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Environmental Disclosures in Annual Reports: the Nigerian Perspective

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Abstract

The Niger Delta area of Nigeria has been plagued with serious oil prospecting and production related environmental hazards with its attendant protest(involving armed struggle against the Nigerian state and Oil Companies). The social, political and security implication of corporate environmental neglect is thus a common knowledge in Nigeria. This study investigates the degree of lessons learnt by companies in Nigeria with regards to their attitude towards the environment. The study examines annual report disclosures of environmental information of 20 companies from 10 sectors(out of the 27 listed on the Nigerian Stock Exchange) that represent industries widely recognized to have environmental problems, and these are Breweries; Chemical and Paints; Conglomerate; Construction; Food/Beverages and Tobacco; Health Care; Industrial/Domestic Products; Packaging; Petroleum Product Marketing; and Textile. The period of investigation covers the five – year ended December, 2006. Of the 100 annual accounts examined; 27 have short qualitative discussion of less than a page on environmental disclosures; 5 have extended qualitative discussion of a page and above; none has a footnote discussion; 17 articulate the environmental policies adopted; 10 have had improvement since adoption of policy; and 22 claimed positive response to environmental related government policies. Analysis also reveals that only 7 out of the 20 companies spread over 6 out of the 10 sectors examined provided one form of disclosure or the other. The companies are also mainly multinationals operating in Nigeria with their action more likely to be parent company policy driven because environmental information disclosure is not mandatory in Nigeria. This present study is considered a marked improvement over an earlier study for the five – year ended December, 1999 where the overall disclosure rate was 11%.

Keyword(s): Environmental reporting; Environmental disclosure; Environmental cost

1 - Introduction

The insecurity of life and properties of oil producing companies in the Niger Delta area of Nigeria is a classical example of insufficiency and inadequacy of economic performance and efficiency for organisational survival and growth. Nigeria, like most of the developing countries is a mono economy nation. It derives the majority of its income from the oil and gas industry - an industry that is heavily reliant on environmental resources and consequently degrades and pollutes the environment. Nigeria is an example of developing countries that (Myers, 1994) describes as having massive degradation and destruction of environmental systems and natural resources threatening their continued and sustainable development. Olorode(2000) traced the origin and the dynamics of the Nigerian Civil war of 1967 to 1970 to socio-political factors in the petroleum industry. The socio-environmental induced crisis in the oil and gas sector of the economy is a national knowledge that has created very serious security problems to life and property in the area at a worsening dimension since the execution in 1995 of Ken Saro-Wiwa, a renowned playwright and environmentalist. It is expected that managers of economic entities in Nigeria should take a cue from the oil and gas industry of the limit to economic growth of firms that take no account of social and economic dimensions of their relationships with the society where they operate.

Chokor(1988) argues that the first step in the effective control and management of the environment is in the development of public environmental awareness because it is considered as a synthesis of people's conception, interpretation and perception of environmental issues.

Gray (2000) also takes the essential desirability of social, environmental and sustainability reporting as a crucial element in any well-functioning democracy as given. A converse view to this position possibly provides an explanation among others for the not so well-functioning democracy being experienced in Nigeria.

Millstone and Watts(1992) have also argued that environmental issue that began as a grassroots effort is quickly becoming a mainstream issue of concern to consumers, investors, politicians, and businesspeople alike. The concern for the environment at the State and Federal Government levels in Nigeria led to the establishment of ministries of environment which is an improvement on the earlier states and federal environmental agencies.

This study is carried out to contribute from an African nation perspective to the global literature on environmental disclosure in annual reports and also to provide a basis for corporate investment decision making.

The remaining part of this paper is organized as follows. The next section discusses the theoretical background and literature review. This is followed by the section on research design and methodology. Thereafter is the section that presents the results and discussion. The final section is the conclusion.

2 – Theoretical Background and Literature Review

2.1 – *Some Theories*

Gray(2000) claims that there has been significant growth in environmental and social auditing and reporting since the 1990s. Possible explanation for this trend is not unconnected with business firms' desire to create, maintain or repair their societal legitimacy. Arguably, legitimacy theory is the more probable explanation for the increase in environmental disclosures since the early 1980s(O'Donovan, 2002). Other researchers that have agreed to the dominance of Legitimacy theory as a more profound explanation to corporate social and environmental reporting include(O'Donovan, 1999; Walden and Schwartz, 1997; Gray *et al*, 1995a; Hooghienstra,2000; and Wilmshurst and Frost, 2000). Other theories that provide a sound theoretical foundation to substantiate the value of social and environmental accounting research, and by extension their disclosure include Stakeholder theory(see; Guthrie and Parker, 1990; Roberts, 1992; Gray *et al*, 1995a; and Roberts and Mahoney, 2004); Institutional theory(Cormier *et al*, 2005; Meyer and Rowan, 1977) and Resource Dependence theory(Pfeffer and Salancik, 1978, 2003)

