Legislative regulation and financial institutions in environmental assurance in developing countries: Case study of mining in Ghana

Eric Twum

Department of Politics, School of Social Sciences and International Studies, University of Exeter, Amory Building, EX4 4RJ, Devon, Exeter, United Kingdom.

Accepted 10 July, 2013

The use of financial institutions and legislation are some of the regulatory mechanisms for ensuring an effective Environmental Financial Assurance (EFA) implementation. Third party involvement in regulation could mitigate regulatory implementation inefficiency in developing countries. This research uses Ghana as a case study to examine the effectiveness of these two regulatory mechanisms in Ghana’s EFA policy implementation. The influence of financial institutions in environmental policy could be seen in 3 folds: as lenders, insurers and investors. Transnational companies (TNCs) are sometimes unwilling to accept regulatory reforms in developing countries because it appears they can get away with it. The knowledge that contractual agreements and legal institutions are weak also seems to allow TNCs to take advantage of the situation and hardly comply fully with the environmental regulations in developing countries.

Key words: Environmental financial assurance, rule of law, financial institutions, developing countries, transnational companies, mining reclamation bonds.

INTRODUCTION

As part of policy efforts to ensure sustainable mineral utilisation, most countries insist on reclamation bonds, which apply the polluter-pays principle as a means of regulation (Miller, 2006). Environmental Financial Assurance (EFA) policy includes reclamation bonds, which are a form of assurance such as pledged assets of a company and letters of credit and guarantees that mining operators will undertake reclamation activities or forfeit the amount posted as bonds or pledged assets. These bonds are normally payable to regulatory authorities by insurance companies if the mining operator fails to fully undertake post-mining closure plans.

In countries where reclamation bond requirements are in place, there have been occasions where mining operators quickly close down or go into liquidation without rehabilitating and restoring sites to pre-mining state as stipulated in the reclamation bond agreements. There is also evidence of arbitrariness, especially in developing countries in the process of estimating baseline environmental cost, coupled with lack of real success stories even in a country like Ghana where reclamation bonds have been in existence for over a decade. The reason for this state of affairs has been broadly attributed to non-existence of coherent and more potent legislative underpinnings and the efficacy of regulations.

In Ghana, as of February 2011, this research discovered that less than one per cent of the mining companies in possession of a mining license had posted
bonds to cover reclamation of their mining areas despite cases of death and severe loss of livelihoods in mining areas as a result of non-reclaimed mining sites. These disturbing statistics reflect the existing reality despite government interventions in natural resources management and after the International Monetary Fund (IMF) and the World Bank Structural adjustment policies (Akabzaa, 2006). The inception of the World Bank / IMF led mineral sector reform programmes, in the 1980s resulted in significant increase in mining activities in Ghana (Akabzaa, 2006). However, the apparent gains from the mining sector, in the form of increased investment and foreign exchange, are probably being achieved through great environmental cost.

Given Ghana’s status as a democratic and a developing nation (WorldBank 2008), this research aimed at contributing to the field of environmental policy and policy transfer with the view of assisting policy makers, practitioners and observers to understand what EFA policy is and what can be transferable in the context of a developing nation. It delivers a tangible result in terms of a positivistic case study that tests the transferability of a new public management policy across substantial international and cultural boundaries. It allows us to draw comparison with other countries.

This research paper provides brief empirical background on the political history of Ghana; outlining the importance and the role of the mining industry to the Ghanaian society and EFA. The second section discussed the rule of law and how reputation affects compliance. This is followed by the role of financial institutions in EFA regulation. The last section proposes recommendations that are likely to help ensure an effective EFA policy implementation by the Ghanaian government and other stakeholders.

Using regulatory theories such as policy transfer, elite interviews, analysis through participatory action research; engaging stakeholders in EFA regulatory policy in the mining industry in Ghana and a review of official and unofficial documents, the research examines the use of financial institutions and the rule of law as regulatory mechanisms to ensure an effective EFA implementation.

METHODOLOGY

The study was conducted using a qualitative research approach. Accordingly, the research was designed as described by Kindon et al. (2007), to draw on the capabilities and assets of twenty six elite participants.

A field study was carried out in Ghana to obtain primary data from target groups within the research scope, through a participatory interview approach with a cross section of stakeholders in the mining sector from March 2010 to September 2010, after a reconnaissance study conducted between April 2008 and June 2009. This was based on participatory action research methodology, which assists in developing practical knowledge through a combination of theory and practice in the quest to offer practical solutions in line with Reason and Bradbury’s (2001) suggestion on social science research.

