Site-specific and Geographical Segmental Social, Environmental and Ethical Disclosures by the Ghanaian Mining Sector

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Structured Abstract

Purpose: This paper explores the extent of site-specific and geographic segmental social, environmental and ethical reporting by mining companies operating in Ghana. We aim to: (i) establish a picture of corporate transparency relating to geographic segmentation of social, environmental and ethical reporting which is specific to operating sites and country of operation, and; (ii) gauge the impact of the introduction of integrated reporting on site-specific social, environmental and ethical reporting.

Methodology/Approach: We conducted an interpretive content analysis of the annual/integrated reports of mining companies for the years 2009 to 2014 in order to extract site-specific social, environmental and ethical information relating to the companies' mining operations in Ghana.

Findings and Implications:
We found that site-specific social, environmental and ethical reporting is extremely patchy and inconsistent between the companies' reports studied. We also found that there was no information relating to certain sites, which were in operation, according to the Ghana Minerals Commission. This could simply be because operations were not in progress. Alternatively it could be that decisions are made concerning which site-specific information is reported according to a certain benchmark. One policy implication arising from this research is that IFRS should require geographic segmental reporting of material social, environmental and ethical information in order to bring IFRS into line with global developments in integrated reporting.

Originality: Although there is a wealth of sustainability reporting research and an emergent literature on integrated reporting, there is currently no academic research exploring site-specific social, environmental and ethical reporting

Keywords: International Financial Reporting Standards (IFRS); geographic segmental reporting; integrated reporting; site-specific social, environmental and ethical reporting; sustainability reporting.

1. Introduction

Recent years have witnessed an immense international growth in social, environmental and ethical reporting with the majority of listed companies producing stand-alone sustainability (or equivalent) reports as well as increasing the social, ethical and environmental content within their annual (now often integrated) reports. Social, environmental and ethical reporting is especially prevalent in 'high impact' sectors, those with a substantial impact on society or the environment. Mining is one sector which has focused on developing sustainability reporting as, "[M]ining companies are increasingly aware of the need to engage with a wide range of stakeholders and obtain a social 'licence to operate' to mitigate potentially sensitive issues such as exploration leases, indigenous rights and environmental protection" (Jenkins and Yakovleva, 2006, p.279). The Global Mining Initiative (GMI) coordinated many mining, metals and minerals companies with an intention to focus on sustainable development in the industry (Jenkins and Yakovleva, 2006). Indeed, there are a number of codes of practice developed especially for the mining industry including the International Council on Mining & Metals (ICMM) Sustainable Development principles and the Extractive Industries Transparency Initiative. Given the high proportion of mining companies in Australia the Australian Mineral Industry Code for Environmental Management was developed in 1996 which focused on addressing environmental performance and public accountability.

Although there is a substantial literature exploring the content of stand-alone sustainability reports as well as emerging research into integrated reporting, there is hardly any research investigating the site-specific and geographic segmental social, environmental and ethical reporting in annual/integrated reports pertaining to mining operations. The annual reports of mining companies are increasingly incorporating material social, environmental and ethical information for a variety of reasons including the global spread of integrated reporting, societal and stakeholder demands for information, corporate attempts to enhance reputation and attain legitimacy. However, the extent to which a balanced picture of corporate social, environmental and ethical issues according to the geographic spread of companies' operations and site-specific operations/activities is provided by annual/integrated reports has not been explored in the academic literature. We aim to: (i) establish a picture of corporate transparency relating to geographic segmentation of social, environmental and ethical reporting which is specific to operating sites and country of operation, and; (ii) gauge the impact of the introduction of integrated reporting on site-specific social, environmental and ethical reporting.

The paper is organised as follows. Section two provides a summary of the academic literature exploring social, environmental and ethical accounting reporting in Ghana and other African countries and outlines the current requirements for site-specific and geographic segmental reporting. Section three discusses the research method applied and the sample of companies selected. In section four we present the empirical findings of our interpretive content analysis and the paper concludes with a discussion and policy recommendations in section five.

2. Prior Literature

2.1 Social and environmental reporting by mining companies

There is a significant literature on social and environmental reporting generally and the practice of sustainability and other related reporting has burgeoned in recent decades. Every three years KPMG produces a survey of environmental reporting patterns. This began in 1973 with environmental reporting and in 1999 it began to look at sustainability reporting. The survey looks at reporting practices from the Top 100 companies in 11 countries. The early KPMG surveys showed a gradual increase in the proportion of companies surveyed which were producing separate corporate environmental reports, with the percentage arising from 13% in 1993 to 17% (1996), 24% (1999) and 28% (2002). In the 1992 survey the UK took the lead over other European countries surveyed, with 49% of the Top 100 companies producing a separate environmental report. The survey also indicated that over 30% of the 100 companies sampled in 2002 had incorporated social and economic issues in their environmental reports, thereby moving the environmental reports more towards sustainability.

More recently, there has been a focus on corporate responsibility reporting (KPMG, 2008a), reflecting the shift of emphasis from solely environmental issues towards a combination of social, environmental and economic concerns. Some salient findings of the (2005) KPMG survey were that:

- The three years preceding 2005 witnessed a substantial increase worldwide in corporate responsibility reporting.
- There had been a dramatic change away from purely environmental reporting until 1999 to sustainability reporting, which has become mainstream among 68% of the top 250 companies in the Fortune 500 (termed the G250).
- There was an increase in more integrated reporting of corporate responsibility issues, with more information included in the annual report rather than filtered into a separate report.
- The UK and Japan were producing the largest quantity of separate corporate responsibility reports, with the highest increases in reporting being in Italy, Spain, Canada and France.
- Almost two-thirds of corporate responsibility reports included a section devoted to corporate governance.
- About 85% of the reports studied addressed climate change issues.
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The 2008 survey of corporate responsibility reporting produced by KPMG found that:

- Corporate responsibility reporting has become mainstream, with nearly 80% of the world's largest 250 companies issuing reports, as opposed to 50% in the 2005 survey.
- Corporate responsibility reporting is now the ‘norm' not the exception for the world's largest companies.
- Climate change reporting is increasing but needs to improve substantially.