Legitimacy theory (Lindblom, 1994; Suchman, 1995) is value system centred. A dichotomy exists between the value system of organisations and those of the society. Legitimacy exists at the organisational level when there is congruence between organisation and society value system. Institutional theory, unlike legitimacy theory specifies how society expectations are met and gained by institutionalising norms and rules. Some code of behaviour to earn, nurture and maintain societal expectations; and thus create a positive organisation-society interface. Resource dependence theory concerns itself with the strategy organisations adopt in drawing resources from the environment. This position is imperative because organisations are interdependent with selves and the environment. The resolution by organisations of different and conflicting expectations of different stakeholders is what stakeholder theory engages in. This is more necessary because of divergent impacts different stakeholders have on organisations. In spite of the diversity in their level of analysis and specificity, the various theories are united in their resolve to advance and sustain positive organisation – society interface.

2.2 – Some Prior Research

Various authors, accounting associations and researchers have addressed the environmental reporting issue and concluded (based on different objectives) that environmental disclosures are important to both internal and external users(Gamble *et al*, 1996). Some of the objectives that formed the basis of their investigation include: the usefulness of environmental or social disclosures to investors(Buzby and Falk, 1979; Rockness and Williams', 1988; Longstreth and Rosenbloom, 1973, Gray *et al*, 1995 Deegan and Rankin 1997 and O'Donovan G.,2002) and the results produced are mixed; the quality of environmental disclosures(United Nations 1992; Gamble *et al*, 1996; and Gray, 2000) revealing poor and inconsistent information; the relationship between stock price movement and environmental related information(Shane and Spicer, 1983; Freedman and Jaggi, 1986; and Konar, and Cohen, 1997) revealed some association in some of the studies but none in others; studies by (Rockness, 1985; Milne. and Adler, 1999) on reliability of social and environmental disclosures in annual accounts have not found them as reliable measures of social performance.

A number of studies have been undertaken in different countries to examine corporate environmental performance from different perspectives. As observed by (Guthrie and Parker,1989; Hogner, 1982; and Tinker and Neimark, 1987) a number of researchers have noted a substantial increase in environmental disclosures in annual reports in the last four decades.

The theoretical perspectives provided by (Gray et al 1995a, 1995b) for discussing environmental disclosure are: decision-usefulness studies, economics-based theories such as Positive Accounting Theory and political economy theories. The political economy theories such as stakeholder and legitimacy theories are more useful than economics-based theories because their focus is beyond shareholders' wealth maximization.

Several researchers have examined the association between corporate environmental performance and economic performance(Spicer, 1978; Chen and Metcalf, 1980; Jaggi and Freedman, 1992). The results of these studies are inconclusive.

Their findings indicate that the association in the short run is expected to be negative, but that it is likely to be positive in the long run.

Overall, results strongly suggest that environmental disclosure is multi-dimensional and is driven by complementary forces (Cormier *et al*, 2005). Besides, gaps exist between perception of environmental issues and actual performance. For example, the existence of gaps between perception of managers and accounting professionals of environmental issues and management; and actual firms' performance as reported by (Jaggi and Zhao, 1996; Owolabi, 2001) and this could be mainly attributed to the perceived cost and liabilities of environmental preservation.

3 – Research Design and Methodology

3.1 – *Samples Selection*

With respect to the sample data, 20 companies from 10 sectors(out of the 27 listed on the Nigerian Stock Exchange) that represent industries which are either environmentally sensitive in their daily operations, or industrial and utility companies which are widely recognized to have the greatest environmental problems were selected. These sectors were Breweries; Chemical and Paints; Conglomerate; Construction; Food/Beverages and Tobacco; Health Care; Industrial/Domestic Products; Packaging; Petroleum Product Marketing; and Textile.

3.2 – *Nature of Data and Data Collection Procedure*

Content analysis was used to collect environmental disclosure data. The variant of content analysis used is that based on proportions of pages to collect data on environmental disclosures (Gray et al, 1995a and Unerman, 2000). In this type of analysis, volume is used as surrogate for importance, that is the more voluminous disclosure is, the higher the chance of its importance and hopefully usefulness.

