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## Assessment of legal framework for corporate environmental behaviour and perceptions of residents in mining communities in Ghana

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The paper examines the laws and policies that regulate corporate environmental practices in Ghana, with an emphasis on mining. In particular, the analysis of the legal and regulatory framework examines the extent to which it meets international best practices and standards of corporate conduct and the extent to which self-regulatory mechanisms are accommodated under the framework. This was accomplished through reviews of mining and water related Acts, laws and relevant Statutes on corporate environmental practices in Ghana. Ethnographic qualitative research was carried out and key tools utilised included participant observations, focus group discussions and interviews. Interview data captured community members' perceptions on impacts of mining in 12 host communities. Key findings indicate that most respondents have negative perceptions about the socio-economic and environmental impacts of mining and where corporate environmental governance codes exist, enforcement mechanisms are not very well laid out, a situation which reflects weak regulatory institutions in the mining sector. Further, the legal and regulatory regime for environmental governance has failed to come up to international best practices. While government has an important role to play in the area of providing the legal framework for enhancing best practice standards in corporate environmental governance, it appears that the ultimate responsibility for sound environmental behaviour still lies with corporations themselves.

**Keywords:** corporate environmentalism; policies; governance; law; sustainability; Ghana

### 1. Introduction

As a result of Structural Adjustment Programme from the 1980s, Ghana has experienced an increase in resource extraction activities by international and transnational corporations (Cole *et al.* 2008, Garvin *et al.* 2009). The contribution of the mining industry to the macro economy of Ghana in 2008 was 43.7% of gross

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foreign exchange earnings; 14.72% of Internal Revenue Service collections; 13.25% of corporate tax; and the creation of 12,601 jobs. That the mining industry has contributed to the growth of the economy is not in contention (Tschakert and Singha 2007). In an attempt to attract and retain investors into the mining sector, various laws were enacted. The laws were to a large extent put into force to attract investors instead of regulating the behaviour of the multinational mining companies in their host communities and the nation as a whole (Hilson and Nyame 2006, Akpalu and Parks 2007).

Activities of mining corporations in Ghana are often seen by civil society (non-governmental organisations and community-based organisations) and host communities to be negatively impacting the environment (Tschakert 2009a, Armah *et al.* 2010). Perkin (2007) mentions that over the years, civil society and host communities sought to influence the activities of such corporations by public opinion and pressure, and later, through legal pressure. Adler (1995) asserts that the lack of existence or enforcement of good legal regimes through the enactment of appropriate environmental laws often creates an adversarial relationship between the regulators, environmentalists and corporations. Notwithstanding this, it is in the interest of government, companies, frontline mining communities and other stakeholders in the mining industries to operate in places with strong legal regimes in order to avoid conflicts between host communities, companies as well as government agencies. In following the tenets of sustainable development, normative imperatives that prescribe environmentally responsible behaviour in the mining sector are gradually evolving.

Corporate social responsibility (CSR) and win-win-win strategies are elements of this evolving discourse. The conceptualisations of CSR are as myriad as the corporations committed to it. The range of the description and interpretation of CSR is tied to the context, ideologies and values of the defining agency (Lekunze 2007). In the context of this paper, however, CSR is considered to be a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis (Lekunze 2007). CSR's worth lies in its potential to provide a win-win-win situation – a win for the environment, a win for the economy and a win for the local community and existing social and cultural structures. However, to ensure that these persuasive promises become reality, there is a need for effective tools such as an outline for best practice that stimulate the development of authentic CSR. In support of the concept of CSR, the International Council on Minerals and Mining (ICMM) has instituted a set of 10 principles that serve as guidelines for good corporate environmental behaviour. The 10 principles inform best practice in the mining sector and broadly include the following:

- (1) Implement and maintain ethical business practices and sound systems of corporate governance.
- (2) Integrate sustainable development considerations within the corporate decision-making process.
- (3) Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities.
- (4) Implement risk management strategies based on valid data and sound science.
- (5) Seek continual improvement of our health and safety performance.

- (6) Seek continual improvement of our environmental performance.
- (7) Contribute to conservation of biodiversity and integrated approaches to land use planning.
- (8) Facilitate and encourage responsible product design, use, re-use, recycling and disposal of our products.
- (9) Contribute to the social, economic and institutional development of the communities in which we operate.
- (10) Implement effective and transparent engagement, communication and independently verified reporting arrangements with our stakeholders.

This study seeks to assess the legal and other regulatory frameworks which govern the behaviour of mining companies as well as how residents of mining communities perceive the companies to be abiding by the terms enshrined in the entire legal and regulatory framework.

### ***1.1. Aims of the study***

The study was undertaken to answer the following questions:

- (1) What are the perceptions of the communities on the impacts of mining and what specific activities/aspects of mining account for those impacts?
- (2) Does the legal and regulatory framework for mining in Ghana conform to international best practices and standards of corporate environmental behaviour?
- (3) To what extent are self-regulatory environmental or social responsibility mechanisms by corporations accommodated under the legal framework?
- (4) What processes can be used to address shortcomings identified by this study?