The research design included these thematic areas: (i) classical review of in-country mining EFA policies in developing and developed countries; (ii) the development and implementation of bond posting; (iii) assessment of the quality of currently existing mining reclamation bond and comparison with other developed countries such as the United States and (iv) elite interviews and published and unpublished documentary analysis. Heads of department or local chief and opinion leaders in the mining communities and other institutions listed below were interviewed;

2. The Environmental Protection Agency (EPA) with focus on its legal, regulatory and mining sections
4. Local chiefs from Bontefufu and Amanzie West
5. NGOs’. Three Non-Governmental Organizations (NGOs’); The Third World Network, Friends of the Earth and Wass community affected by mining (WACAM)

Secondary information was obtained through a comprehensive search and review of related literature. Relevant information in line with the research was gathered from textbooks, journals, newsletters and reports available in libraries of the related institutions in Ghana such as the EPA, Ghana mineral and mining law 2006, Generic guidelines for reclaimed lands, internal reports within the regulatory agency and mining companies about EFA, EPA Act 490, Legislative Instrument 1652 of the EPA, Government and NGO reports on mining activities. The use of multiple interviewees, theories and empirical materials, helped to minimise weaknesses or intrinsic biases and problems associated with single method, single-observer and single-theory studies. The objective was to gather information from multiple sources of evidence in a manner encouraging convergent lines of enquiry as described by Cohen and Manion (2000).

Selection of elite interviewees

A purposive sampling technique employed by other

E-mail: ekatgh@yahoo.com
researchers (Hemmington, 1999; Saunders et al., 2003), was used to select the respondents. This assists in selection of respondents and obtaining a sample that is more representative of the population and thus ensures a wider range of data set is captured. Thus, participants were chosen based on their experience, role and influence in the mining industry. The purposely chosen interviewees included representatives of different views who are experienced, command respect and deemed credible by society as they were either the top level managers or experienced on the concept and/or effect of EFA policy at first hand. The information obtained by interviewing was then cross referenced with other data from published and unpublished documents and other interviews. The interviews lasted between 45 and 105 min. The elite nature of this research did not allow the use of large numbers of respondents and may limit the grounds for generalisation (Maxwell, 2005). However, the aim of the study is to explore the quality of the data not the quantity.

**Consent, ethics, validity and reliability**

Elite interviews were conducted in line with Bryman (2001) guidance on ethical approach to social science research. To eliminate some of the concerns regarding validity, respondents were not subjected to pre-testing nor did they interact with each other to offer pre-arranged information (Bryman, 2001). The overall analytical approach adopted was the gathering of themes in the transcripts. Themes were then subjected to a more detailed manual analysis, which led to the formation of sub-themes within each theme. These themes directly address the research objective.

Similar questions were asked of all the respondents. The information obtained from heads of government departments, regulators, heads of NGOs', chiefs and elites of the community and local population who were chosen randomly reflected the real situation and understanding of the EFA policy implementation.

**GHANA AND ENVIRONMENTAL FINANCIAL ASSURANCE**

To fully understand the importance and the role of the mining industry to the Ghanaian society and the importance of EFA in the mining industry in Ghana, it is necessary to have a brief look at the history of Ghana. The country, formerly known as the Gold Coast, was the first in sub-Saharan Africa to gain independence from Britain on 6 March 1957, and thus was perceived as a symbol of democratic governance in Africa. Geologically, Ghana is auspicious with large areas overlaid with a Pre-Cambrian greenstone, known as Birimian, which are endowed with a substantial variety of mineral resources including gold, diamond, bauxite and manganese (Akabzaa, 2000). Recently, the British Geological Survey (2008) ranked Ghana the tenth in the world in terms of gold mining. Unfortunately, the post-independence policy pursued by Ghana, which centred on state ownership of the mineral resources with the view of providing more socio-economic benefit and thus improving the livelihoods of the people, led to the collapse of most of the mines and a decline in output due to inefficient management and under performance (Economic Commission for Africa (ECA), 2007). Most notably, gold production by Ashanti Goldfields subsequently declined due to lack of foreign exchange to replace equipment (Akabzaa, 2001).

