical of the activities of ASM in view of the application of environmentally harmful substances that lead to land degradation. Moreover, populations from others parts within and outside the borders of countries of indigenous communities migrate to engage in temporary operations of ASM.

It appears, it is almost impracticable to regularize the artisanal mining sector by government in some of these indigenous communities because of the populations' cultural and emotional attachment to the land. These group of miners operate under dangerous working conditions, exposing them to health risk and associated environmental unfriendliness. Land use disputes that come with ASM are normally widespread and intense in developing world. Some of the challenges of the developing world are usually weak legal regime governing the mining sector, inadequate commitment by governments to manage land use disputes, and inclination of governments toward foreign large-scale mining entities to the detriment of ASM operations. Escobar (2006) suggests that the hunt for fresh resources by mining entities in delicate environments and social surroundings such as communities occupied by indigenous populations, means that large-scale mining companies usually operate in corrupt regimes with weak legal and political institutions. The current regularization of small-scale mining is putting impediments on the way of ASMs due to the detailed paper work requirement and the cumbersome nature of acquiring licences to operate. In the light of this, some of these indigenous populations are compelled to operate illegally. The illegality of the indigenous ASMs are over the years major source of conflict. The operations of ASM causes the displeasure of foreign large-scale mining companies operating within the legal confines of the state.

In spite of the many negative repercussions of the mining industry, it also has the possibility of transforming communities considerably. Bridge (2004) observes that the operations of natural resource extraction are massive that have the potential of bringing social, economic and environmental transformation to communities. Furthermore, the mining industry has the capability of generating economic openings through the process of adding value to natural raw materials. The mining industry also has the potential of developing indigenous social capabilities, human resources, infrastructure

and local business. Kemp, Bond, Franks, and Cote (2010) point out that the process of adding value to natural raw materials have the ability to culminate into profits and investment of financial gains into strategies of protecting the environment and the indigenous social structures. The mining industry has also the potential to grow and expand the economy by creating many job opportunities for the indigenous people.

In contrast, Franks (2009) explains that large-scale mining operations have the potential of adversely affecting environments, nearby economies, mineral reserves and processing infrastructure of communities. The various stakeholders encounter change in varied circumstances generating avenues for possible disputes in likely situations of unfair distribution of resources. The values and interests of the indigenous community also need to be consistent with the development programs in the community else the likelihood of conflicts will be enormous. (Kemp et al., 2010) indicate that the various dynamics in indigenous mining communities is massive challenge to large-scale mining companies. It is obvious that numerous large-scale mining companies are used in cost benefit analysis of managing possible and diverse segments of disputes in the running of the organisation. Some of the potential disputes that may arise encompass workers, customers, organisation-to-organisation and organisation to governments. Rational large-scale mining companies possess considerable knowledge on the significance of possible liabilities that may result from their inability to handle effectively and efficiently land use conflicts, environmental impact, economic livelihoods of the indigenous and community relations in general.

There are variations in the costs that are incurred as a result of conflict amongst the various players in the mining sector. Environmental impact, depletion of mineral stock, accidents, loss of life, destruction of properties, expansion in costs of capital and insurance, huge legal fees arising out of litigation, private security costs, low level of productivity, and loss of business associates such as suppliers and customers. Switzer (2001) explains that these costs are often shown by the indication that, mining companies have conventionally managed the risk of disputes through 'end-of-pipe' solutions such as insurance, private security and danger pay, which do little to minimise the factors that trigger conflicts in local communities. Telmer and Veiga (2009) suggest that forced eviction from mining sites by large-scale mining companies have proved futile in many instances since ASM operators return to engage in their operations within the leaseholds and concessions of large-scale mining companies. Huge operational, financial and legal costs are incurred by the large-scale mining company through this practice of disrupting their operations coupled with additional pollution and risk.

Moreover, conflicts come with massive cost on national governments through unfulfilled fees payment and loss of tax revenues to the black market.

There are adverse implications and high costs of conflicts on the indigenous populations such as social dislocation, high demand and high prices for local resources, high cost of living, excessive pressure on water supply, disruption of indigenous way of fishing and hunting, high level of social vices like robbery and prostitution and outbreak of epidemic like yellow fever, tuberculosis in mining communities. Ruggie (2010) suggests that economic and social dislocation of this nature are associated with huge cost to large-scale mining entities coming with operational delays, destruction of facilities, soured reputation, shut-down period, legal and other operational costs. Hilson (2002) points out that foreign large-scale mining entities are unable to acknowledge the essence of ASM and mineral resources to the local culture. Boge, Wu, Himes, Vander Velde, and Georg (1999) suggest that land use issues between ASM and large-scale mining entities can be so disputable to the extent of resulting in degradation of the environment, destabilising livelihood of the indigenous populations, triggering violent clashes and dislocating the local communities. Some of the repercussions of these violent disputes are social and community dislocations in many communities particularly in the developing world.