## **2. The context**

In 2003, Ghana's Environmental Protection Agency (EPA) and the World Bank initiated a project to promote public disclosure of environmental performance of industries. This was a shift from the command and control system that was previously being used by the Environmental Protection Agency (EPA) to enforce environmental policy to performance ratings, which is more information-based. Ultimately, the project established a process for publicly disclosing the performance of mining and manufacturing companies with respect to environmental standards and compliance with environmental laws in Ghana.

The pilot phase, which ended in December 2005, focused on surface mining and activities which resulted in discharge of effluent and particulate matter to the environment in Tarkwa, a mining community in the western region of Ghana. At the beginning of the project, the industries and the Agency agreed upon the environmental standards to be assessed. The companies were colour-rated from best to worst with Gold (clean technology, waste minimisation, pollution prevention), Green (most standards met, good maintenance, housekeeping), Blue (efforts meet some minimum standards), Pink (efforts do not meet standards), and Red (no pollution control effort, serious environmental damage) from top to bottom. The rating when made known to the public was expected to enhance the image of participating corporations at local and international levels. This was also anticipated

to enhance their chances with financial institutions. It is expected that this project will be replicated in all of Ghana's manufacturing and mining industries after the pilot phase. It is projected that this approach will help Ghana to meet obligations of certain Multi-lateral Environmental Agreements (MEAs), and the Basel Convention. According to Jorge *et al.* (2009), and De Marco and Vigod (2007) public disclosure of environmental performance in developing countries has been effective in many jurisdictions.

However, success that is obtained merely randomly is not easy to transpose to other contexts and often remains indefinitely in a pilot state. For example, in Ghana, six years after the commencement of the public disclosure of environmental performance project, the extent to which the set targets have been met and the number of host communities within which the project has been replicated is still unclear, primarily because consensual definition of indicators and time bound targets that are widely acceptable to all stakeholders are lacking. This situation threatens to render the public disclosure and environmental performance coding concept meaningless, or at best, relegates it to being little more than a hollow cliché. Notwithstanding the prospects of the project, it appears that recent occurrences that impinge on the environment give credence to the notion that the performances of corporations in Ghana are still not environmentally sustainable. Some of the notable breaches on the environment by corporations are well documented in the literature.

Essumang *et al.* (2007) found that the levels of heavy metals (As, Cd and Hg) in Cocoyam (*Xanthosoma sagittolium*) in Tarkwa (a mining community in Ghana) and its surrounding villages exceeded the WHO recommended levels.

Hanson *et al.* (2007) found that industrial pesticides such as lindane, pentachlorophenol (PCP), and propoxur, had contaminated water bodies near some human settlements in Cape Coast.

According to Obiri *et al.* (2006) between 1990 and 2004, no less than 14 cyanide spillages by mining companies occurred. These include, but are not limited to, the following:

- In 1990, Obenemase Mines near Konongo spilled large quantities of cyanide solution, which contaminated a tributary of the River Oweri.
- Bogoso Gold Limited (BGL) had a major spillage in 1994. Large volumes of cyanide were discharged into the River Anikoko, which flows into the River Bodwire. The company constructed boreholes for some of the affected communities but in places where the boreholes were not operational, the farmers were forced to drink from the polluted river or streams, which posed a significant health hazard to them. The affected communities, especially the people of Anikoko and Brakwaline, were forced to abandon their farms. The communities had to resettle in other communities because they could not contain the effects of the spillage.
- In 1996, large quantities of cyanide solution were spilled by Tebrebe Goldfields into Angonaben stream, a tributary of the River Bonsa, causing harm to human lives and aquatic organisms.

According to Singh *et al.* (2007), on 23 October 2004, there was another spillage by BGL. The spillage was from the new tailings dam of the company into the River Aprepre, which flows into other rivers, including Egya Nsiah, Bemanyah, Manse and Ankobra. This river flows into the large River Ankobra. The cyanide spillage has

affected Dumase and other towns, including Goloto, Juaben and Egyabroni. Some residents of Dumase and other villages picked up and ate dead fish, crabs, shrimps and other aquatic organisms that were found floating on the surface of the river.

These incidents would not only warrant investigation into the causes of such environmental breaches by corporations in Ghana but also of the environmental laws and policies that regulate corporate practices in Ghana in order to ascertain if there are any lapses (in content, structure, enforcement) and consequently examine ways in which the shortcomings could be addressed.

Although a wide range of policies may affect the environment, the discussion here is limited to those policies explicitly and directly concerned with mining and water. Responsibility for making environmental policy in Ghana is centralised, but otherwise spread quite widely. The Environmental Protection Agency (EPA) has overall responsibility for environmental regulation, advising other ministries on standards and guidelines, and ensuring implementation of environmental policies. Wiggins *et al.* (2004) mention that established in 1994, the EPA succeeded the Environmental Protection Council that had a purely advisory role. In each of Ghana's 10 regions, there is a Regional Co-ordinating Council presided over by a Regional Minister. The Council is expected to co-ordinate the work of the regional offices of the central ministries and agencies. The EPA also has an office in each region.