Thus, in the 1980s, Ghana underwent a paradigm shift in mineral policy reforms in order to attract foreign direct investment to revitalise the mining industry and rehabilitate derelict mines and the environment. The policy reforms led to the adoption of trade liberalisation, resulting in a phenomenal increase in the amount of investment in the mining sector in Ghana (Akabzaa, 2001) by multinational financial agencies and in particular, the World Bank.

Although the exploitation of these non-renewable mineral resources can have a tremendous positive socio-economic impact in Ghana, the same exploitation has the potential to adversely impact on land resources. This leads to the creation of large derelict areas through the destruction of forests and agricultural lands, human settlements and biodiversity. In the past, failure by mine operators to put aside funds for reclamation resulted in abandonment of sites in unsafe and unacceptable environmental conditions (ICMM, 2005). Successive governments were then forced to use public funds to complete the closure of abandoned sites. In response, regulations were designed to offset these externalities associated with the winding down of mining operations. Most significantly in 2000, the government of Ghana developed a mining reclamation policy with the ultimate aim of ensuring that mining operators undertook post mining land reclamation, which was also intended to serve as a form of insurance to protect the public against the cost of mine clean up should the mining company be declared bankrupt or refuse to complete the reclamation plan according to its permit.

Walker (1990) identified that an honest handshake between two or more parties to an agreement was the first form of surety bonds. However, he claims that in 1895 after the United States treasury realised that US$ 35 million surety guarantees were simply worthless, the change to a corporate surety bond was argued out as a better alternative. Since then, the surety bond is the leading financial instrument that seems to guarantee the completion of an obligation as many mineral fields have been reclaimed through surety bonds.

---

2 A surety bond as defined by the Surety Association of America is an agreement providing for the monetary compensation should there be a failure to perform specific acts within a selected period.
Boyd (2003) identified EFA as a requisite in many mineral operations like offshore gas installation, mining, underground gasoline, just to mention a few. This insurance can be obtained from banks or by the setting up of a trust fund or an escrow account. However, evidence suggests that a large number of Trans-National Companies (TNCs) operating in the mining industry neither post reclamation bonds before their mining operation and / nor simply do not post bonds for their operations at all as this research discovered.

The role of litigation in regulating TNCs in ensuring an effective EFA in Ghana

Apart from seeking compensation and justice by developing countries, Newell (2001) insists on the importance of taking the legal route to address TNCs environmental non-compliance. This has the possibility of generating regulatory reforms in subsidiary companies operating in LDCs. In a few instances, governments in developing countries are unwilling to take up legal issues with TNCs for fear of backlash from other TNCs, because of the complexity of such cases, the cost of the process and the uncertainty of the outcome (Newell, 2001). One such example is the environmental damage caused by Texaco in Ecuador in 2000 where the Alien Tort Claims Act of 1789 in the USA was useful (Newell, 2001). This allows developing countries to sue subsidiaries whose parent companies are in the United States of America for international law violation. The common law legal declaration of forum non conveniens, however, has been used by TNCs to stall cases against them (Newell 2001). What it means is that the defendant, in this case (the TNC), can invoke the principle to claim the proposed forum to hear the case is inconvenient on the grounds that there is a clearly and distinctly more appropriate forum where justice could be dispensed between the plaintiff and the defendant. This might lead to a protracted ‘shopping around’ of an appropriate place to hear the case (Newell 2001). This raises the question of whether this might be the underlying reason why as of now, no mining company has been asked to face the courts locally or abroad despite clear indications of EFA policy non-compliance in Ghana. For example, a senior legal officer at the EPA claimed that ‘till date, no mining companies have been prosecuted for not having a bond in place...’. In the case of Bonte Mines in Ghana, the Centre for Environmental Law (CEPIL) initiated a court action against Bonte (Adarimani, 2004). The case highlighted the absence of a common standard to be met by all mining firms; a failure of the EPA and Mineral Commission in monitoring activities of firms sanctioned to operate; ineffectiveness of statutory bodies to enforce environmental legislation; and absence of local community participation in the determination of mining standard (Adarimani, 2004). In the light of these inefficiencies, it can be argued that setting examples of TNGs who do not comply may enhance compliance.

Environmental compliance and company’s reputation as a regulatory tool

Related to the legal issues of enhancing regulation is the reputation that goes before companies. TNCs understandably value the fact that environmental friendliness is an integral part of their public image and credibility.
strategy (Verhoosel, 2002). Environmental regulation adherence, they are aware, could influence public consumption of their products and the ethical reasoning some people consider before dealing with some companies and their goods and/or services. The advent of the internet has made this even more important as information about a company’s reputation and image is spread at the click of a button on the information superhighway. As noted by Waelde (2001), bad reputation could undo a business.