The phenomenon provides a stiff impediment in the mining sector's attempt to accomplishing sustainable development. Buckles & Rushek (1999) explain that, even though land use disputes feature ASM negatively in the scheme of affairs, it is however an avenue for creativity and transformation of the indigenous communities. Castro and Nielsen (2001) suggest that conflict has some positive connotations since it has the capacity to make out competing requirements for resources in the community and enhances transformation and development. In the light of this, the main objective of stakeholders should be the formulation of conflict management frameworks and not the outright elimination. Likewise, A. J. Bebbington and Bury (2009) point to the recognition of conflicts as sometimes productive and its possible constructive significance that inure to the benefit of the community.

Background of Prestea Mining Area

The concession in ancient mining town of Prestea is situated in the Western Region of Ghana about 200 km from the capital Accra and 50 km from the coast of the Gulf of Guinea. Dzigbodi-Adjimah and Asamoah (2010) indicate that, it is the most notable of the five evenly spaced, running side-by-side the sedimentary pattern and volcanic belts found in the Birimian of Ghana. The Prestea mining area has produced about nine million ounces of gold and ranked the second highest production of any mine in Ghana. Sylvester and Attoh (1992) indicate that the Gold belt in Prestea is a typical Birimian volcanic gold belt which broadly extends for more than 100 km in length and up to 40 km in width and are separated by basins folded in isoclinal manner and metasedimentary rocks averaging 90 km in width. Abouchami, Boher, Michard, and Albarede (1990) point out that the belts includes mainly of metamorphosed tholeiitic to calc-alkaline basalts and form synclinoria that are made of variable proportions of metamorphosed basaltic lavas of bimodal composition comprising andesitic and dacitic pyroclastic rocks and rarely rhyolite rocks. In addition, Hirdes and Leube (1988) observe that volcanoclastic rocks form a minor part of the volcanic belts becoming greater majority in the interceding basins particularly close to the margins but reduce giving way to fine-grained wackes of similar rock chemistry towards the centre of the basins. Hirdes et al. (1993) explain that, the metamorphosed tholeiitic basalts with pillow structures and variolitic textures are in the majority in the lowest part of the belt.

Mining operations in Prestea community began centuries before the arrival of the Europeans. In the 1880's, the maiden participation of the Europeans in mining operations in the community happened. The Gio Apanto Gold Mining Company and the Essaman Gold Mining Company was formed. These entities evolved into the Apanto Mines and Prestea Mines Limited in 1900 due to alteration in control and ownership. In 1927, there was a formation of a merger between the two companies under a new name called Ariston Gold Mines. In 1933, there was a take-over of these leaseholds by Ghana Main Reef Limited leading to uninterrupted operation until 1961. Prestea boost of underground mine operating for more than 100 years until it was shut down in 2002.