Finally, at the District level there are District Assemblies (DA), partly elected (one-third of members are appointed by central government, as is the chief executive, although that may change), that have the power to levy local taxes, pass by-laws and implement projects. They are also expected to co-ordinate and supervise the work of central government agencies in their Districts. By law, each DA has a set of subcommittees, one of which deals with environmental health. In addition, in the early 1990s District Environment Management Committees (DEMC) were set up under the Ghana Environmental Resource Management Project (GERMP). The DEMC, however, is not a statutory body.

Tienhaara (2006) argues that Ghanaian environmental policy is codified through: policy papers setting out government intentions; Acts, laws and decrees that formally establish powers and responsibilities of different public agencies; legislative and executive instruments that describe the specific and legal extent of measures; by-laws setting out the former two elements at the district level; and programs and projects with specific environmental aims financed by government, usually with some donor assistance. Singh *et al.* (2007) state that moreover, in practice, the measures that are actually implemented depend in part on the degree to which policies are specifically and legally defined, and in part on the administrative capacity of agencies. Taking the first point, definition matters both practically and legally.

The original legal and regulatory framework on mining was the minerals and mining law, PNDC law 153. This law was repealed and replaced by ACT 703, the 2006 minerals and mining law. A Minerals Commission (MC) was simultaneously developed to execute oversight responsibility over the mining sector. The amendments were made to the original law to reflect the dynamic trends of the sector across time and space. ACT 703 of 2006 and the constitution of Republic of Ghana place ownership of every mineral in its natural state on land, rivers, streams and water courses on the Republic of Ghana and vests it in the government. The current environmental protection regime (ACT 703 of 2006) does not provide specific mechanisms through which communities may formally seek redress for

violations of their rights. Hence, it is plausible to suggest that the law is not abreast with international best practice. That is, the law is silent on international best practices such as the polluter pay principles, and the ICMM's 10 principles on good practice in the mining sector, which could empower regulatory agencies as well as citizens of frontline mining communities to initiate legal proceedings against companies which pollute the environment.

### **3. Methodology**

#### **3.1. Data collection**

This study employed an ethnographic qualitative research approach. Key tools utilised included participant observations, focus group discussions, interviews and reviews of Acts, laws and relevant statutes related to corporate environmental practices in Ghana. Fieldwork took place between June 2006 and June 2007. The focus group discussions included key personalities in the communities such as chiefs, assemblymen, members of the community consultative committee, unit committee members, and ordinary community members who wished to participate in the deliberations. Interviews with 220 adult residents in 12 mining communities, five top management of mining corporations and the Ghana Chamber of Mines and five key informants of relevant government agencies (DA, EPA) were also carried out. Environmental policies were recorded by examining official documents, and by interviewing officials in key ministries and agencies at national, regional and district levels (metropolitan, municipal, district). This study was carried out based primarily on various laws and regulations in force, international treaties and other literature relating to environmental protection and corporate social responsibility (CSR).

#### **3.2. Study area**

The Tarkwa Municipality of Ghana is the study area (Figure 1). In the Tarkwa municipality, random sampling techniques were adopted for the selection of the communities. In each of the selected communities, male and female respondents for the study were also selected using random sampling techniques. Table 1 shows the summary of all the communities selected for this study and the number of respondents selected from each community.

### **4. Results and discussion**

This section of the paper discusses the findings results of the study carried out on the adequacy of the legal, regulatory, and institutional arrangements for the mining sector in Ghana, in line with international best practice. There is also a discussion of the extent to which the host communities perceive the socio-economic and environmental impacts of mining.

#### **4.1. Community livelihoods**

The main income sources of respondents are shown in Figure 2. Subsistence farming basically comprises vegetable production while cash crop farming consists of the cultivation of palm oil and cocoa. Petty trading involves selling food stuffs,