On the other hand, ‘reputation’ can be seen as a perception and could be corrected by good public relations. Waelde (2001) argues and asserts that large MNC will be prepared to pay out and perhaps save their international image and activities around the world and the effect it might have on them when entering future contracts. Nevertheless, there are other considerations (Waelde, 2001). Until all the facts are known about a company’s compliance with existing environmental regulations, many states or countries are wary of being seen as frustrating investors when they insist on the right things being done and getting painted black in the process by the affected companies. This then provides some leeway for MNCs to go on flouting laws with impunity. In the case of Ghana, no mining company has been put through the court system to deter other TNCs who do not abide by their promised reclamation agreement compared to companies in developed countries such as the United Kingdom (UK) where the EPA is proactive. This paper argues that the non-use of the legal system in ensuring EFA compliance may be due to the fear of international political backlash from TNCs home countries and the economic hardship that may result or the lack of training and zeal to hold TNCs to account through the legal process.

Firms could be liable to civil claims and fines when they are found to have caused environmental damage. This might also affect their corporate image or reputation; the risk emanating from this is considered important by TNCs (Graham and Woods, 2006). For example, consumers and investors may have over the years labelled minerals from certain countries as ‘blood diamonds’ because of the untold hardships in the countries where these minerals are extracted and the MNCs contribution to this phenomenon. Consumers with strong ethical considerations may shun minerals from certain companies if they make negative headlines. The financial implications for such TNCs business could be huge: shares may fall and they may lose their competitive advantage. The fear or risk of non-compliance and the subsequent implication for TNCs may cause them to adhere to environmental regulations like EFA whilst others may decide to act opportunistically, perhaps because pressure groups and the communities who might sound the alarm about their non-compliance are either non-existent or not properly organised or the political will to take action against those flouting mining regulations is lacking. What appears to be lacking in Ghana is the political will to take on TNCs through the court system or taking a strong position on EFA requirement. For example a respondent of the environmental regulator, indicated that “why would you be dancing in front of the foreign investor when he is bringing in money to develop the country just because of EFA requirement?” The fear that strict enforcement could discourage foreign investment in the country is a major concern for the efficacy of EFA implementation.

Legal issues in EFA regulation

Most people interviewed in the local communities and NGOs do not trust that the legal system will address their concerns as the legal system is seen as embedded with corruption. It was also argued that the supposed biases in the mining sector in support of influential and powerful MNCs makes them untouchable. A local chief of Manso Nkran lamented that ‘even if you take them to court, you end up paying too much money from your pocket and they (TNCs) will go free because they can bribe the judges’ A typical example is the case of Mabey and Johnson, a UK construction company that was charged with alleged bribery of overseas ministers and leaders including Ghanaians who served in the then ruling party of the National Democratic Congress (NDC) so they could secure contracts in those countries. Their actions only came to light in 2009 in a UK court after a new board decided to blow the whistle (BBC news 10/07/09). It was also perceived in some quarters that, because of a lack of expertise and experience in the legal resolution of disputes with many TNCs in developing countries, these nations might be at a disadvantage. An officer of the third world network commented that ‘I don’t think the EPA will send anyone to court because of not rehabilitating the land they have used. They do not know what they are doing...’

The EPA could not identify a single case where a mining company has been taken to court for not adhering to EFA policy. The mention of names of TNCs companies occurs only in the media when there is a major catastrophe such as water pollution through cyanide or mercury poisoning of water bodies, but not for defaulting on EFA. It actually takes the media and NGOs to come to the aid of communities and bring the attention of the public to the adverse environmental crimes being perpetuated. A senior director of Wass Community Affected by Mining (WACAM), an NGO asserted that, ‘the EPA will not come to the aid of these local communities who face land and water pollution even after their lands are no longer used by the mining companies unless I organize the local community to go on demonstration and make sure the press is informed so the environmental catastrophe reaches the regulator’s attention’.

International law permits nations to develop and

---

regulate their mineral sector to suit the nation’s policies and objectives (Otto and Barberis, 1994). The right to regulate the mineral sector in order to mitigate environmental consequences of mine operations also involves the ability to renegotiate and repudiate contractual arrangements (Otto and Barberis, 1994). In effect, developing countries can abrogate contracts with TNCs from developed countries if a part of an agreement on environmental protection measures (such as mine reclamation) is not adhered to; as observed in this study, this is hardly done.