A number of initiatives have encouraged the growth of sustainability reporting. The Companies Bill arising from the recent review of company law (Modernising Company Law, 2002) required major public companies to produce an Operating and Financial Review (OFR). However, their requirements only applied to 'large' companies. Specifically, the Bill stated that companies have a duty to consider including matters in their OFRs, such as Section 75(2): the company's policies on environmental issues relevant to the company's business and the company's policies on social and community issues relevant to the company's business. These requirements are, however, subject to a materiality constraint, as discussed earlier in this chapter. The Bill also required in Section 73 that company directors must comply with any rules about the manner in which the operating and financial review is to be prepared. However, as we saw earlier, the abandonment of the OFR has made these consequences uncertain.
Further, the Green Paper entitled 'Promoting a European Framework for Corporate Social Responsibility' (European Commission, 2001) presented the European Union's views on corporate social responsibility. It covered such issues as human resource management, health and safety at work and the environment. Of particular interest was that the discussion took place in terms of corporate social responsibility in an internal dimension and an external dimension. Not only did the report address multinational enterprises, but also small and medium enterprises. The Commission hoped to see the development of social and environmental reporting by companies. The Commission is prepared to provide guidance to companies, particularly smaller listed companies.
Another initiative that has influenced sustainability reporting has been the foundation in 1991 of the Association of Chartered Certified Accountants (ACCA) UK awards for sustainability (initially environmental) reporting. By 2001, in order to reflect changes in disclosure practices of UK companies, the award schemes had been changed to sustainability reporting. The awards are divided into environmental reporting, social reporting and sustainability reporting.

The KPMG (2011) *International Survey of Corporate Responsibility Reporting* stated that corporate responsibility reporting had become a '*de facto* law' for business and that it 'came of age' in 2011. The survey found that 95% of the largest 250 companies in the world were, by 2011, reporting corporate responsibility information. The research also revealed that two-thirds of those companies which were still not reporting on their corporate social responsibility activities were based in the USA.

There is limited literature exploring sustainability (or equivalent) reporting within the mining sector. One study by Jenkins and Yakovleva (2006) suggested that mining operations often co-exist with indigenous people. They discussed the way in which global mining companies are finding it increasingly necessary to engage with local communities and indigenous populations who are largely employed by the mining industry. The relatively recent increase in spread of mining and its increased access to new and undeveloped areas of the world has "increase[d] the potential for conflict with a wide range of stakeholders" (Jenkins and Yakovleva, 2006, p.275).

2.2 Financial Reporting Requirements on Geographic Segmental Reporting

There is a long history of segmental and geographic reporting. IFRS 8 which came into force on 1 January 2009 covers segmental reporting. Operating segments are identified based on internal reporting of financial information to the board. They can be geographical but can also be segmented based on products and services. The majority of the disclosures are numerical: revenue (external and internal segmentation), interest revenue and expense, depreciation and amortisation, material items, associates, JVs, tax, assets, liabilities; revenues analysed by product/service group; revenues analysed by country of domicile and other foreign locations; non current assets analysed by country of domicile and other foreign locations; the amount of revenue from each external customer who is 10% or more of total revenue. The only narrative disclosures included in IFRS 8 are: factors used to identify the operating/reportable segments; the nature and effect of changes from the prior period in the methods used to determine segment results, and; the nature and effect of any asymmetrical allocations between segments. Thus, there is no specific requirement from IFRS to report narrative social and environmental information by segment or geographic sector.

2.3 Prior Research into Geographic Segmental Reporting

Tonkin and Skerrat (1989) described segmental reporting as the reverse side of the coin of consolidation and as organizations become larger and more complex, academics, regulators, analysts and other users have identified a need for disaggregated information (Edwards and Smith p.156). Further, segmental reporting has been defined as providing "… details about the company's operating margins, return on assets and growth rate in its different lines of business" (Prencipe, 2004, p.5). Segmental reporting is considered important due to varying rates of profitability, opportunities for growth, and risks between sectors and between geographical locations (Haller and Park, 1994, p.563). Indeed, the usefulness of segmental reporting has been emphasised by researchers, for example, "[t]heoretically, segmented income statement and balance sheet data should enable the analyst-investor to analyze more precisely the component parts of the total firm and thereby evaluate the firm's stock on a more rational basis" (Kochanek, 1974).

A range of academic studies found that segmental reporting provides relevant information to the financial market and especially to financial analysts (Baker and McFarland, 1968; Mautz, 1968; SRI, 1987; Boersema and Van Weelden, 1992; Deppe and Omer, 2000). However, the additional costs required to produce this form in what is effectively a voluntary environment of reporting, can act as a deterrent.

Segmental reporting is expensive and complex to produce due to technical issues, and cost has been a matter of academic debate for many decades (Baker and McFarland, 1968; Mautz, 1968; Boersema and Van Weelden, 1992). A similar concern was expressed during the issuing process of SFAS 131 and IAS 14 revised (FASB, 1997; Epstein and Mirza, 1998). Another concern raised was that technical issues related to segment reporting are reflected in higher audit fees, since it requires extra work from auditors (Sanders et al., 1999). Further, the fact that the use of such information can cause potential disadvantages due to competitors and other parties having access to the information must be taken into account. By definition, segment reporting gives details about the company's operating margins, return on assets and growth rate in its different lines of business. These can reveal to competitors weaknesses or opportunities to be exploited to their own advantage. This has been a topic covered by practitioners (Mautz, 1968; AICPA, 1994; Sanders et al., 1999; Deppe and Omer, 2000).

Academic studies have attempted to model the relationship between segmental disclosure and competitive costs (Harris, 1995, 1998; Hayes and Lundholm, 1996). Indeed, Harris (1995, 1998) investigated how firms selected their reported segments and observed that companies are less likely to disclose segmental information when they are consistently earning abnormal profits, in order not to attract potential competitors. Hayes and Lundholm (1996) analysed how firms choose the appropriate level of aggregation in segmental disclosure.

From a stakeholder accountability, transparency and governance perspective, segmental reporting can be useful to a diverse range of stakeholders, not only shareholders but also to other user groups. We suggest that local communities and indigenous populations may have a particular interest in such disclosures.