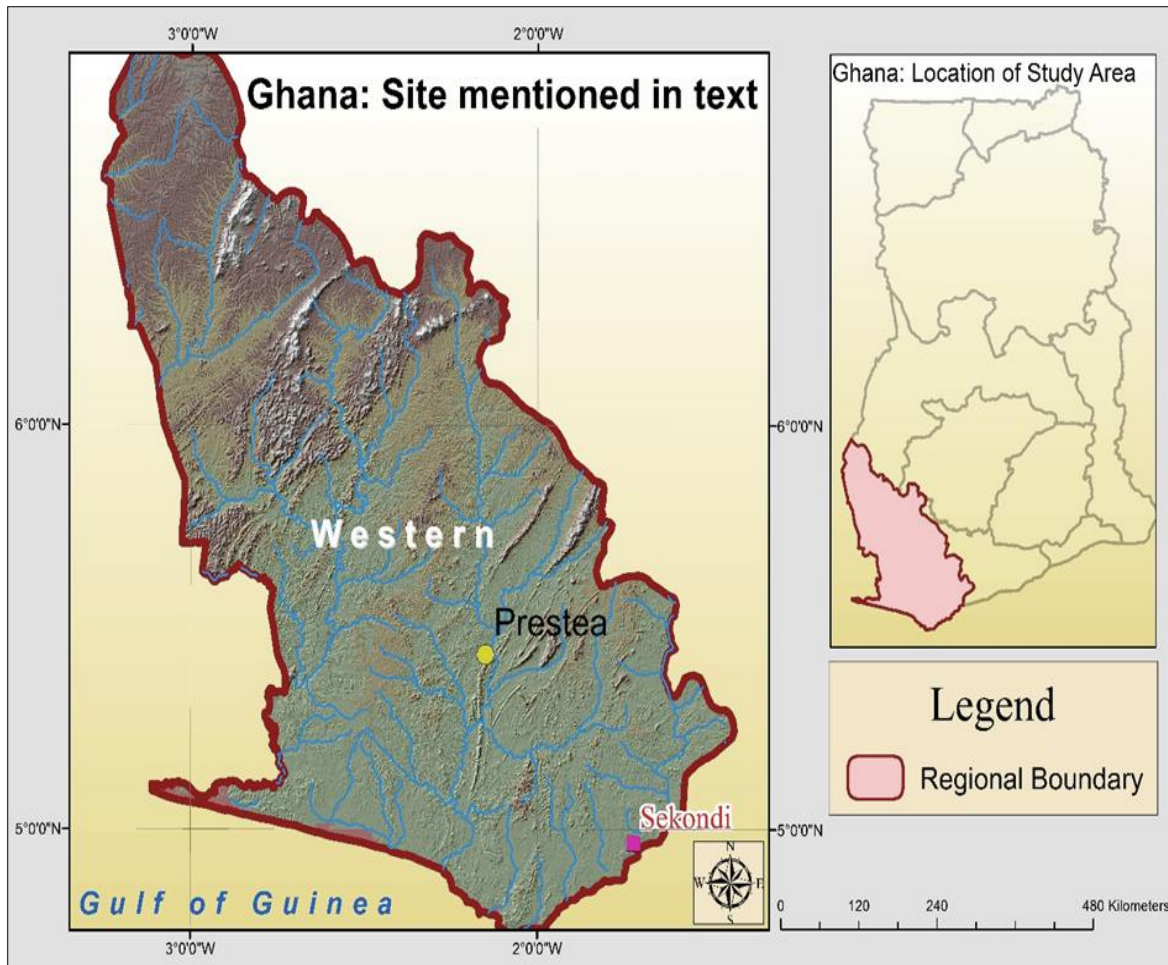


Figure 1: Map of Ghana with Location of Study Area. Cartography by: Samuel Kwesi Osei, Department of Environmental Planning, Brandenburg Technical University, Germany.

In 1965 the then post-independence government nationalised and merged these autonomous mining companies into a limited liability entity called the State Gold Mining Corporation (SGMC). However, the mines ran at a loss because of absence of adequate and sustained investment resulting in low production. The Government of Ghana was granted a World Bank loan in 1985 to resuscitate the mining sector. Nevertheless after three years of successive losses the government adopted a privatization drive policy of these mines. Helmsing (2003) suggests that the situation of local economic development policy swiftly shifted to privatization in many low-income countries in general and Africa in particular. Johannesburg Consolidation Investment Group Limited (JCI) won the bid to run the management and operations of Prestea mines in 1994 through the Government of Ghana's privatization drive. The operations of the underground mines experienced increased productivity and efficiency. The declining gold prices on the international market and continued financial losses compelled JCI to close down the Prestea underground mines. JCI

initiated a process to sell its stake in the Prestea mining project. The underground mines in Prestea has been dormant since 2002 when it was shut down as a result of declining world market gold prices in the 1990s. The closure of the underground mines was opposed by the Prestea mines workforce. Consequently, the workforce formed the Prestea Gold Resources (PGR) which was granted a permit to run the mines in December 1998. Two different leaseholds were granted in June 2001 by the Ghanaian government for the concession in Prestea. Surface mining leasehold was secured by Bogoso Gold Limited (BGL) to mine to the depth of 200m below prevailing land elevation. The second leasehold covering the underground mining was also secured by Prestea Gold Resources (PGR) to mine below the depth of 200m.

An agreement was brokered in March 2002 between BGL and PGR for a merger which carried out the subsequent evaluation and operations of the Prestea underground mines. Golden Star Bogoso Prestea Ltd (GSBPL) is now the majority share-

holder with a 90% ownership in the Prestea Underground Mine with the Government of Ghana holding a 10% ownership interest in the Prestea Underground Mine as well as its 10% holding in GSBPL making up an 81% beneficial ownership by Golden Star.

Theoretical Framework

The theoretical frameworks that guide this paper are the 'Sustainability Framework' and the Legitimacy theory (Suchman, 1995). In a complex social-ecological systems, subsystems such as resource systems, for instance river fishery and resource units such as tilapia, framework is thus useful in providing a common set of potentially relevant variables and their subcomponents. The entire resources consumed by humans are integrated in complex social ecological systems. The social ecological systems are made up of multiple subsystems and internal variables within these subsystems. This contributes in making out elements that may influence the potential of specific policies improving sustainability in one form and magnitude of resource systems that are not in others. Presently, the globe is endangered by substantial destruction or deprivation of huge natural resources encompassing fisheries, river bodies and forest covers in addition to encounter with huge reductions in biodiversity and the threat of massive climatic change. Ostrom (2007) observes that monitoring, enforcement and reducing excessive influence of bigger governmental policies are the key to sustainability of rules tailored to be at the centre of social-ecological systems.

The sustained potency of regulations have been demonstrated in contemporary research in various jurisdictions to hinge on people's inclination to track one another's consumption behaviour. There is on-going attempts to additionally review and enhance social-ecological systems geared towards setting up related system to improve the collection of research discovery of practices influencing sustainability of pastures, forests covers, top soils, water bodies, and coastal areas globally. Ostrom (2007) explain that the colonial governments in Africa, Asia and Latin America for instance failed to acknowledge indigenous structures that had evolved over a long period and inflicted on the local people their norms usually leading to either excessively utilisation or depletion of the resources. Brooks et al. (2002) point out that there is growing proof of a universal reduction in biodiversity. Even though varied elements contribute to the reduction, what is globally triggering it has to do with some kind of human activity, principally connected with alterations in land use. In order to deal with the universal reduction in biodiversity, Young et al. (2005) explain that the identification of the motivators leading to conflicts between human activities

and the conservation of biodiversity is required whilst enhancing the management of these conflicts.