Gray (2002) points out that, either a lack of political will or limited resource, or a combination of both could be a reason for weak legislation to deal with non-compliance in developing countries. The legal system provides an avenue for affected communities to register their protest and air their views when their lands are abandoned after mineral exploitation. In addition, Bell (2002) asserts that MNCs are sometimes unwilling to accept regulatory reforms in developing countries because they know they can get away with it. The knowledge that contractual agreements and institutions are weak may also allow MNCs to take advantage of their weakness in complying with the environmental regulations (Bell, 2002). For example, in Ghana, penalties for non-compliance with EFA policies do not serve as a deterrent to TNCs.

With eroding confidence in the legal system, people are not encouraged to pursue environmental non-compliance in the courts believing that the final outcome will yield nothing. A traditional chief of Manso Nkran lamented that ‘you will be labelled asking for too much’ Although the regulatory body agrees that a ‘name and shame approach’ to enforcing the rules may work, they are hesitant to publicly denounce the defaulters as it may negatively affect the relationship between Ghana as the host nation of the TNCs. However, Hewko (2000) posits that corruption, a weak court system and regulation do not affect the decision by TNCs to invest in developing countries. This might be because their focus is increasing their market share and profitability; the weak judicial system and regulations as well as corruption might only favour this course. It is assumed that where corruption is high regulation is weak (Dutta and Aidt, 2005). Another regulatory mechanism for ensuring an effective EFA implementation is the use of financial institutions.

**FINANCIAL INSTITUTIONS AND EFA REGULATION**

Mining operators are expected to post bonds in cash into an escrow account. The use of the escrow account does not guarantee the immediate forfeiture (Kahn et al., 2001) of the amount posted. It requires a judicial process which could drag on for years before funds are available for mine reclamation. The concept is to ensure government is guaranteed funds in case of any eventuality such as bankruptcy by the operator. In Ghana, when the cash is Executive Director of the EPA and the Manager of the mining posted, an agreement is then signed by the company. Standard Chartered Bank, Merchant Bank, Bank and Eco-bank were identified as banks the regulator will deal with in the generic guidelines although none could identify a single company posting bonds with them or having provided any kind of financial insurance for them. An intelligence analyst of Merchant Bank’s comment was perhaps the most revealing: ‘I was made aware by my manager during a conversation when a loan was being arranged for a mining company. They enquired if we do provide such facility for TNCs. We said we don’t provide such a facility and that was the end of story. I will be happy to know more about it, if you can brief me...’. As a result of this situation, countries such as Ghana are exposed to the harsh realities of the effects of abandoned mines and the cost of rehabilitation which could be astronomical since they do not have the money posted by TNCs at hand.

The study discovered that local banks that are supposed to provide environmental assurance policies are not informed about what EFA policy with respect to mining as indicated by the intelligence analyst from Merchant bank. This is because only one out of seven major banking and financial institutions that have been mentioned in Ghana’s reclamation of degraded lands policy had an idea on EFA during a discussion with TNCs when a loan was being accessed. In effect, it shows TNCs raise money locally and then post bonds in escrow accounts abroad. Richardson (2002) argues that financial institutions have the potential to aid the elimination of bad environmental practices and provide environmental protection measures as they could monitor and write reports highlighting progress of companies they insure. For example, the request by the Barclays Bank and other leading banks for companies to adhere to the ‘equator principle’4 demands the production of an adequate environmental impact assessment and pollution licenses before funds are made available to TNCs.