Before the introduction of IAS/IFRS requirements were made mandatory, Haller and Park (1994, p.567) provided a list of segmental reporting requirements in 35 countries including:

- segmental reporting should only be required for diversified corporations
- segmental data should follow the disaggregation approach
- The reporting segments are: lines of business and geographical areas
- The core information of segments should be an explanation of the lines of business and the geographical areas
- for each segment the following data: sales (separated into sales with external customers and sales to other segments), income, assets, bases for transfer prices between the segments
- assurance of the consistency between the disaggregated data in the segmental report and aggregated data in the balance sheet and income statement - there should be a transformation from disaggregated data to aggregated data in the financial statements
- information regarding changes in segmental reporting methods

Again, this list does not incorporate a desire for segmental social and environmental disclosures. One of the attractions of segmental reporting is that it should incorporate a narrative description of each segment for which financial data are presented, as "… pertinent description would include the product and company components of each segment, a description of segment goals and future outlook, and an indication of changes in segments over time" (Kochanek, 1974).

Size has been found to be related positively to the extent of voluntary segmental disclosure (Prencipe, 2004). Indeed, Hope, Kang, Thomas and Vasvari (2009) found that foreign earnings were related to an increase in the number of geographic segments disclosed and the inclusion of earnings measures in geographic segments following adoption of SFAS 131. A positive association has been found between firm size and the extent of voluntary segmental disclosures by Bradbury (1992) and between firm size and social responsibility disclosure (Hossain et al, 1995).

2.4 Geographic Segmentation of Social, Environmental and Ethical Reporting

There is limited research into the reporting of social, environmental and ethical information according to geographic segment or according to specific operating sites.

One study asserted that mining companies generally report on their global operations and that in some cases such companies disclosure site-specific information on social and environmental issues, concluding that not only has the quantity of environmental and social disclosure changed, but also the quality and complexity of disclosure (Jenkins and Yakovleva, 2006). Increasing complexity or quality of reporting may be associated with site-specific and geographic segmental social, ethical and environmental disclosure. A sample of the world's largest mining companies was classified as producing social and environmental information in formats described as 'deluxe' (full website, full printed report, summary printed report, brief annual report section) (BHP Billiton, Rio Tinto, Newmont); standard (full website, summary printed report, brief Annual Report section) (Anglo American, AngloGold, Implats, Barrick Gold, Xstrata) and economy (comprehensive section in the Annual Report, the same information available as a download) (CVRD, MMC Norilsk) (see Salterbaxter, 2003). Jenkins and Yakovleva similarly classified the top 10 global mining companies as 'mature reporters' (Anglo American, BHP Billiton, Rio Tinto), 'adolescents' (Anglo Platinum, AngloGold, Barrick Gold, Newmont, Xstrata) and 'infants' (CVRD, MMC Norilsk).

Further, they found that companies were increasingly using their websites to disclosure social and environmental information. They showed that many companies posted site-specific reports and updated news items relating to social, environmental, community and employee issues on their websites.

2.5 Integrated Reporting

Recently, the emergence of integrated reporting has provided a potentially new vehicle for disclosing site-specific and geographic segmental social, ethical and environmental information. An integrated report integrates material social and environmental information into the core reporting vehicle, a company's annual report (King Report, 2009; International Integrated Reporting Committee, IIRC, 2011; Solomon and Maroun, 2012). "An integrated report is not simply an amalgamation of the financial statements and the sustainability report. It incorporates, in clear language, *material information* from these and other sources to enable stakeholders to evaluate the organisation's performance and to make an informed assessment about its ability to create and sustain value…. By its very nature an integrated report cannot simply be a reporting by-product. It needs to flow from the heart of the organisation and it should be the organisation's primary report to stakeholders" (Mervyn King's Foreword, Integrated Reporting Committee of South Africa, IRCSA, 2011, p.1, emphasis added).

Integrated reporting is the culmination of a long-term academic and practitioner research agenda into sustainability reporting and the need for a more holistic approach towards financial reporting. Full cost accounting represented some of the earliest attempts to create accounts, which reflect more than just financial variables but incorporate social and environmental factors. Prior to the development of integrated reporting, the connected reporting framework was proposed. The concept of a connected reporting framework emerged from the UK as an initiative of the Prince of Wales Trust. More recently, US scholars have started to take an interest in the evolution of integrated reporting stating that it represents the future of corporate reporting (Eccles and Krzus, 2010; Eccles, 2012).

South Africa is the first country in the world to adopt mandatory integrated reporting. Indeed, the requirement for all companies with a primary listing on the Johannesburg stock exchange to produce an integrated report is, from a stakeholder accountability perspective, the most important outcome of King III. Integrated reporting in South Africa reflects the intentions of King III to adopt a stakeholder inclusive approach rather than simply an enlightened shareholder approach to corporate governance, *"Inclusivity* of stakeholders is essential to achieving sustainability and the legitimate interests and expectations of stakeholders must be taken into account in decision-making and strategy." (King III, 2009, p.10). Currently, the IIRC is working towards recommending and requiring companies worldwide to produce integrated reports (IIRC, 2011). Further, King III highlights the need for companies to adopt a holistic view and distil this into their reports, "The achievement of best practice in sustainability and integrated reporting is only possible if the leadership of a company embraces the notion of integrated sustainability performance and reporting" (King III, 2009, p.9).

An ACCA study of the first integrated reports to be published by South African listed companies was conducted employing an interpretive style content analysis (Solomon and Maroun, 2012). The findings of the research painted a complex picture of the impact of the introduction of integrated reporting on the reporting of social, environmental and ethical information in annual reports. There was an undeniable increase in the quantity of social, environmental and ethical information reported in companies' annual reports as a result of King III's requirement. The study showed developed a simple measure of integration which showed that social, environmental and ethical information appears throughout a significantly greater number of sections of the reports for 2010/2011 compared to 2009, before the introduction of integrated reporting. However, a striking weakness of the integration of social, environmental and ethical information was the significant repetition of information throughout the reports. The authors suggested that perhaps the reporters were unclear about what an integrated report 'should' look like and what it 'should' include. The only real guidance is that the information has to be material and materiality is acknowledged as a complex area in sustainability reporting generally.