In addition, Legitimacy theory is hugely significant to this paper since it deals with important segments of land use and environmental impact disputes where the main actors are the indigenous population, the government and GSR. Legitimacy theory postulate that companies on regular basis attempt to safeguard their operations through the confines and standards of their various communities. Companies may protect their interest through the provision of the social and economic needs of the community. Lubchenco (1998) observes that, explaining certainties and uncertainties and seriousness of different environmental or social impacts, offering options to deal with them, and educating indigenous populations relative to important matters in the community are some of the critical needs. It is also crucial for companies to make attempts to communicate existing scientific information that should run side-by-side with the introduction of new research. Deegan (2002) suggests that in assuming a dimension of the legitimacy theory, a mining entity will elect itself to detail the operations of the organisation in case management and discern that those operations were anticipated by the local communities in which it operates. In line with this, social, economic and environmental aspirations of the indigenous population should be met. The fulfilment of the social, economic and environmental aspirations will earn the company a 'social contract' by the community. Patten (1992) points out that Legitimacy theory is hinged on the conception that there is a 'social contract' between a mining company and the local community in which it operates, may provide an overview of the concept of a social contract.

Gibbons (1999) points out that social contract consists of many individual components, which demonstrates wider contracts between government and the community, between industry and community, and between higher education and community. There are variations in social contract substantially over different jurisdictions relating differences in tax rates and fiscal structure. The state has been charged with the funding of education and health insurance in many jurisdictions. Many, prominent amongst them is United States of America reserved greater part of that responsibility to families, local communities and employers. Community choices cannot be interpreted in the absence of appealing to exogenous variations in taste, technologies or political systems. Bénabou (2000) points out that, there are also continuous variations in the blend of public goods and the degree of implicit redistribution through labour-market policies. Similarly, Thomson and Boutilier (2011) observe that social license has do with mining operations that generally possess existing consent of the community.

Likewise, Gunningham, Kagan, and Thornton (2004) point out that social license regulates the degree to which a company is restrained to reach the expectations and stay away from operations that is considered by communities to be impermissible regardless those expectations are found in the law.

Wilburn and Wilburn (2011) observe that in response to the United Nations enterprise that demand companies to conduct their operations in communities inhabited by indigenous populations to acquire free prior and informed consent (FPIC) from the local populations, the principle of social license was advanced. Free, prior, and informed consent acknowledges indigenous populations' deep rooted and prior rights to their lands, natural resources and recognize their legal authority to demand that third parties enter into a uniform and decent partnership with them founded on the principle of informed consent. Rousseau (1920, p. 62) assert that the 'articles of this contract are so unalterably fixed by the nature of the act that the least modification renders them vain and of no effect; so that they are the same everywhere, and are everywhere tacitly understood and admitted, even though they may never have been formally announced; until, the social compact being violated, each individual is restored to his original rights, and resumes his native liberty, while losing the conventional liberty for which he renounced it.' Prno and Slocombe (2012) point out that, indigenous community may grant social license and local community usually serves as the judge in the process due to their nearness to mining operations, sensibilities to impacts and their capacity to influence operational results. Similarly, Hawkins and Hutter (1993) observe that conventionally, companies that respected the confines of the appropriate law considered not only the law but also their obligations to the community in which they operate.

Academic inquiries in social and legal issues indicate that companies observe the provisions of the law just to avoid legal sanctions. Likewise, Wright (1998) points out that legal requirements are regarded as a mechanism of community expectations hence, it is explained as a lead to a company's moral and social commitments. In addition, Porter and Van der Linde (1995) indicate that, as regards the conventional stand point, it is anticipated that companies will operate contrary to the norms and standards only in situations where there is company's interest such as making business gains over shorter period of time. Nonetheless, Gunningham et al. (2004) explain that in contemporary times, significant number of companies do not ordinarily consider their social commitments the same way as their legal requirements. However, the principle of operating within the confines and norms of local communities through expressed or implied social contract applies to all corporate and social institutions.

The survival and growth of corporate or social institutions are built on the delivery of some socially desirable ends to the broad community and the distribution of economic, social or political goods to entities from which it draws its power. Deegan, Rankin, and Voght (2000) explain that social contract connotes variations in expectations that the community possesses in relation to how organisations should conduct their operations. Deegan (2002) believes precisely that the survival of an organisation will be endangered if the community discern that the organisation has violated its social contract. If corporate or social organisations operate illegitimately or perform below expectations, the community will abrogate the organisation's 'contract' to continue its operations. Deegan (2002) provides instances of how this may be carried out; that is community people may rebel against the operations of the company; mines suppliers may remove the supply of labour and financial capital to the business; or local populations may lobby government for increased taxes, fines or laws to prohibit those actions which do not conform to the expectations of the community.

O'Donovan (2002) observes that social contract is complex to define since it can be explicit or implicit and has no permanence. In the light of this, various managers will explain the term 'social contract' in diverse ways since the term cannot be explained with specificity. Gray, Owen, and Adams (1996) indicate that legal demands offer the explicit terms of the contract, whilst other expectations that are not in the law represent the implicit terms of the contract. It is in connection with the implicit terms of the contract that managerial perceptions may hugely differ. Moreover, there is no permanence in community expectations but rather it evolves with the changing times. In other words, conditions under the social contract on which social consent is granted shifts with time.