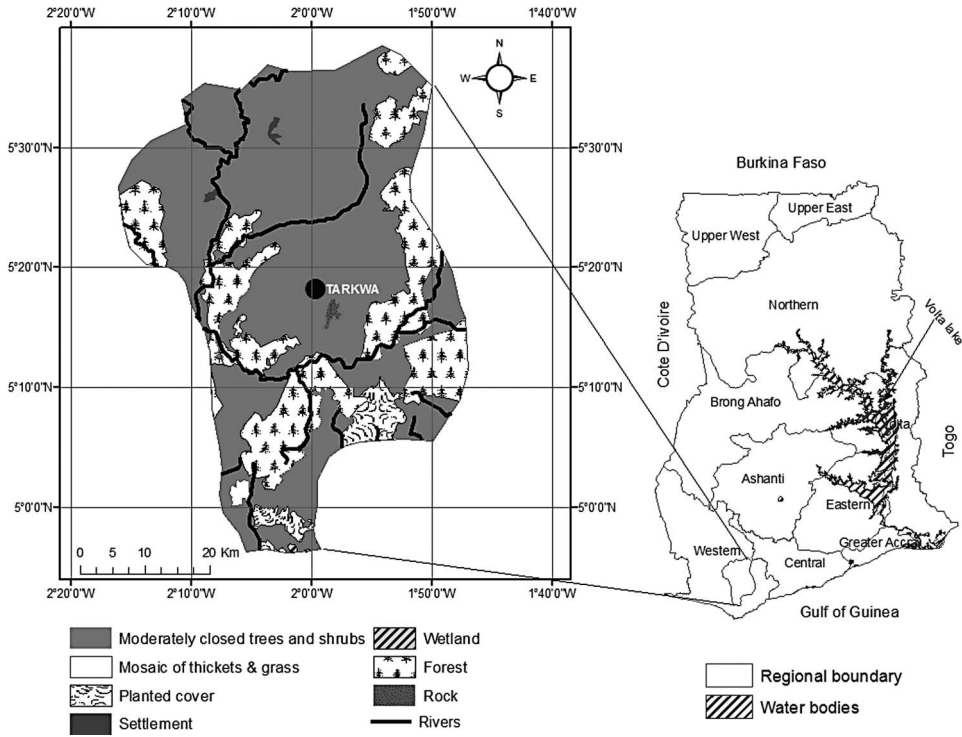


Figure 1. Land cover map of study area showing Tarkwa.

Table 1. Summary of respondents in mining communities.

| Community  | Frequency | N = 220 |        |
|------------|-----------|---------|--------|
|            |           | Male    | Female |
| Efuantah   | 10        | 7       | 3      |
| Nsuta      | 20        | 12      | 8      |
| Tamso      | 15        | 13      | 2      |
| Bogoso     | 35        | 25      | 10     |
| Prestea    | 35        | 30      | 5      |
| Obuasi     | 35        | 28      | 7      |
| Dumasi     | 15        | 11      | 4      |
| Anikoko    | 10        | 6       | 4      |
| Brakwaline | 10        | 8       | 2      |
| Goloto     | 10        | 6       | 4      |
| Juaben     | 15        | 10      | 5      |
| Egyabroni  | 10        | 5       | 5      |

confectionery and clothing. Interestingly, 80% of female respondents indicated their involvement in petty trading at different times of the year, showing that livelihoods within the communities are gendered. Critical examination of the income sources shows that it focuses on the use of natural resources (land, water, trees). Only 12% of respondents were employed as mine workers.



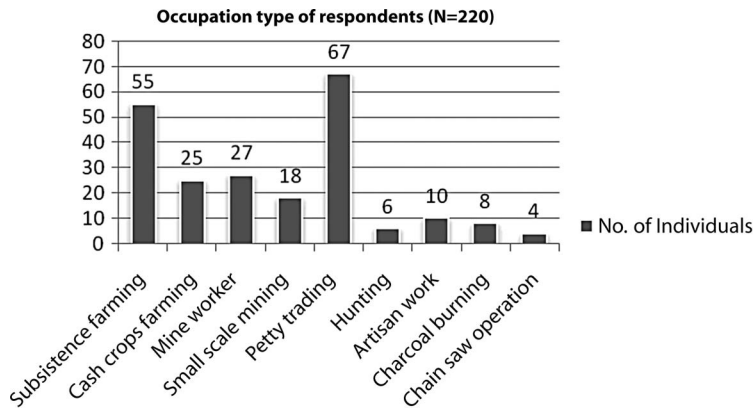


Figure 2. Main income sources of respondents in study area.

#### ***4.2. Perceptions of host communities on socio-economic and environmental impacts of mining***

The potential of mining to offer employment was perceived to be quite low likely due to the few jobs given to local residents despite expectations to the contrary. Most respondents reported that the corporations failed to honour previous promises of employment, a situation that has culminated in mistrust of the corporations. Community members asserted that even indigenous individuals who were initially employed in the mining corporations have been laid off since 2006. In response to this issue, a number of top management of some mining corporations indicated that although other competitors in the mining sector offered preferences for local people, they did not discriminate on employment. Provided the individual is a Ghanaian and is qualified for the advertised position, he or she will be offered the position.

The perceptions of impacts of gold mining are shown in Figures 3 and 4. Only 8% of respondents living in the communities had a positive view on gold mining while twice this percentage mentioned that they were undecided about whether the impacts were positive, negative or both. Water pollution was identified as the foremost impact of gold mining. Table 2 shows the number of rivers and streams in the study area reported as affected.

#### ***4.3. Lack of community participation in the award of mining permits to corporations***

On paper, the mining law captures the relationships between water, forest and minerals but in reality, it lacks a systems perspective because it appears to have disaggregated forestry, mining and water through lack of co-ordination between the three sectors. This lack of co-ordination threatens better policy outcomes when viewed against the background that mining activities in Ghana are concentrated in the remaining forests, as this is where the most substantial mineral deposits are found. Incidentally, this is also the area within which the majority of Ghana's water resources traverse. The communities and civil society cognisant of these issues are agitating for more inclusiveness in resource governance. Civil society pointed out that before any further mining permits are granted to the corporations, it is imperative to engage in extensive consultation with communities directly affected by

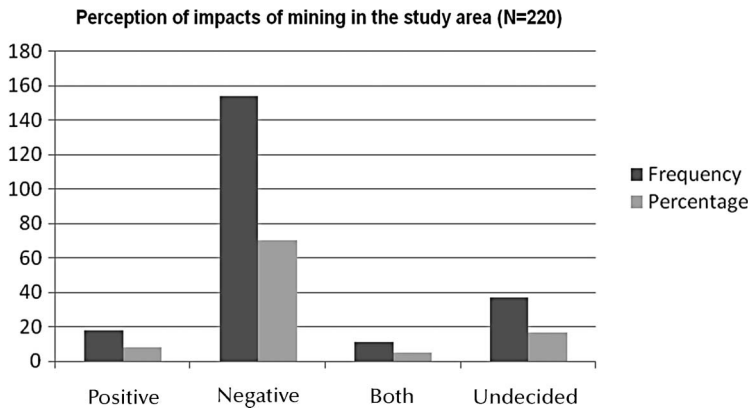


Figure 3. Perception of impacts of mining by respondents in absolute numbers and percentage.