To date, there has been no investigation into the extent to which the new integrated reports include information on segmental or site specific social, ethical or environmental information and in this study we focus on whether the annual reports, whether entitled integrated or not, of a sample of mining companies operating in Ghana, incorporate this type of information.

3. Research Method

For this study we have applied an interpretive content analysis to extract site-specific social environmental and ethical information on mining operations in Ghana. The sample was selected from a comprehensive list of mining operations in Ghana and the multinational corporations, which run these operations, specifically in Ghana. One of the challenges of the research was that many companies operating in Ghana are unlisted (on the Ghana Stock Exchange) and do not produce reports. We have been attempting to obtain the state mining reports produced according to regulation for the government for companies which are not listed and which provide no public reporting. However, this is proved difficult and despite one of the authors travelling to the Minerals Commission in Ghana, copies were not obtained. Thus, we have only been able to analyse the reports of seven mining companies operating in Ghana. By focusing on these firms, annual consolidated reports covering the period 2009-2011 were analysed based on availability and access. Consolidated annual reports were chosen over sustainability reports because we sort to gauge the impact of integrated reporting (integrating material financial, social, environmental and ethical issues in one report). There is often the argument that consolidated annual reports are aimed at providing an accurate financial portrait of a firm to shareholders in a true and fair manner and not stakeholders. However, as accountability and transparency goes beyond financials, coupled with evidence of firms publishing consolidated annual reports imbued with social, environmental and ethical information as well as the recent emergence of integrated reporting, it presupposes these reports go beyond the financials. Its also indicates that these reports are not only directed at shareholders but a broader stakeholder community as well. Table 1 provides a list of the companies we used in the analysis. The table also provides details of the geographical sites in Ghana, the mineral mined and the company's listing status on the Ghana Stock Exchange (GSE).

Table 1
Sample of Mining Companies Operating in Ghana and their reported sites

Company (annual/integrated reports for 2009, 2010 and 2011)	Geographical sites in Ghana (disclosed)	Mineral mined	Listing status on the Ghana Stock Exchange (GSE)
AngloGold Ashanti	Iduaprime	Gold	Listed
	Obuasi		
Newmont	Ahafo	Gold	Not listed
	Akyem		
Ashanti Goldfields	Tarkaw	Gold	Not listed
	Damang		
Noble Mineral Resources	Bibiani	Gold	Not listed
	Cape Three Points		
	Brotet		
	Tumentu		
Golden Star Resources	Bogoso/Prestea	Gold	Listed
	Wassa		
Azumah Mining Resource	WA	Gold	Not listed
PMI Gold Corporation	Obotan	Gold	Not listed
	Kubi		

Interestingly, when we examined the lists of mining operations and operating sites within Ghana as reported by the Ghana Mining Commission, there was a striking difference between the data we had gleaned from the companies' reports and the mining Commission's lists. Some of the companies we studied were reported to be operating in up to 15 different sites within Ghana, yet we only found site-specific information on a maximum of four sites (Noble Resources, one of the analysed companies) in the reports. This seems to be explained by the possibility that the company has not yet started or has already completed active operations at the unmentioned sites. Another possibility is that requirements for geographic segmental or site-specific reporting is limited by the size of the operations.

4. Findings

Table 2 summarises the form of reporting by our sample companies for years 2009, 2010 and 2011. Interestingly there is only one company, Anglogold Ashanti, which has chosen to produce an annual report entitled 'integrated report' rather than an annual report with a separate sustainability (or equivalent) report. Thus, the impact of integrated reporting can only be relatively low. However, the impact of a change of emphasis, accompanying integrated reporting, in the approach towards social, environmental and ethical reporting may be substantial but difficult to quantify. Research is required to discover the extent to which the introduction of mandatory integrated reporting in South Africa is affecting the level of social, environmental and ethical reporting in other countries. For example, Noble Mineral Resources appears to have a high level of social and environmental reporting but does not choose to produce an integrated report by 2011.

Table 2: Types of annual reports produced by the sample companies

Company	2009	2010	2011
AngloGold Ashanti	Annual financial statement	Annual financial statement	Annual integrated report
Newmont	Annual report	Annual report	Annual report
Ashanti Goldfields	Annual financial report	Annual report	Annual financial report
Noble Mineral Resources	Annual report	Annual report	Annual report
Golden Star Resources	Annual report	Annual report	Annual report
Azumah Mining Resource	Annual report	Annual report	Annual report
PMI Gold Corporation[1]	Annual information form	Annual information form	Annual information form

[1] In the instance of PMI, the researchers are aware of the fact that annual information forms are meant for the Security and Exchanges Commission regulations in Canada. However, the inability of the researchers to have full access to consolidated annual reports occasioned the used of annual information forms for PMI. Our comparison of snippets of PMI's consolidated annual reports and that of their annual information forms did not show much difference. PMI's annual information forms contained the information the researcher would otherwise have required in its consolidated annual reports hence the use of its annual information forms, as proxies for consolidated annual reports did not have any unexpected impact on the research.

Table 2b Types of Annual Reports Produced by the Sampled Companies

Company	2012	2013	2014
AngloGold Ashanti	Integrated Annual Report	Annual Integrated Report	Integrated Report
Newmont	Annual Report	Annual Report and Form 10-K	Annual Report and Form 10-K
Ashanti Goldfields	Integrated Annual Review	Integrated Annual Review	Integrated Annual Report
Noble Mineral Resources	-	-	-
Golden Star Resources	Form 10-K	Annual Report	Annual Report
Azumah Mining Resource	Annual Report	Annual Report	Annual Report
PMI Gold Corporation	Annual Report	Annual Information Form	-

Table 3 provides a brief summary illustrating the number of sample companies which provide site specific information or geographic (i.e. on Ghanaian operations) information on social, environmental and ethical issues.