There is therefore the need for large-scale mining companies to respond to the environment in which they operate. Large-scale mining companies are required to declare their annual operational reports to the public, indicating that the mining entity is also changing since community expectations change with time. It is essential to scrutinise the corrective measures that large-scale mining companies undertake in view of the effects of perceived violations of the social contract for mining company's survival. Legitimacy theory provides the concept of 'legitimacy gap' and 'legitimacy strategies' in view of the perceptions of infractions on the social contract. Lindblom (1994) explains a 'legitimacy gap', to be, the variations in the expectations of the 'relevant publics' in connection with how a mining company should conduct its operations and how the mining company actually conduct its operations. Anytime there is a legitimacy gap, the mining company's legitimacy is endangered and when

an imbalance, actual or potential, exists between the two value systems, company's legitimacy is endangered.

Dowling and Pfeffer (1975) reveal that legitimacy is a resource on which a mining company's survival is built. In line with resource dependence theory, Pfeffer and Salancik (1978) explain legitimacy theory suggests that anytime managers contemplate the supply of the specific resource is important to the growth and survival of a company, strategies, that will be undertaken to promote the regular supply of that resource. Richards, Partner, and Freiman (2004) indicate that such strategies may involve earmarked company's revelations, or perhaps controlling or cooperating with other stakeholders who in themselves are considered legitimate. In instances, where managerial perceptions on the organisational activities are inconsistent with the 'social contract', then in conformity with legitimacy theory, companies may take corrective measures to ensure legitimacy. Cormier and Gordon (2001) explain that, since the theory is based on perceptions for corrective measures to have an impact on external stakeholders, it must be associated with publicised revelations. Hence, it is significant to reveal corporate reports, such as those made within annual reports and other publicly released documents.

Mitchell, Agle, and Wood (1997) explain legitimacy as utilising the definition of Suchman (1995) which asserts "a generalised perception or assumption that the actions of an entity are desirable or appropriate within some socially constructed system of norms, values, beliefs and definitions". Finally, urgency is defined using the Merriam-Webster dictionary, as "calling for immediate attention" or "pressing". In explaining the legitimacy of companies, Suchman (1995) points out that, companies exist on the proviso that they must conduct themselves in line with the values, confines and norms of the community in which it operates. Dowling and Pfeffer (1975) utilise this to point out why companies make alterations in connection with their environment so as to secure and maintain legitimacy. Lindblom (1994) suggests that when a company's legitimacy is challenged it may vary strategies to protect its position: alter its practical operations to be consistent with community expectations, and community will be informed of these alterations; activities will not be changed, education and information will serve as a medium, exhibit the suitability of its activities; and seek to change community perceptions through association with highly legitimate symbols and attempt to change community's expectations of its performance. A great deal of importance in each of these is hinged on how the posturing of the company to the community and focusing the contribution of corporate reporting.

Suchman (1995) reveals three kinds of legitimacy granted by stakeholders: Pragmatic legitimacy; where self-interest drives legitimacy granted by major stakeholders; Cognitive legitimacy which confirms stakeholders' support and acceptance; and Moral legitimacy, in which the company secures legitimacy from the stakeholders in case they deem the operations of the company fit to warrant legitimacy. Companies' legitimacy is therefore assessed based on the criteria discussed above. Conspicuously, the contribution of company's legitimacy forms the theoretical foundation for the discussion of this paper if companies' legitimacy need to be maintained in connection with their operations.

Methodology

The study was designed by applying both qualitative and quantitative research techniques to collect the needed data for the study. The main objective of suitable mixing of data is to ensure an outcome from which data sets complements or reinforces each other in data analysis and interpretation. Rauscher and Greenfield (2009) explain the logic by pointing out that the suitable combination of data is to put forward for consistent results and a holistic analysis. It is therefore important to generate supplementary and explanatory data to augment the findings from the key informant interviews. Creswell (2009) points out that in reality, the mixing is the process of fusing or merging the qualitative and quantitative data in the data collection, analysis, or interpretation stages of the research process.

The population of the study area is estimated at 31,607 and the total sample size was 1220 respondents; consisting of 20 stakeholder interviews and 1200 survey respondents. The researcher obtained a list of indigenes of approximately 2000 complainants with varied concerns ranging from land use to environmental impact from the environmental NGO in the area. The author therefore administered questionnaires to a randomly selected sample of 1200 indigenous community people which are broadly spread. The sample constitute 60% of the list of natives who have lodged complaints which is a good representation of the indigenes of the community who have serious concerns with the operations of GSR. The quantitative instrument was pilot-tested and simple random sampling or the lottery sampling was applied in the selection of the indigenes to give equal chance to indigenes who have lodged complaints. This served as an existing knowledge which was made to specifically survey indigenes who have officially made complaints. Again, the simple random sampling improved the sampling efficiency of indigenes with serious concerns. This ultimately helped to improve the representativeness of a sample of any given size that was used in this study. Members of the community who

could not read or write were assisted (via interpretation) to answer the questions. The use of the 1200 quantitative respondents for the survey was used to complement and amplify the qualitative section of the study. That is, it was useful for generating supplementary, explanatory data to augment the findings from the stakeholder interviews. Creswell (2009) explains that the next factor in mixed methods is mixing and this is an important part of mixed methods research and the mixing is the actual process of merging or combining the qualitative and quantitative data in the data collection, analysis, or explanation phases of the research process. Furthermore, Rauscher and Greenfield (2009) observe that the rationale behind the appropriate integration of data is to present consistent results for a holistic analysis. Consequently, the purpose for the appropriate mixing of data is to ensure that data sets complement or support each other in data analysis and interpretation.