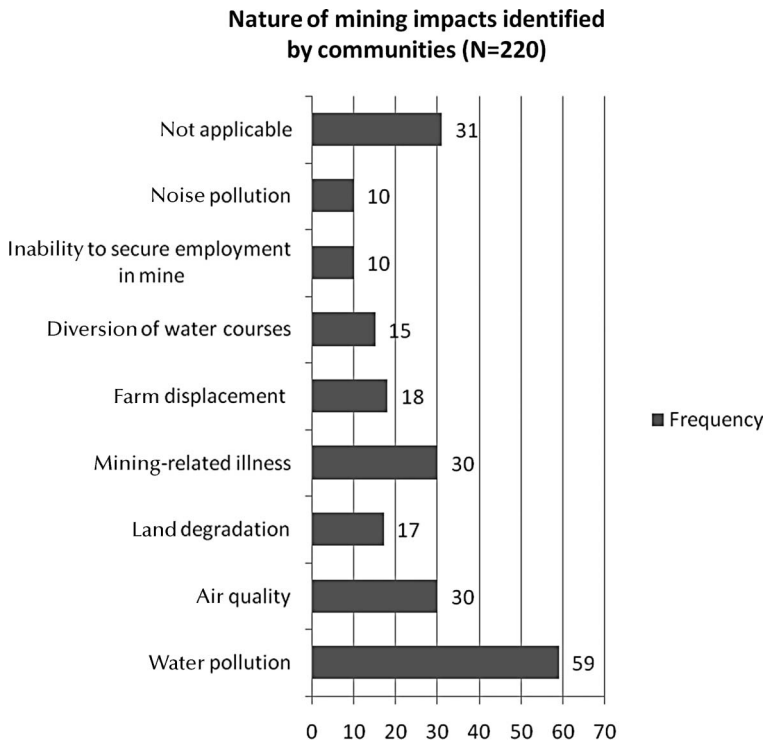


Figure 4. Mining impacts identified by respondents that influences their perception.

mining or forestry, or with civil society organisations for a thorough analysis and debates involving all stakeholders. This is in line with international best practice. Respondents indicated that hitherto they have not participated in mineral resource governance, a situation that could potentially stimulate conflict between the communities and civil society on the one hand, and the corporations and government on the other hand.

Table 2. Number of rivers and streams in the study area reported as affected.

| Mining area   | Number of rivers/streams reported as affected |
|---------------|---|
| Ahafo-Kenyasi | 2   |
| Bibiani       | 3   |
| Obuasi        | 50  |
| Wassa         | 26  |
| Yale          | 1   |

#### 4.4. Reclamation of degraded land in host communities

Another concern closely linked to the above, is the issue of reclamation of degraded land in decommissioned mine sites. The mining law requires corporations to sign a Reclamation Bond Agreement with the EPA. The Bond is a form of insurance to offset the cost of environmental activity to be conducted by the EPA when mining corporations are unable to undertake its environmental impact and reclamation exercises adequately in host communities. The Bond is in accordance with Legislative Instrument 1652 of 1959 Regulation 23. The results show that while a few corporations have totally failed to post the Bonds, the rest have signed the Bond but subsequently failed to comply with strict enforcement of their obligations under it. There appears to be a gap between signing the Bond and implementing the requirements of it on the part of a number of mining corporations; and this was evidenced by the deep trenches and degraded land at most decommissioned mine sites in the host communities covered by this study. The mining corporations have ignored this provision in the law without any retribution from government or the EPA. Inaction by the EPA and government on the matter demonstrates weaknesses in their regulatory functions and this serves to reinforce future violation of this legal provision in the mining law.

#### 4.5. Valuation and distribution of mining royalties in host communities

Recently, much of the public debate over mining has focused on the industry's impact on local communities. To compensate districts for the impacts of the more negative aspects of mining activity, Ghanaian law stipulates that 9% of mining royalties are to be allocated to the communities from which the minerals are extracted. The mineral royalties are distributed as follows: 80% to the Consolidated Fund (the term to describe the general state account); 10% dedicated to the Minerals Development Fund, which will assist the development of the mining sector in Ghana; 1% to the Administrator of Stool Lands for administrative purposes; and the remaining 9% of royalties are allocated to the local districts that provide the minerals. However, the study found that this legal arrangement suffers from a number of shortcomings. The time frame for disbursement of royalties to the host communities is not specified, leading to a three-year time lag in documenting revenue flows, which clearly limits the legal framework's potential for increased accountability and transparency. Not much of the royalties have been diffused to the host communities. Since host communities saw little of this money from government sources, they expected companies (especially large multinational companies) to pay communities directly, and they amply reiterated this during the interviews. This confirms the findings of Wiggins *et al.* (2004) and Singh *et al.* (2007). Table 3 shows