Table 3 : Number of Sample Companies Reporting Social, Environmental and Ethical Information on a Site-Specific or Geographic Basis

Number of companies	**Site specific social information**	**Site specific environmental information**	**Site specific ethical information**
2009	5	2	0
2010	3	2	0
2011	5	4	1
2012	6	4	0
2013	5	5	0
2014	4	2	0
	Ghana geographic segmental social information	**Ghana geographic segmental environmental information**	**Ghana geographic segmental ethical information**
2009	2	0	0
2010	6	1	0
2011	5	4	0
2012	6	2	0
2013	2	1	0
2014	3	1	1

[2]

[2] Table 3 Shows how site-specific issues were reported by multinational firms based on social, environmental and ethical practices. This depicts the fact that aggregate site-specific segmental reporting is effectively useful for accountability purposes as well. As well as what was reported on these bases on Ghana in generic formats and not site-specific. From the table above, in 2009, 5 companies out of the 7-reported site-specific social information whereas 2 reported site-specific environmental information with no company reporting on site-specific ethical information. This however showed no pattern in either decreasing or increasing levels. In 2010 for instance, there was an increase in site-specific social information as 6 companies reported on those issues. This however decreased to 5 in 2011, with an increase to 6 companies in 2012 and a staggering decrease to 2 companies in 2012. This pattern of reporting by companies for site-specific social, environmental, ethical and segmental reporting as indicated in table 6.3 depicts how patchy and haphazard non-core financial reporting by these multinational firms can be. There were more on site-

The number of companies providing environmental and social information on site-specific and geographic Ghanaian issues has remained pretty static over the three year period. Interestingly there is only one case of ethical information for any company over the three year period which relates specifically to Ghana or to a specific site of operations in Ghana. This is Noble Mineral Resources' disclosure that "A delay in the commencement of production resulted in a breach of a loan agreement" (p.39, Noble, 2011).

4.1 Environmental Disclosures

There has been an overall increase in the number of companies providing site-specific environmental information over the three year period. For example, in 2009, AngloGold Ashanti stated that,

> "Iduapriem maintained its ISO 14001 certification" (AngloGold Ashanti, 2009, p.75)

Similarly, they commented that,

> "The mine [Iduaprime] applied to the ICMI for temporary withdrawal from certification to the cyanide code due to a single instance of non-compliance related to the cyanide mixing and storage facility…." (AngloGold Ashanti, 2009).

Ashanti Goldfields reported that,

> "Tarkwa also retained its ISO14001:2004 (Environmental Management System) certification following an external audit during the year. The mine also retained is full compliance to the ICMI Cyanide Code" (p.31)

However, the majority of the companies reported nothing site-specific on environmental issues. In 2010, although there were no more companies reporting site-specific environmental information, the information provided by the two companies was more detailed. For example, AngloGold Ashanti stated that,

> "Inadequate tailings storage facilities on site resulted in operation stoppage" (p.33)

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specific geographical segmental information covering all sections of the reporting information on generic basis for Ghana than for individual operating sites. The analysis illuminates a serious failing in capturing accountability as local activities are like to be more important for shareholders as local communities and NGO's.

The instrumental implications of this disclosure are evident, in that the company's interest is in business continuity and derives from a business case scenario. Similarly, AngloGold Ashanti stated that,

> "Four reportable environmental incidents related to pipe failure occurred" (p.85).

By 2011 there was much more detail relating to environmental issues, with reporting appearing to derive more from an accountability disclosure motive and an intention to consider environmental impacts, rather than a desire solely to comply with legal requirements (AngloGold Ashanti),

> "Total greenhouse gas emissions were 93"
> "14 reported environmental incidents"
> "Developed a task team to address issues of water and land access"

The other company which provided site-specific environmental information was PMI Gold Corporation which stated that,

> "At the Kubi project, under the terms of the previous mining license, reclamation of the site is the responsibility of the former operator" (p.19).

By 2011, six out of the seven companies were producing geographic disclosures on environmental impacts in Ghana and five were providing information on environmental impacts according to sites of operations. For example, Noble Mineral Resources in 2011,

> "… has engaged in an environmental reclamation bound with the EPA"

For PMI Gold Corporation in 2011,

> "Environmental liabilities from previous mining operations at the Obotan project were grandfathered to the government of Ghana when the new mineral titles were issued" (p.18)

NewMont stated that,

> "The investment agreement contains commitment with respect to job training for local Ghanaians, community development and purchasing local goods and services" (p.31).

The year 2011 reflected relatively more firms reporting on sit-specific environmental issues. However, this still came with less emphasis on majority of sites reported. Maybe this is an indication of a high interest in environmental accountability by mining firms. Besides, integrated reporting had become mandatory for JSE listed companies. AngloGold Ashanti is a listed company on the JSE and as from then had its reports captioned as Annual Integrated Reports. The detailed level of reporting may have reflected AngloGold's response to the ethos of the King Report.

Still on environmental reporting for 2011, the following on environment were reported by Ashanti Goldfields, Noble Mineral Resources and Azumah respectively:

> "Provision for environmental rehabilitation and obligation" (Ashanti Goldfields, p.25)
> "Committed to undertake operation in a responsible environmental manner" (Nobel Mineral Resources, p.29)
> "Has engaged in an environmental reclamation bound with the EPA" (Nobel Mineral Resources, p.81)
> "Completed environmental and social impact assessment" (Azumah, p.17)

Ashanti Goldfields reported generally on Ghana, whereas Nobel and Azumah respectively reported on their Bibian and Wa sites. Intriguingly though, all of what was reported are concerned with legal environmental obligations.

Environmental reporting for most companies appeared to have matured by 2012. There were issues of detailed site-specific reporting as well as anticipated generic consolidated reporting by operating firms. On site-specific basis for the Iduapriem and Obuasi sites, AngloGold reported on its energy, and water consumptions in its 2012 Integrated Report:

> "Energy usage (million GJ): 1.01" (p.37).
> "Water usage (ML): 582" (p. 37).
> GHG emissions (000tCO2e): 97 (p.37).

That of Obuasi was also captured as follows:

> "Energy usage (million GJ) : 1.74" (p.37).
> "Water usage (ML) : 6,534" (p. 37).
> "GHG emissions (000tCO2e) : 197" (p.37).