**The regulatory role of financial institutions in EFA**

Could third party regulation be the answer for developing

---

4 The ‘Equator Principles’ is a financial industry benchmark for determining, assessing and managing social and environmental risk in project financing. The equator principles is to ensure that projects that are financed are developed in a manner that is socially responsible and reflect sound environmental management practices, thus avoiding negative impacts on projects affecting ecosystem and communities or compensating appropriately if impact cannot be avoided. Equator Principle Financial Institutions (EPFI) will not provide loans to projects where the borrower will not comply with social and environmental policies and procedures that implement Equator Principles. The principles are to benefit borrowers, stakeholders and to promote environmental stewardship and socially responsible development. Equator Principles financing is usually for large, complex and expensive projects such as power plants, chemical processing, transportation or telecommunication infrastructure or mining. The principles apply to all new projects financing globally with total project capital cost of US$10 million or more (equator principle, 2009). Unfortunately, the equator principle does not require signatories to produce a report detailing how the principle is being implemented. As a result, it is quite difficult for other stakeholders in the minerals sector to ensure banks that sign up for the equator principle abide by it.
countries with regulatory implementation inefficiency? The call for banks to track TNCs activities to ensure compliance is laudable. Although insurers are better placed for monitoring the activities of TNCs, they usually lack the resources and expertise to monitor compliance. A two edged sword, a regulatory chain involving banks and the national regulator, for monitoring and implementation was proposed by Woods (2001) to assist in effective regulation of TNCs. These initiatives have also been opined by the European Investment Bank in their Environmental and Social Principles and Standards in 2009.

The current world financial crisis (economic recession) has drawn attention to the major role banks play in the economy. Closer collaboration between the two, giving their important spheres of influence, could be crucial for better monitoring. Miller (2005), however points out that financial institutions, which provide EFA are sometimes unavailable in LDCs like Botswana and Surinam. The use of third party organisations in the regulatory process has also been proposed. This move is seen as a measure of decentralising regulation instead of the traditional policing methods. Most banks involved in arranging financing for TNCs are international in operation and regulatory experience gained in other jurisdictions on achieving environmental assurance could be incorporated into new arrangements especially in developing countries.

The influence of financial institutions in environmental policy could be seen in 3 folds: firstly, as lenders, they offer financial products to promote sustainable development plans; as insurers, they aid in the estimation and pricing of environmental risks and recommended safety improvement; as investors, financial institutions supply financial resources for sound environmental development (Richardson, 2002). Thus, Banks have considerable leverage in getting TNCs to ensure EFA since concerns for the environment are central in project financing and environmentally conscious financial institutions are protected through their monitoring of borrowers (Richardson, 2002). Nevertheless, Richardson (2002) reports that major American bankers have in the past accrued polluted site clean-up costs after closure of mines because they assumed responsibility over the collateral.

Banks facilitating and steering companies towards environmental responsibility and practice

The European Union workshop on sustainable development of 1998 urged banks to integrate environmental concerns into their operations, giving it the same consideration as their highest priorities. Quite recently, the European Investment Bank released statements of Environmental and Social Principles and Standards (2009)\(^5\) as a means of ensuring transparency and accountability. The evolving approach towards environmental and social policies and funding by banks to incorporate climate change, ecosystem management to ensure sustainable development in projects such as infrastructure and mining has been laudable. These are similar to the equator principles of 2007.

Others have also made similar suggestions with Richardson (2002) raising the importance of incorporating financial services like institutional investors, insurers, and banks into EFA regulatory programmes. They could take up roles such as empowerment and regulation. Due to the obligation on financial institutions to provide environmental reports for both internal and external purposes, financial institutions have the potential to enhance regulation. Indeed, they could complement other aspects of environmental regulation.

Richardson (2002) argues that financial institutions have assisted in eliminating bad practices and improved environmental protection measures. Therefore in a country like Ghana where local banks are rarely involved in providing an EFA, the certainty and verification of mining bond becomes problematic. Banks and investors could help shape policies, especially with resource allocation and management. In between state or government regulation and a free market philosophy may be a market-based institution, like financial organisations who could partner government in EFA regulation (Richardson, 2002). Hancher and Moran (1989) perceive governance as a ‘shared regulatory space’ where the public and private society are mixed such that private firms like investors show features of governing institutions. Since financial institutions play a pivotal role in organisations, their regulatory role in ensuring environmental sanctity cannot be underestimated, especially in the quest to bridge the public-private regulatory role. Financial institutions could be seen as partners with government through the use of rules, incentives and discursive processes (Richardson, 2002). Through discussions with financial institutions, environmental policies could be shaped leading to a better outcome in the interest of the larger society. The state or government may not need to take charge of every regulatory activity if private organisational groups like banks and civil society monitor one another, since it could be another way of ensuring regulation. This idea is also in line with the sustainable world strategy proposed by the Brundtland Commission, formerly the World Commission on Environment and Development (WCED) in 1987.