Table 3. Revenue and royalties paid to the government of Ghana (2006–2008).

| Year | Mineral revenue (US\$) | Mineral royalties (US\$) |
|------|------------------------|--------------------------|
| 2006 | 1,281,904,104          | 38,457,123               |
| 2007 | 1,793,343,307          | 53,800,299               |
| 2008 | 2,304,027,387          | 68,358,428               |

Source: Ghana Chamber of Mines (2009).

the mining revenues and royalties paid to the Ghanaian government by the Ghana Chamber of Mines from 2006 to 2008.

#### 4.6. Compensation for loss of land and crops in host communities

The issue of compensation had been one of the difficult subjects in the mining sector, spanning from exploitation to decommissioning. The principles governing compensation for loss of land or crops arising from mining activities have been set out under the Minerals and Mining Act, 2006 (Act 703), Section 74 (1). In part e of Section 74(1), the framers of the provision seem to have overlooked the fact that granting permission to concession owners to enter the land for mining operations has the effect of depriving the community in which the allodial title is vested the right of user. When the state vests ownership of land in itself, it has two effects. It takes away the corporeal and the incorporeal rights. Corporeal right relates to the physical property, the land itself that is concretely identifiable. Incorporeal right relates to the intangible and invisible abstract entity. Under English law, the incorporeal is recognised as being separate and independent of the corporeal.

The customary law, which is equally valid under the 1992 constitution, does not recognise any such artificial distinction. What the individual knows in the indigenous system is the land, the physical objective entity itself which is verifiable and identifiable. Therefore, where the state permits those with concessions to enter upon lands but fails to go ahead and exercise its rights to vest the incorporeal in itself, means those deprived in the process would not be entitled to receive compensation which would be unrealistic and unjust. The attempt to dichotomise between the permission to occupy the land and the vesting of the land would amount to a distinction as to form and not of substance. The minerals may belong to the state, but the state cannot get access to those minerals without the occupation of the land. In both cases, the owners would be deprived of the land. To deny them compensation on the basis of such an artificial distinction is unjust and inconsistent with the clear provisions of Article 20 of the 1992 Constitution.

Article 73 of the same Act left the determination of actual compensation payable to negotiations between the parties involved, sometimes resulting in lengthy litigation. For example, a number of mining corporations interviewed indicated that they use Net Present Value (NPV) in calculating compensations. This involves discounting total net income for the life of a farmland to the present. The mining laws which prescribe compensation payments for lands, crops and buildings affected by mining are unfavourable to people and communities affected by mining. Objectives of the sections of the law that deal with compensation are not specific, measurable, attainable, realistic and time bound (SMART), therefore it is imperative to establish a national policy which clearly sorts out the principles, basis and

standards of compensation for mining concessions and property values, has a prescribed negotiation procedure and dispute resolution mechanism, and has a policy on speculative developers on mining concessions. International best practice requires that the issue of compensation has to be SMART. Therefore, in terms of compensation, the mining law is not abreast with international best practice in environmental management.

#### ***4.7. Illegal mining and human rights issues in host communities***

Perhaps the single most important challenge to mining is the human rights abuses reported in the study area, which when not addressed holistically can undermine Ghana's juvenile democracy and threaten the benefits of mining for national development. Principle 3 of the ICMM's good practice in the mining sector advocates the need to "uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by our activities". All respondents mentioned that they or their close family members have at one time or another been abused by the security guards of mining corporations. The study shows that this abuse was usually occasioned by illegal and small-scale miners (galamsey operators) encroaching on mining corporations' concessions. This finding confirms the work of the Commission on Human Rights and Administrative Justice (CHRAJ) in Mining communities in Ghana. It is also in agreement with the findings of Hilson (2002).

Significantly, although the mining law prohibits unlicensed galamsey operations, many respondents admitted that they are involved in the practice. According to Tschakert (2009b) almost 90% of all small-scale miners are unregistered. For them, it is a question of livelihoods and survival. All respondents involved in unlicensed galamsey operations attributed it to two reasons. First, they assert that most agricultural land is degraded, leading to low crop yields, a situation that reduces the incentive for agricultural production. Second, the mining corporations have failed to provide sustainable alternative livelihoods for individuals in host communities whose land have been destroyed. This is consistent with the findings of Hilson and Potter (2005). Yet, the ICMM's principle 7 enjoins mining companies to support the development and implementation of scientifically sound, inclusive and transparent procedures for integrated approaches to land use planning, biodiversity, conservation and mining. The Ghanaian government continues to put into practice procedurally difficult and bureaucratically cumbersome regulations and policies for small-scale miners, which have the effect of favouring the interests of established large-scale miners (Hilson and Potter 2005). All the respondents who are involved in illegal mining indicated that the process for acquiring licenses is rather cumbersome. Previously, the process took only a month because the license acquisition process was localised. Recently, however, the process has taken as long as two years. This delay is a disincentive for small-scale miners to register and obtain licenses.