For same site, Obuasi, AngloGold reported on the details of drilled wells on its exploratory actives, a reflection of materiality as far as environmental reporting was concerned:

> "At Obuasi, a total of 12,169m was drilled, with 4,805m from underground exploration and 7,364m from surface exploration activities. Surface exploration focused on the Rusty Monkey target, with 16 holes completed for a total of 5,659m" (p. 66).

For its Ahafo site, Newmont captured the following:

We currently operate four open pits at Ahafo with reserves contained in 11 pits and an underground mine presently in development. Commercial production in the fourth pit, Amoma, began in October 2010. The process plant consists of a conventional mill and carbon-in-leach circuit" (p.33)

This represented a form of detailed site-specific environmental reporting, the rest in line with environmental reporting came in general reporting formats, more so, to do with regulatory compliance of its country of origin (US):

> "Our mining and exploration activities are subject to various federal and state laws and regulations governing the protection of the environment. We have made, and expect to make in the future, expenditures to comply with such laws and regulations, but cannot predict the full amount of such future expenditures. At December 31, 2012 and 2011, $1,341 and $1,070, respectively, were accrued for reclamation costs relating to currently, recently producing or developmental stage mineral properties, of which $62 is classified as a current liability. For more information on the Company's reclamation and remediation liabilities, see Note 4 of the Consolidated Financial Statements" (p. 84).

Gold Fields, another multinational mining company, did also offer some detailed environmental reporting regarding its Tarkwa site:

> "Closure of the high cost South Heap Leach operation" (p. 43).
>
> "In 2012, our Group Technical Services (GTS) function started scoping activities for the development of a Group-wide water strategy. This is being supported by a newly formed, world-class team of water experts at Group-level headed by a new Group Head of Water Management to ensure we address heightened levels of scrutiny from national water regulators and other stakeholders in an early and proactive way. This included a prioritised review of water management at our Tarkwa mine, which produced a comprehensive action plan to further enhance:
> • Water management plans and systems
> • Water balances
> • Operational procedures
> • Roles and responsibilities
> • Laboratory standards" (p. 91).

Interestingly though, this detailed site-specific reporting proffered by AngloGold did not come across as voluntary as it later reported of it to have been occasioned at the behest of Ghana's, Environmental Protection Agency. More of a regulatory response it seemed. This notwithstanding some honest reporting appeared to have occurred, maybe yet another regulatory response? :

> "In July 2012, Ghana's Environmental Protection Agency (EPA) directed us to suspend all discharges of water from our North and South Heap Leach

> facilities at Tarkwa. The EPA further required that instead of utilising longstanding dilution methods, which had ensured that we were discharging within regulated limits, all such discharges should be treated through a water treatment plant to reduce conductivity levels (i.e. the amount of dissolved salts rather than any indication of toxicity per se). Although the EPA had permitted the dilution method for several years, we nonetheless:
> • Suspended discharges as part of our commitment to strong environmental stewardship and compliance with the EPA directive
> • Commissioned the construction of two water treatment plants at the mine" (p. 91).

> "In August 2012, the EPA lifted its suspension of activities at Tarkwa's Heap Leach facilities and – along with Ghana's Ministry of the Environment, Science and Technology – approved the continued dilution and discharge of excess water within existing legal limits, pending the completion of our two new water treatment plants by 31 December 2012. It is estimated that the 24-day suspension resulted in lost production of 15,000 ounces – less than 10% of the mine's quarterly production" (p. 91).

The rest of the companies through either generic or site-specific formats appeared to have been responding to material regulatory environmental reporting than voluntary. 'Rehabilitation Liabilities' of AngloGold however appeared on site-specific formats in its 2014 integrated report.

4.2 Social disclosures

The largest proportion of social, ethical and environmental disclosures related to social issues, which is consistent with the findings of previous research on South African disclosures in integrated reports (Solomon and Maroun, 2012). The main disclosures related to the number of employees and the lost time frequency injury rate (LTIFR) (essentially a financial figure). Illustrations include for example the following from AngloGold Ashanti for 2009,

> "Community and environmental concerns remain priorities at Iduapriem, especially regarding the relocation of villages and People" (p.75).

Similarly,

> "Iduapriem's alternative community livelihood programme has been commended by local authorities" (p.75).

The most important social disclosure (in our view) is that relating to fatalities. AngloGold Ashanti reported in 2009 that,

> "There was one fatality during the year (2008:2) caused by an accident involving machinery" (p.76)

Safety is an essential issue include in social disclosures, and AngloGold Ashanti reporting information in 2009 relating to safety, diseases such as malaria and socio-economic issues,

> "Obuasi has drawn up a strategy to improve safety performance focused on four interlinked goals…." (p.76)

> "The mine successfully complete a socio-economic study of the Obuasi mining community with the assistance of a consortium of consultants"(p.77).

> "The company's highly acclaimed malaria control programme, which has led to a 74% reduction in the incidence of malaria within the environs of Obuasi, received another major boost with the signing, in December, of an agreement to provide funding of up to $130m ….." (p.77)

Newmont in 2009 stated that,

> "As with our commitments to improving our safety and project development records, we are also committed to improving our environmental and social practices by applying the lessons we learned through our experiences in Ghana….." (p.6).

Similarly Noble Mineral Resources in 2009 reported that,

> "A large majority of workers are sourced from the adjacent villages …and this forms an integral part of the Company policy in supporting the related communities directly involved with our activities" (p.3).

In 2010, AngloGold Ashanti stated that,

> "The sites livelihood program continued with strong support from community members and local authority. The program includes crop, fish, pal, farming and processes and mushroom farming. Women economic empowerment will be fostered through the operations of stand-alone business from the farm produce" (p.86).

In 2010, Golden Star Resource stated that,

> "We believe our success as an employer, as a neighbour and as an important part of the local economy, is furthered by contributing t the diversification of the local economy with initiatives such as our Oil Palm Project and by our support of community-driven improvement Projects through our Golden Star Development Foundation" (p.25).

Further they disclosed that,

> "We furthered our work in human rights and against child and forced labor with an extensive training program … and met with our major suppliers to outline our socioeconomic commitments" (p. 26)

In 2011, the main social disclosures related to the number of people employed. However, there was significant social information throughout the period but especially in terms of detail in 2011. NewMont stated in 2011,

> "The investment agreement contains commitment with respect to job training for local Ghanaians, community development and purchasing local goods and services" (p.31).