The sources, causes and costs of conflicts are captured by the following variables: age and sex of respondents. The author accurately interpreted results of data obtained to reflect the major themes of the study. The age variable is significant because a greater number of the indigenes involved in ASM are the energetic youth and have cultural attachment to the land. They are therefore reluctant to move from the land and are poised for violent confrontation with the mining company. Again, the sex variable was included because ASM is a male dominated occupation and they have been violently confronting the mining company since the inception of their operations.

The qualitative section consists of 20 respondents, that is; 3 members of the environmental NGOs/civil society organizations, 5 community farmers affected by mining activities, 5 members of ASM, 2 members of registered ASM, 5 members of the large scale mine management (GSR). The qualitative research approach enabled the research-

er to gather sufficient, in-depth and detailed knowledge which led to the understanding of the sources, causes and costs of conflict in the Prestea community. Author therefore made use of key informant interviews. Some of the key informants were people who have basic knowledge about the sources, causes and costs of violent conflicts, therefore gave basic and in some cases in-depth information to inform the study. Kreuger and Neuman (2006) suggest that it is useful to employ the qualitative research design because the qualitative design gives a detailed, varied and extensive data on the subject matter. All interview sections were tape recorded, transcribed, translated and complemented with an accurate note taking. An interview schedule, mainly consisting of open ended questions, were prepared and used for the interviews. Details that were not brought out initially were sought through follow up questions or probes.

Results

The following variables; age groups and sex of respondents were captured in the responses to the sources, causes and costs of conflicts in Prestea. These variables and their responses are presented in tables in this section.

Table 1 shows the relationship between sources and causes of conflicts and age profile of respondents in Prestea mining community. Respondents (1,126) representing 93.83% indicated that land use is the major source and cause of conflict in the Prestea mining community. Respondents (74) representing 6.17% pointed out that environmental impact is the principal sources and causes of conflicts in the community. Significant majority of respondents (539) who indicated that land use is the main sources and causes of conflicts were between the ages of 18-27 years.

Table 1: Relationship between Age Profile of Respondents and the Sources and Causes of Conflicts in Prestea Mining Community

Sources of Conflicts	Age of Respondents						Total
	18-27	28-37	38-47	48-57	58-67	68+	
Land Use	539 44.92	271 22.58	157 13.08	94 7.83	61 5.08	4 0.34	1,126 93.83
Environmental Impact	32 2.67	18 1.50	13 1.08	7 0.58	2 0.17	2 0.17	74 6.17
Total	571 47.58	289 24.08	170 14.17	101 8.42	63 5.25	6 0.50	1,200 100.00

Table 2 shows the relationship between sources and causes of conflicts and sex profile of respondents in Prestea mining community. Respondents (1,126) representing 93.83% indicated that land use is the major source and cause of conflict in the Prestea mining community. Respondents (74) representing

6.17% pointed out that environmental impact is the principal sources and causes of conflicts in the community. Significant majority of respondents (576) who indicated that land use is the main sources and causes of conflicts were males.

Table 2: Relationship between Sex Profile of Respondents and the Sources and Causes of Conflicts in Prestea Mining Community

Sources of Conflicts	Sex of Respondents		Total
	Female	Male	
Land Use	550 45.83	576 48.00	1,126 93.83
Environmental Impact	21 1.75	53 4.42	74 6.17
Total	571 47.58	629 52.42	1200 100.00

Responses to Sources, Causes and Costs of Conflicts in Prestea Mining Community

According to key informant respondents, the Prestea area is a place where ASM is the major livelihood. The local leader of the ASM operation said: *“You cannot go to a fishing community and ask them to stop fishing because of the operation of large scale fishing companies in the community. This is ridiculous and this is not done anywhere. You should know that, we were born and raised up in this occupation. We have nowhere to go. There will always be clashes so far as the government and GSR doesn’t change its policy towards us”*.

Another member of the ASM operation leadership who happened to be part of the study participants said: *“We have nowhere to go, this is our land and we have wives and children we care for. We are going to fight them with our last blood whenever they come here to stop us from working. They believe they are powerful because the police is on their side”*.

According to the leadership of the ASM operators, if the government could prospect a new parcel of land and assure them of the availability of enough gold ore, they would be ready to relocate from GSR concessions. The illegal ASM operators believe GSR is not being reasonable because they contend all the rich lands in Prestea are their concession which cannot be the case. One ASM leader said: *“If they leave us in peace to do our work, there will be no violent clashes. We’ll also not stop their machines from working. I think everybody should mind his own business. It is not our fault that, we were born into this area; we have no place*

to go and man needs to survive at all cost. They should just get this straight and stop both the physical and the media war.”