#### ***4.8. Regulation of noise and dust pollution in host communities***

Widespread complaints about dust and noise pollution from mining activities resonated in many communities covered in the study. Residents noted the impact of blasting on their building structures, a major source of conflict between corporations and host communities. Blasting was introduced when surface mining operations

commenced in 1985. As of May 2009, there are still no standards for blasting in the mining industry regulatory framework. The distance often quoted for the purpose of blasting is 500 metres, in line with Legislative Instrument 542, which stipulated such distances between communities and the Volta River Authority (national energy generation institution) installations. This is arbitrary because in the mining law there is no standard to regulate the process of blasting in host communities. As a result, determination of the requirements to be met by mining corporations with regard to blasting mostly hinges on discretion. This practice cannot be said to be in tandem with international best practice.

#### ***4.9. Sustainability of the minerals and mines policy***

The prerequisites of a successful mineral policy are: a transparent legal and regulatory framework; a competitive, stable and fair fiscal regime; strong institutions to implement them; and sound environmental management systems (De Sa 2005). The study found weak institutions, lack of transparency in the legal and regulatory framework in terms of valuation and payment of compensation and royalties, and unsound environmental management systems of some mining corporations within the study area, all of which undermine the sustainability of the mineral policy. For example, most respondents indicated that in the compensation process, they were not consulted in the counting and valuation of the crops on their lands. The formula for determining the unit cost of cash crops and food crops designed by the mining companies is also unclear. Indeed, respondents were unanimous on the view that the mining companies enter their farms without their knowledge and value the crops. Consequently, there is always a gap between the number of crops on the farm as counted by the farmers and the mining company. In all cases, the mining company has the final word on the matter.

Principle 9 of the ICMM's good practice for corporate environmental behaviour calls for engagement at the earliest practical stage with likely affected parties to discuss and respond to issues and conflicts concerning the management of social impacts. It also calls for the establishment of appropriate systems for ongoing interaction with affected parties, making sure that minorities and other marginalised groups have equitable and culturally appropriate means of engagement. One of the key elements under Principle 3 is to compensate fairly for adverse effects on the community where they cannot be avoided. Non-involvement of the communities in the valuation of the crops on their farms compromises fair compensation. The results of the study revealed that 75% of respondents are of the view that, given the current legal regime in the country, gold mining in Ghana is not sustainable. For example, the mining policy set out in the laws does not link gold mining operations with other sectors of the economy; thus making mining an enclave economic activity.

#### ***4.10. Government policy and corporate social responsibility***

While government policy has favoured social corporate responsibility, by the introduction of tax incentives for corporate sponsorship of charities, sports development and promotion, educational scholarships and rural and urban community development projects, approved by government from the 2001 tax year, data on the extent to which companies take advantage of these tax incentives is, however, not readily available. There are no best practice management systems for

applying CSR nor are there nationally recognised CSR standards against which a company can benchmark its efforts in this regard. Hence standards differ across mining corporations. Indications are, however, that in the major extraction sites, mining companies account for a significant share of social infrastructure and provision of social services (Garvin *et al.* 2009). The corporations pointed out intangible benefits of mining such as long-term capital formation, social investments and skills transfer as elements that feed into their corporate social responsibility in host communities. For example, in the 2003 fiscal year, the Ghana Chamber of Mines (a coalition of mining corporations in Ghana) committed a total investment of US\$13.8 million to social infrastructure and provision of social services in host communities. Given that independent information on earnings of mining corporations was not readily available, it is difficult to evaluate whether investment in social services in relation to profit margins is significant or not. Figure 5 shows the sector distribution of the investment in social services. It is significant to note that investment in water is only 6% even though most of the conflicts within the study area are water related. Host communities need to shift to alternative livelihoods given that their continued dependence on natural resources (forest products, land and water) appears unsustainable due to forest depletion and water pollution,