Environmental disclosure data were collected from annual reports (ARs) of the 20 companies sampled from 2001 to 2006 (making a total of 100 ARs.). Data collected from ARs were coded according to the coding scheme in Figure 1(Adapted from: Gamble *et al*, 2006; and Jaggi and Zhao,1996)

Figure 1 – Annual Report Environmental Disclosure Codes

Code	**Description**
SQD	Short qualitative discussion (not in the footnotes and less than a page)
EQD	Extended qualitative discussion (not in the footnotes and a page or more)
FN	Footnote discussion
JE	Journal entry recorded in financial statements
	Firm has been cited for environmental violations and/or is conducting remediation efforts at one or more sites:
V1	Associated costs are significant
V2	Company believes associated costs will not be significant or will not have a material adverse effect on the financial statements
V3	Liability or associated costs can not be estimated
EP	Environmental policies adopted
PI	Improvements made since the adoption of policies
RGL	Response to government legislation
COST	Material costs charged to current operations

Source: Adapted from: Gamble *et al*, 2006; and Jaggi and Zhao,1996

Gamble (*et al*, 2006) interpret the coding scheme as follows:

SQD includes information regarding environmental policy, legal compliance and restrictions, changes in environmental regulations, operating and capital environmental expenditures, and the net effect of environmental matters on other aspects of operations.

EQD includes SQD as well as information regarding plans for environmental improvements in operations, the total dollar amount committed to such plans, the dollar amount spent to date, the dollar amount expected to be spent in each of the next five years, the types of environmentally –oriented assets that have and/or will be acquired, and the results of an environmental audit.

4 – Results and Discussion

Environmental disclosures in annual reports of sampled companies is summarized as Table 1. Out of the total of 100 annual reports of 20 companies from the 10 sectors examined over a five-year period ended in 2006, only 32 of the annual reports disclosed environmental information. The annual reports were from 7 out of 20 companies spread over 6 out of 10 sectors.

The distribution by sector of annual reports which disclosed environmental information is reported as Table 2.

Table 1: Environmental Disclosures in Annual Reports of Sample Companies - Summary

	No.	%
Annual reports which disclosed environmental information	32	32
Annual reports which did not disclose environmental information	68	68
Total annual reports reviewed	**100**	**100**

Expectedly, the petroleum product marketing has the highest percentage disclosure because of the legitimacy problem the industry is facing in general and Shell petroleum in the Niger Delta area of Nigeria in particular. The sectors that have the next highest percentage disclosure, that is; breweries, chemical & paints, food/beverages & tobacco and industrial/domestic products are also widely known to have environmental related issues and thus need to demonstrate to the society efforts being made to create and nurture positive organization-society interface. This result is in support of earlier studies carried out by (for example; Jaggi and Zhao, 1996; Owolabi, 2001).

Table 2: Distribution of Disclosing Reports by Sector

	No.	%
Breweries	5	16
Chemical and Paints	5	16
Conglomerate	0	0
Construction	0	0
Food/Beverages and Tobacco	5	16
Health Care	2	5
Industrial/Domestic Products	5	16
Packaging	0	0
Petroleum Product Marketing	10	31
Textile.	0	0
Total annual reports which disclosed environmental information	**32**	**100**

Table 3 depicted below shows the distribution of environmental disclosures by form. Of the 100 annual accounts examined; 27 have short qualitative discussion of less than a page on environmental disclosures; 5 have extended qualitative discussion of a page and above; none has a footnote discussion or a journal entry recorded in financial statements or significant associated costs or liabilities; 17 articulate the environmental policies adopted; 10 have had improvement since adoption of policy; and 22 claimed positive response to environmental related government policies.

Table3: Forms of Environmental Disclosures Based on Codes of Figure 1

Annual report environmental disclosure codes	SQD	EQD	FN	JE	V1	V2	V3	EP	PI	RGL	COST
Annual reports which disclosed environmental information on the basis of the codes	27	5	0	0	0	0	0	17	10	22	0

5 – Conclusion

The results of the study provide some evidence that 35% of companies sampled (60%of sampled sectors) provide some form of environmental disclosure in their annual report over a five-year period from 2002 to 2006(both years inclusive). The information disclosed is however brief, mostly descriptive and narrative in nature. It neither provides environmental mitigating cost nor liability. Its usefulness and reliability in decision making is in doubt and the result is not too different from earlier studies in environmental disclosure(see for example; Jaggi and Zhao, 1996; Owolabi, 2001 and Gray, 2002).

The sectors from which the companies disclosed environmental information (Breweries; Chemical and Paints; Food/Beverages and Tobacco; Health Care; Industrial/Domestic Products; and Petroleum Product Marketing) were those adjudged to be the most polluters. Their action may therefore not be unconnected with the need to repair or maintain their legitimacy. The environmental information disclosing firms were all multinational with a global reporting requirement. And to the extent that environmental information reporting and disclosure in annual reports in Nigeria is still voluntary, this partly explains the low level of disclosure among non-multinational Nigerian firms.