Environmental interest could be registered at the point of decision making where lenders and borrowers meet in agreeing on a loan. At this stage, a long term environmental interest such as mine reclamation bonds could be factored into the borrowers' activities. In the view of the European Commission (1998), the involvement of the financial sector is the way forward in catalysing changes in environmental regulation. The financial insurance industry can also aid in regulation by advising public authorities and companies on appropriate damage prevention and development policy instruments and

\(^5\) The European Investment Bank provided these guidelines in 2009 to ensure transparency and accountability
collaborate with regulators in order to mitigate damage to the environment and publication of environmental risk. This delegation of a government's regulatory role to professionals can be an effective tool if the said bodies are competent to provide supervision on behalf of the state (Richardson, 2002). The information dissemination of organisational environmental performance could be healthy for the market as both private and public sector relations are enhanced and communities are in the know about what is happening to their environment. This is referred to as environmental accountability. Unfortunately, this level of environmental accountability is not exemplified in Ghana and perhaps other developing countries as this study found that there is a lack of information dissemination to all stakeholders in the mining sector and the financial institutions are virtually not involved.

Risks

Problems that could arise when third party regulatory bodies are incorporated into the regulatory scheme include third party institutions being captured (Richardson, 2002). Secondly, if the policies of government and private regulatory bodies are incoherent, it may lead to distorting the regulatory programmes. It is however argued by Richardson (2002) that the government regulatory function may lose its visibility and lead to loss of control of the situation on the ground. In addition, private interests could capture the regulatory process leading to implementation failure due to the brokerage and negotiation process (Hancher and Moran, 1989). This has the potential to defeat the public interest regulation objective.

RECOMMENDATIONS

To ensure a good working policy and implementation, there is the need for an independent regulatory system, which consists of a mining code and a clear working government policy on minerals and mining. It also requires the signing of a comprehensive, binding mining agreement between a prospective mineral exploiter and the regulatory body, as well as the inclusion of all stakeholders in the mineral exploitation such as local residents, landowners etc. in assessing the potential environmental impact as required under the Environmental Impact Assessment programme and the insistence of an EFA policy before mining operations begin. However, because regulators have not ensured that TNCs adhere to these regulations, it has led to the creation of enforcement loopholes likely to be exploited by TNCs.

In addition, a strong link between the regulated, regulators and legislation to ensure compliance is absolutely crucial. The judiciary need training on a new regulatory concept such as EFA on its introduction. The regulatory agency's ability to function is determined not just by its own technical capacity to perform its duties, but by legal rules that define its formal authority, the willingness of the courts and other governmental entities to recognise and follow these legal rules and belief and acceptance of operators that the regulatory agency is legitimate and capable. The rule of law and effective judicial system could explicitly deal with TNCs and deter possible offenders when they do not meet EFA requirement based on international and local laws and not simply because they lack the technical ability.

Thus in the future, the insurance and banking industry will have to be trained on perhaps the 'risky business' of assuming a regulatory role in the mining industry; this might aid the monitoring of TNCs environmental compliance. Having local banks and insurance companies involved could guarantee there is a possibility of verifying the bonds and hold someone accountable when the companies default locally.

Furthermore, the Government needs to put environmental issues at par with trade liberalisation policy. The IMF and World Bank policy that required developing countries such as Ghana to open up trade links with TNCs has resulted in an influx of TNCs. This has resulted in some economic benefit to developing countries, as envisioned when the policy was promulgated, but it has been accompanied with unprecedented environmental disaster. It is highly recommended therefore, that amendment to the existing environmental policies, laws and regulations in the area of rehabilitation bonds is made so as to ensure that the burden of rehabilitating mining sites remains with the operator and not the Government and ultimately the tax payer after closure of the mine.

Finally, fines or repercussions for defaulting companies EFA non-compliance have to be substantial; this could include demanding full postage of bonds in Ghana to cover all reclamation activities or forcing companies to cease operations when they are in the middle of accruing profits from their investments, to serve as a warning to mining companies not to shirk their responsibilities. At the moment the repercussion for non-compliance is largely insignificant. It appears the mine operator is better off financially not complying with the usually implied verbal agreement rather than spending money rehabilitating mines, knowing they can get away with impunity, especially when there is no strong binding agreement locally or internationally. This amendment must highlight the grave consequences (such as the forfeiture of mining licenses) companies are likely to face for non-compliance to the EFA. A lack of political will to sanction defaulters however allows TNCs to escape sanctions and thus not even internationally agreed sanctions in the UN can perturb defaulting companies. Firms may be willing to comply with the regulations, but only when those violating the law will be discovered and punished.