In terms of stakeholder engagement and the importance of developing it in the future, Noble Mineral Resource sin 2011 commented on their,

> "… development of a two-way communication conduit between the company and the local community" (p.5)

Further, Noble Mineral Resources commented in 2011 that they,

> "… embarked on a mosquito reduction exercise" (p.5)

PMI Gold Corporation stated in their 2011 report that for their Obotan site,

> "The company dedicates considerable efforts towards community relations, providing information, labour opportunities and open forum discussion" (p. 22)

A similar disclosure was made for their Kubi site. There seems to be an element of boilerplate disclosure for sites in the same country. In general for Ghana, PMI Gold Corporation states that for 2011,

> "The Company is committed to improving the lives of the communities directly affected by their activities. This will include direct and indirect employment benefits, improved access to potable water and electricity" (p.18).

Interestingly, the salutation used in the Chairperson's statement for both AngloGold Ashanti and Goldfields all King (III, 2009) compliant company's was "Dear Shareholders" and "My Fellow Shareholders". A sort of inconsistency, here, as the salutation "Dear Stakeholders" is used inconsistently in other years. As to what explains this inconsistency was unclear; but there is however the temptation to conclude a preference of a 'Shareholder-centric' practices as opposed to the 'Stakeholder value'. Furthermore, AngloGold for the year 2012, had elements of segmental reporting for the year ended 31 December on Continental basis (with Ghana lumped under Continental Africa). As the years went by (2013-14), more segmental issues as Risk amongst other were added. In line with the aims of this research, Goldfields in its 2012 Integrated Annual Review touted Corporate Governance to be inclusive of Social, Environmental and Ethical issues. The South African firms as Ashanti Goldfields and AngloGold Ashanti was much detailed on the social compliance of international Corporate Governance and CSR codes. Mention was made of GRI, AA 1000, UN Global Compact, World Gold Council, and Reporting Guidance on HIV/AIDS as well as some Sustainability Reporting Guidelines. Stakeholder engagement process and models also featured prominently within the Integrated Reporting confines of these firms, thus Goldfields and AngloGold (all of South African genre). Health related issues were also of great focus as was seen in the 2009, 10, and 11 reports with just a bit of a difference in additions as Silica dust exposure, Diesel particulate matter, Radiation and Ebloa (expectedly) in Goldfields' Integrated Annual Report for 2014.

Golden Star Resources on its part presented a user-friendly Form10-K for the year 2012 as it defined key terms as: Reserves, Proven Reserve, Probable Reserve, Mineralised Materials, just to mention but four. The report also contained abbreviation, in the view of the researcher would aid easy comprehension by stakeholders. Unfortunately, more of this was not seen in the subsequent reports of Golden Star Resources. The terminology 'Materiality' was ubiquitous in all reports from 2012-14, a supposed appreciation of materiality of reporting I guess? AngloGold for example had a whole section on "Materiality and Reporting" in its 2014 Integrated Report.

Form 10-K of Golden Star Resources presented a summary of information regarding what they termed significant properties on sit-specific basis. This contained elements as Name of Property, Description, Type of Interest, Expiry Date, Property Size and Status - as those that were either active/inactive (see appendix 1.4 b). With Azumah Mineral Resources stating what it called a Schedule of interests in mining tenements in its 2012 annual report.

Most enchantingly were the generic social reporting ingredients of Goldfields in its Integrated Annual Review. They reported on an a social ingredient known as Historically Disadvantaged South Africans (HDSAs) but was quick to add in a foot note that: "White females are included within the definition of HDSAs", a sort of afterthought, perhaps to satisfy some affirmative action request by either investor or stakeholders. A practise as this, if an afterthought may not represent genuine responsibility and responsiveness but rather what this research would term as an "attitudinal response" – a response to please stakeholders, yet not intended genuinely.

> "Goldfields fully recognises the need to continue the long-term transformation of the South African mining sector – as part of the broader transformation of society. Furthermore, under the revised Mining Charter, we are required to fill 40% of all management positions with Historically Disadvantaged South Africans (HDSAs) by 2014 (White females are included with the definition of HDSAs)" (Gold Fields, 2012, p. 134).

Goldfields also did add in its 2013 report that:

> "In total, the 73 individuals that make up the HDSA component of the BEE transaction only hold an aggregate 3.6% economic interest in South Deep and no individual holder has greater than a 0.26% economic interest. Further, we should also remember that these individual interests were essentially non-

> transferable for a 30-year period" (p. 16).
> "The Board recognises the reputational damage that has resulted from adverse media coverage surrounding the transaction. However, we are firmly of the view that the South Deep BEE transaction is one of continuing value and has delivered tangible benefits primarily to employees and to an array of South Africans through the activities of the Educational Trust. For example, the Educational Trust has distributed more than R25 million to students, schools and other educational initiatives, such as the 'Lap Desk Project', which has helped nearly 20,000 students around South Africa" (p. 16).

Though these social ingredients (for the year 2012 and 13) seemed much focused on South Africa, Goldfields admitted to have replicated them in other developing country settings, when need be.

4.3 Ethical discourse

Ethical reporting was absent, except for Nobel Resources, which capture "a delay in the commencement of production resulted in a breach of a loan agreement" (p.39) in its 2011 annual report, no other company reported on issues of ethics. Fact is: it might not have occurred within these firms as in the case of noble. The material site-specific (Bibiani) ethical report of Noble on "a breach of a loan agreement" manifested itself with the company folding up in 2012, on financial grounds. At the time of writing, checks by the researcher revealed a skeletal staff on site. Though a universal construct, its nature poses some difficulty when it comes to identifying and determining unethical practices. With corporate reputations at stake, companies may also have been careful in reporting ethical issues. The difference in global cultures amidst the multinational world of mining may also render ethics a complex subject to be reported. This calls for a broader international stakeholder discourse on what constitutes ethics within corporate spheres. However, the concern should be the driving force of ethical reporting, thus the interest of the Ghanaian community in the demands of ethical reports from operating multinational firms. This drive appeared absent and could be attributed to the over concentration on state corporations in the name for paying taxes. Most Ghanaians believe that their tax paying status warrants them some locus to demand state accountability (a justified move though). It is however interesting to note that this is overly contracted on state owned firms as opposed to Private Corporations hence a reflection of what is presented in the results to this research. Until some concerted efforts are made towards localising the demand for external ethical reporting by Ghanaians living in Ghana, the efforts of international bodies whose activities are large so as not to capture actual details on country basis may not be enough to promote real accountability.