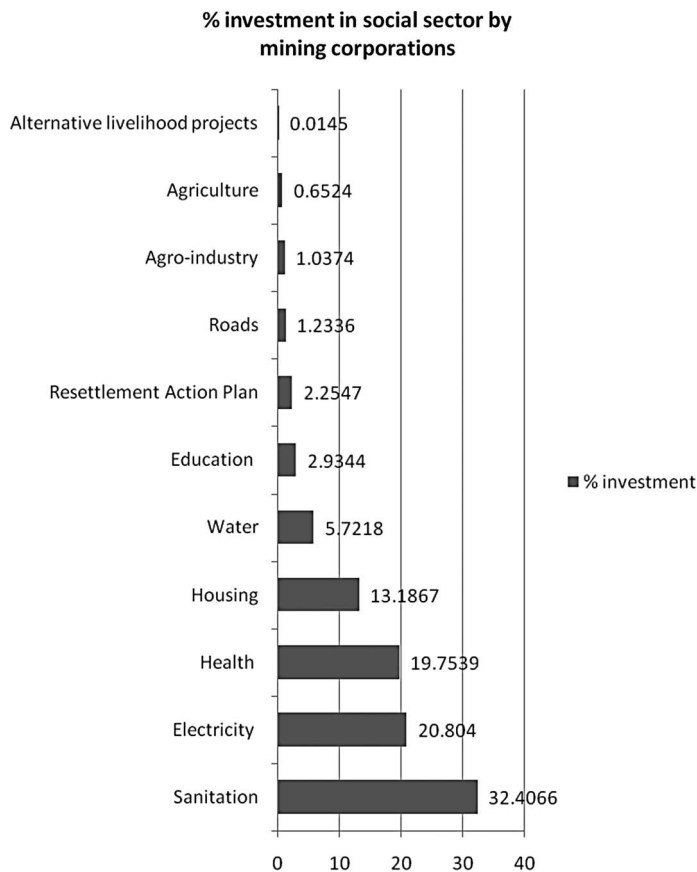


Figure 5. Percentage investment in social services by mining corporations. Source: Ghana Chamber of Mines (2003).

however, the investments in alternative livelihood projects is the least (0.015%). It would seem therefore that the corporations did not involve the host communities in determining the actual social priorities of host communities. If this had been done, it would have impacted positively on the quality of corporate social strategy. The study found that a number of the projects undertaken by the mining companies as part of CSR were either not functioning or inadequate given the population of the communities. This suggests the need to assess the sustainability of such projects. There is also the need for critical re-evaluation of corporate social responsibility of the mining corporations with the view to channelling financial resources to more critical areas such as water and alternative livelihoods.

Host communities cited the corporations for using corporate social responsibility as an excuse or justification for polluting their water bodies. The study revealed that some mining corporations had even converted mined pits into fish ponds and dams, some of which have become potential grounds for breeding mosquitoes and other water-borne disease vectors. The results indicate the mining corporations took such decisions unilaterally without due consultations with the Ministry of Mines and Forestry, the host communities and civil society (NGOs, CBOs). Farrelly (2005) contends that such a situation portrays a lack of appreciation of what indigenous individuals and groups could proffer in the decision-making process, and this definitely feeds into conflict in mining communities. International best practice encourages extensive consultation with relevant stakeholders in arriving at such decisions in order to reduce the likelihood of conflicts.

#### ***4.11. Weak institutions and inter-ministerial gaps***

The government in Ghana recognises the existence of weak institutions and has proposed to deal with it by strengthening inter-ministerial co-ordination arrangements: strengthen the Environmental Protection Agency by expanding its strategic planning functions, its ability to assist the Ministry of Environment Science and Technology in providing original thinking (innovation) and scientific inputs to policy formulation, and its capacity to provide up-to-date monitoring on the state of the environment and the impact of policies; developing an effective system for co-ordinating activities on natural resources and the environment between Ministries Departments and Agencies (MDAs); and strengthening the capacity of all MDAs to better regulate environment and natural resources, whether through fiscal measures, administrative compliance or judicial enforcement of legislation.

These government interventions are possibly effective, but it appears they do not address the central problem for the environmental issue: that the environment usually is given a lower rank priority than several other areas, for example, finance, trade and industry and that some officials in ministries such as the justice or interior, also do not necessarily understand or focus on the environment. Perhaps it is too radical to put the environment above those, even though we recognise that it is the environment foremost that we depend on. Instead, what may be less radical is to integrate the environment into the strategies and policy making of any ministries that are usually more powerful, more prioritised and whose decision making has strong effects on the environment. We argue that there are at least two ways to achieve this: first, to include environmental sustainability factors in the performance reviews of all relevant and key ministries. Finance, trade and industry, among others will have to provide answers if their environmental impacts are negative. Second, and this



follows from the first, to establish the knowledge in all key departments and ministries about how to design policies and actions that are consistent with proper environmental sustainability. Often there is a win-win-win possibility (Elkington 1994). However, the critical question is does anyone in the ministry know what a win-win-win sustainable development policy looks like and involves? If ministries and departments do not have sufficient information, then they will have a problem doing the important things to get good environmental sustainability reviews.

## 5. Conclusion

The paper has attempted to examine the environmental laws and policies that regulate corporate practices in Ghana, with particular emphasis on mining. The legal and regulatory regime for environmental governance has failed to come up to international best practices because of weak institutions, lack of transparency in the legal and regulatory framework in terms of valuation and award of compensation, and unsound environmental management systems. The current environmental protection regime does not provide specific mechanisms through which communities may formally seek redress for violations of their rights. There are no best practice management systems for applying CSR, nor are there nationally recognised CSR standards against which a mining corporation can benchmark its efforts in this regard. Hence standards differ across corporations and host communities. Most respondents have negative perceptions about the socio-economic and environmental impacts of mining. In the case of the former, this is attributed to the fact that the potential of mining to offer employment was perceived to be quite low likely due to the few jobs given to local residents despite expectations to the contrary. In the case of the latter, the deep trenches and degraded land at most of the decommissioned mine sites in the host communities together with water pollution contribute to the negative perception of mining. While the government has an important role to play in the area of providing the legal framework for enhancing best practice standards in corporate environmental governance, it appears that the ultimate responsibility for sound environmental behaviour still lies with the corporations themselves.

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