The illegal ASM operators think that there is no way; government can lease all the good parcel of lands to GSR only for the indigenes of the land to lose their source of livelihood. The ASM leader said: *“They (GSR) should know that, if they contend all the good parcel of land are part of their concessions, there is no way, we will understand because this is where we come from. We will mine with all the force we have to make ends meet and they can bring in soldiers and that would not stop us from mining here. They don’t respect us since the government support GSR with the police to crush us.”*

According to the ASM operators, in some few years back whenever the security men saw ASM operators dressed in a particular way (dirty dress) they arrest them and beat them up. In the words of the ASM operator: *“We also met them with aggression and sometimes we conquer them and sometimes they conquer us. You see there can never be a winner in this fight, if they win today, we will prepare and win tomorrow. Even with this present location, there is a problem here. We have been on peaceful demonstrations on so many occasions”*.

Another member of the ASM operations said: *“Conflict is not a good idea but we have no option but to fight on, otherwise we will lose our source of livelihood. Conflicts in this community is costly to us because sometimes security personnel come here to seize our equipment. We bought all those equipment with money even though locally made.*

We get injured sometimes and we spend money to go to the hospital''.

In the nutshell, land use in relation to mining operation is the major source of conflicts in the Prestea communities. Golden Star Resource uses the relocation framework to manage such conflicts which have not made any headway over the years. Another land use conflict has to do with crop and land compensation. The mining companies have over the years failed to pay land compensation to the farmers, which the farmers contend it must be paid.

An employee of a registered ASM intimidated: *''Nobody is interested in the current misunderstanding in this community. I don't think anybody wins in the current stalemate. We have been accused of contaminating the river bodies through the spilling of cyanide but that's not true. Honestly, we don't use any of those poisonous chemicals they are accusing us of. I am a native of this community and I drink water from this community so I won't indulge in that wicked act''.*

Some of the farmers the researcher interviewed do not believe anybody care about the welfare of farmers in the community. This is because in spite of the numerous complaints, GSR are still removing their forest cover and developing cracks on their buildings. The farmer said: *''I think we are in serious trouble because nobody seems to be fighting for our course. Even the taste of water in this community has changed because of the pollution that is being perpetuated by mining in this community. There are cracks all over our building due to mining. Our vegetation and forest cover is also being removed on daily basis. Where on earth can a company do this? Please, we need your help, write something about it in the media for us''.*

Another farmer was mainly concerned about the pits that are dug close to their homes and farms. The farmer intimidated: *''GSR has dug pits close to our homes and farmlands and expect us to be happy. I hope you have seen the way they are destroying our forest cover and topsoil since you arrived. For me, I don't think they have any respect for farmers in the community. They impact heavily on our farmlands and pay us meagre amount of money as compensation. This is main reason why farmers have issues with GSR''.*

Another farmer said: *''We are losing a lot of money through the operations of GSR. They impact on our farms and pay us little cash. I don't think the conflict in this community can ever be settled since GSR don't bother about our welfare. None of us are interested in confrontations because it is waste of money and time but we have no option. There are influential because the government supports them''.*

The researcher interviewed an officer of an environmental NGO who had this to say: *''The degree of environmental degradation that is going*

on in this community is alarming. I believe we have a government that should be able to put a stop to it. The government doesn't appear to be interested in that. Go round the community and you will see the degradation that is going on. This is what is causing the conflicts. We'll always be in the news for the wrong reasons because none of our complaints has been addressed''

Another member of an environmental NGO said: *''I personally believe the revenue they (GSR) get from extracting gold cannot offset destruction that they are causing to the environment. A time will come there will be no forest cover in this area. Do you think GSR can do this in any of the advanced countries? I think environmental impact is one of the major sources of conflicts here. It's a pity''.*

The researcher spoke to a member of the GSR management who believe regular dialogue with the community is the way forward. He said: *''We lose millions of dollars when the indigenes storm our site and stop our machines and workers from working. Sometimes, they (indigenes) cause damage to our equipment and other assets that runs into a lot of money. I don't think violence is the way to go if all sides want peace in this community''.*

Another member of the management of GSR said: *''Majority of the conflicts in this area has to do with land use. We're definitely not interested in the conflict in this area that is why we have put in place numerous conflict management frameworks. Do you know how much we lose through conflicts? We need all hands on deck to bring peace and stability to this area''.*

Some management members of GSR do not believe that the activities of the company is causing environmental impact. One management member said: *''Our blasting do not generate cracks on the buildings of indigenes. We also do not contaminate the river bodies of the area as the public is being made to believe''*

Discussion

The operations of mines in indigenous jurisdictions where there is excessive variations in values between foreign mines and native populations exacerbates the wrong side of conflicts. There is severe friction inherent in available literature relative to real constraints of international principles tailored to enhance practical and fair results for indigenous mining populations. Existing evidence indicate that stakeholders are unable to formulate strategies that are acceptable to both the mining entities and the indigenous populations in the light of prevailing land use conflicts. Even though the inferred failure is widespread and probably well-grounded, it is inconsistent with huge practical alteration to build and execute indigenous related measures for addressing grievances framework reflecting unified

attempt by the sector to acknowledge and encompass the participation of indigenes in bargaining with the mines.