Also, some snippets of ethical issues, though not site-specific but representational in consolidated formats featured in the 2012, 13 and 14 reports of AngloGold and

Goldfields respectively; and that of 2013 and 14 for Newmont. These were however seemed a response to regulatory issues on the part of AngloGold and Goldfields in light of the King Report (2009) and Newmont in response to the Dodd-Frank Act as well as other US SEC obligatory requirements; Or a response to international codes (be it voluntary/mandatory) on the part of all ethical reports that spanned 2012-14. AngloGold for 2012 reported:

> "Awareness training on the Code of Business Principles and Ethics (Our Code);
> • the roll-out of anti-bribery and anti corruption training;
> • issue of a global communication on International Anti- Corruption Day in December emphasising the group's zero tolerance for bribery and corruption, and re-affirming its commitment to the tenth principle of the UN Global Compact in working against all forms of corruption, including extortion and bribery;
> • revised and introduced new policies and procedures, including a new anti-bribery and anti-corruption policy as well a new facilitation and extortion payments policy;
> • further automation of the group's gifts, hospitality and sponsorships registers;
> • automation of the group's conflicts of interests registers;
> • further efforts to track compliance with laws, regulations, standards and contractual obligations (at the country and group levels); and
> • further assessment of compliance risk in the group" (AngloGold, 2012, p. 90).

AngloGold for same year (2012) added:

> "Social, Ethics and Transformation Committee came into effect on 30 April 2012. The committee assists the board in discharging its responsibilities as prescribed by the Companies Act and in terms of the company's specific needs on sustainable development, compliance and ethics, transformation and localization (AngloGold, 2012, p. 89).

With Newmont reporting:

> "Disadvantages of competing against companies from countries that are not subject to the rigorous laws and regulations of the U.S. or other jurisdictions, including without limitation, the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act and the Dodd-Frank Act" (Newmont, 2013, p.17).

Whereas Gold Fields reported:

> "Our Code of Ethics is aligned with national and international business ethics and anti-corruption standards, including:
> • The UN Convention against Corruption (2003)
> • The OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions (1997)
> • South Africa's King III Report on Corporate Governance, as well as the Prevention and Combating of Corrupt Activities Act (2004)

• The United States' Sarbanes-Oxley Act (2002), Dodd-Frank Act (2010), the Foreign Corrupt Practices Act (1977)" (Gold Filed 2013, p. 37).

Given the global levels of corruption reported and attributed to the African content by international anti-corruption institution coupled would how Ghana fair on the global ranking on the corruption perception index it was surprise to witness this level of ethical reporting.

In summary, the predominance of site-specific and geographic information on Ghanaian operations appears to be predominantly social in nature. Very little site-specific information is available on environmental issues except for conformance with environmental regulation. Although the social disclosures by site are more significant than the environmental and ethical disclosures, they are relatively far less than the social disclosures contained in top high impact sector companies listed in South Africa over the last three years (cf Solomon and maroon, 2013). There is actually very little information in relation to social spending, local community and, health and safety. It seems from this comparison that the adoption of integrated reporting which is effectively mandatory (as it is a listing requirement) in South Africa actually makes a significant difference to the quality and quantity of social, environmental and ethical information. Also, this analysis as well as the analysis of reports in South Africa (Solomon and Maroun, 2012) has shown that social disclosure outstrips environmental disclosures and that ethical disclosure is almost non-existent. This is surprising considering the substantial problems with ethics – especially bribery and corruption – which have been detected by studies of developing economics in Africa.

5 Discussion and Conclusions

The study raises many questions relating to transparency, governance and stakeholder accountability. The annual, and for the most part now, integrated reports of multinational mining corporations increasingly include information relating to social, environmental and ethical risks, strategy, impacts. However, this information is reported predominantly at the group level, with illustrative examples provided relating to geographic operating sites. However, these illustrations tend to be anecdotal and seem to represent possibly best practice. Integrated reports do not tend to provide a balanced picture of social, ethical and environmental information relating to all operating sites. How do stakeholders know whether corporate practice is comparable and equitable between operating sites? How do stakeholders know that companies are not focusing their social, environmental and ethical efforts on certain sites and neglecting others?

Further, our research showed that multinational companies may be operating in as many as fifteen operating sites within Ghana, from the information provided by the Ghana Mining Commission, yet they are only reporting any site-specific information in their integrated report on two sites. Does this mean they are not actually operating in the other sites? Or does it simply mean they are not reporting information on these sites? If the latter is the case, then why are certain sites selected for reporting and not others? Further, the site-specific social, environmental and ethical reporting is inconsistent between companies. Some companies, provide quite detailed site-specific social and environmental information, whereas others provide nothing on a site-specific basis. None of the companies studied provided any site-specific ethical information.

Evidence from this research show there is no correlation between corporate reporting and the reality of the impact of corporations on society. Most the reporting is not reflect of the happenings on the sites of the various mining operations. It appears mining corporations are more interested to reporting their box-ticking responses on voluntary international regulations than engaged and actual reporting. This makes the process of corporate reporting less democratic with very little to do with accountability and transparency.

One recommendation arising from our research is that financial reporting standards on geographic segmentation should include information relating to material social, environmental and ethical issues in order to be consistent with developments in integrated reporting. Standards requiring social, environmental and ethical information in relation to geographic sites and countries of operation are necessary in our view to ensure that multinational mining companies discharge accountability for their social, environmental and ethical impacts for all the sites where they operate. Only then can stakeholders receive a comprehensive picture of the extent and spread of the organisation's efforts to discharge their accountability for their impact on local communities, society and the environment.

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