Even though the author acknowledges the underlying variations in character between the mining entities and indigenous communities, the interpretation of this should not indicate power variation is absolute devoid of possible shift. However, the establishment of a formal framework for addressing grievance generates fresh space for development and academic scrutiny and there is manifestation and acceptance of this fresh phenomenon than in the past. The absence of consensus or ethical industry reaction to these matters is not entirely in oblivion within the scholarly documentation. There are considerable limitations within the mining entities' corporate social responsibility operations on one side and transparency, accountability and equity on the other side. There should be circumspection in considering in real terms claims of corporate social responsibility in the indigenous communities by mining entities. Intense shift in relation to the enhancement of justice can be achieved through practical change of corporate reaction to community level disputes. In order for this to come to fruition, it is worthwhile that native communities, indigenous populations and other excluded and minority groups pursue deliberative encounters with corporate entities in view of the environmental impact and land use associated with unfairness in local communities.

The major source and cause of conflicts in these local communities including Prestea in Ghana is land use and environmental impact. However, there have been conflict management in Prestea community and other indigenous 'flash points' in Ghana as a containment mechanism. This principle of containment includes actions taken by stakeholders to deal with disputes such as consultation, initiation, escalation, grievance settlement and development. Mining entities are required to deal with power disparity, promote community level communication and enhance local involvement in the formulation of grievance resolution framework. This is in connection with assumption of responsibility in relation to community level grievance settlement framework as a matter of principle by mining companies in some instances. There is the need for greater contribution by the academic circles in explaining grievance resolution framework as a fresh governing power that dwells on growing advocacy for self-autonomy from indigenous populations and other ethnic minorities on the globe. These indigenous populations are usually adversely impacted on by the extraction of natural resources in their communities.

Violent conflicts within the mining communities like Prestea obviously have the possibility to result in huge costs to GSR and other large-scale mining company, Prestea community itself and the

larger society. The stakeholder interviews conducted by the author proved that some of the substantial costs of GSR have to do with disrupting production operations by indigenes, lost opportunities and the length of time spent by GSR managing old and protracted conflicts. The paper's revelation is inconsistent with academic documentation that indicates that indigenous populations are without any power as regards their relationships with large-scale mining companies. Even though disparity in power is usually real, the qualitative component of this study reveals the capacity of indigenous populations to mobilise to resist operations of the mines. This normally, occurs in situations of perceived unfair treatment by the large-scale mining company leading to huge costs to the sector players. Community relations approaches can help shape extractive companies' actions so that they are more socially, culturally, and environmentally responsive to the communities they impact on. Dealing with indigenous perceptions of unfair treatment, have the potential to settle community conflicts before they become a protracted phenomenon. Formal and well-structured community consultation is a possible key to minimising the risk of rebellious activities such as demonstrations, blockades and other forms of protests by the indigenes. Good community relations between the local populations and the large-scale mines also have the capability to minimise the costs that is incurred by the mining company through disruptive activities.

On the other hand, there is scanty information on how serious community relations activities are integrated into the establishment of management systems regarding community conflicts as compared to other competing priorities. There is the need for deep insight into costs of conflicts to enhance understanding in the mining sector in connection with conflict prevention and management.

Conclusion

This author concludes that the sources and causes of conflicts in the Prestea community are land use and environmental impact. Therefore, enhancement of sustainability could be promoted by the participation of neutral and accepted third parties. Neutral peace brokers may contribute to neutralise the power imbalances demonstrating that accomplishing equity and accountability in view of prevailing disputes associated with land use and environmental impact goes beyond corporate self-governance. In the nutshell, there is uncertainty in the competence and capability of the mining sector to self-govern and promote the universal agenda to integrate activities for dealing with local grievances with consensual principles and standards. There are underlying hindrances to smooth dispute settlements in terms of land use and environmental impacts in the local communities.

In addition to allocation of concessions and environmental impact of GSR, this paper further reveals that conflicts in Prestea community are in connection with the power imbalances; unfairness; unfair distribution of risk; GSR's disrespect for local perceptions and worldviews. The above mentioned factors are major drivers of conflict in Prestea community and are possibly going to feature prominently in mining associated research and advocacy. The author explains that no formal channel of communication was available to address local populations' concerns until recent times. It is an undeniable fact that, there was no community relations structure in place. Perhaps, the story would have been different if community level grievance addressing structure had been formulated long ago. The government, GSR, and their international partners should ensure emerging global norms and performance standards; growing expectations for the industry are translated into ground practice rather than remaining a mere rhetoric.

Available evidence proves that conflicts in the local communities are associated with huge cost to GSR, the local community and the government. The costs of community conflicts could be very huge and even threaten the very existence of GSR in Prestea and its environs. There is therefore the need for GSR to focus on the activities of their community relations department to strengthen their relations with the local population. Land use and environmental impact disputes need further academic scrutiny in connection with the costs that come with them in addition to the outcomes and impacts. There is usually conflict resolution attempts in aftermath of violent clashes between the mines and the local populations. In most cases the costs of such settlements are borne by the management of GSR. There are many situations of financial structure that enable one kind of party to incur a huge part of the mediation cost, however, the system may be devoid of interference in sincerity of the process. This situation happens if there is no dissent in the mediation procedure and it is opened to parties particularly the desire of ASM to participate in sincere negotiation. The integrity of the process will increase the likelihood of mediation success that is geared towards resolving burning issues with GSR that are in dispute.

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