In spite of this flaw and from Nigerian perspective, the present study is considered a marked improvement over an earlier study for the five – year ended December, 1999 where the overall disclosure rate was 11%. With increased globalization, improved drive towards environmental information reporting and disclosure in annual reports at the international level, the level and content of disclosure of environmental information is also expected to increase in Nigeria.

References

Buzby S., and Falk H. (1979), A Survey of the Interest in Social Responsibility Information by Mutual Funds, *The Accounting Review*, Vol. 54, No.1 [23-37]

Chen K. and Metcalf R. (1980), The Relationship Between Pollution Control Record and Financial Indication Revisited, *Accounting Review*, January [168-177]

Chokor B.A.(1988), Environmental Awareness as a Strategy for an Effective Environmental Policy and Pollution Control, in Sada, P.O. and Odemerho, F.O. (eds), *Environmental Issues and Management in Nigerian Development*, Evans Brothers, (Nigeria Publishers Limited), Ibadan, Nigeria [325-338]

Cormier D., Magnan M. and Van Velthoven B. (2005), Environmental Disclosure Quality in Large German Companies: Economic Incentives, Public Pressures or Institutional Conditions?, *European Accounting Review*, Vol. 14, No.1, [3-39]

Deegan C. and Rankin M. (1997), The Materiality of Environmental Information to Users of Annual Reports, *Accounting, Auditing & Accountability Journal*, Vol. 10, No. 4, [560-581]

Freedman M. and Jaggi B. (1986), An Analysis of the Impact of Corporate Pollution Disclosures Included in Annual Financial Statements on Investors' Decisions, *Advances in Public Interest Accounting*, Vol. 1 [193-212]

Gamble G. O., Hsu K., Jackson C.and Tollerson C.D. (1996), Environmental Disclosures in Annual Reports: An International Perspective, *The International Journal of Accounting*, Vol. 31, No. 3 [293-331]

Gray R. (2000), Current Developments and Trends in Social and Environmental Auditing, Reporting and Attestation: A Review and Comment, *International Journal of Auditing*, Vol. 4, [247-268]

Gray R., Kouhy R. and Lavers S. (1995a), Corporate Social and Environmental Reporting: A Review of the Literature and a Longitudinal Study of UK Disclosure, *Accounting, Auditing and Accountability Journal*, Vol. 8, No. 2, [47-77]

Gray R., Kouhy R. and Lavers S. (1995b), Methodological Themes: Constructing A Research Database of Social and Environmental Reporting By UK Companies, *Accounting, Auditing and Accountability Journal*, Vol. 8, No. 2 [78-101]

Guthrie J. and Parker L. (1989), Corporate Social Reporting: A Rebuttal of Legitimacy Theory, *Accounting and Business Research*, Vol. 19, No. 76 [343-352]

Guthrie J. and Parker L. (1990), Corporate Social Disclosure Practice: A Comparative International Analysis, *Advances in Public Interest Accounting*, Vol. 3 [159-173]

Hogner R.H. (1982), Corporate Social Reporting: Eight Decades of Development at U.S. Steel, *Research in Corporate Social Performance and Policy*, Vol. 4 [243-250]

Hooghienstra R. (2000), Corporate Communication Impression Management - New Perspectives Why Companies Engage in Corporate Social Reporting, *Journal of Business Ethics*, Vol. 27 [55-68]

Jaggi B. and Freedman M. (1992), An Examination of the Impact of Pollution Performance on Economic and Market Performance: Pulp and Paper Firms, *Journal of Business Finance & Accounting*, Vol. 19, No. 5, [697-713]

Jaggi B. and Zhao R. (1996), Environmental Performance and Reporting: Perception of Managers and Accounting Professionals in Hong Kong, *The International Journal of Accounting*, Vol. 31, No.3, [333-346]

Konar S. and Cohen M.A (1997), Information as Regulation: The Effect of Community Right to Know Laws on Toxic Emissions, *Journal of Environmental Economics and Management*, Vol. 32, No. 1 [109-124]

Lindblom C.K. (1994)**,** The Implications of Organisational Legitimacy for Corporate Social Performance and Disclosure, *Critical Perspectives on Accounting Conference*, New York

Meyer J.W. and Rowan B.(1977), Institutional Organisations: Formal Structure as Myth and Ceremony, *American Journal of Sociology*, Vol. 83, No. 2 [340-363]

Millstone S. and Watts F. B. (1992), Effect of the Green Movement Business in the 1990s, in Sullivan T.F.P.(ed), *The Greening of American Business: Making Bottom-Line Sense of Environment Responsibility*, Government Institute, Maryland [1-21]

Milne M.J. and Adler R.W. (1999), Exploring The Reliability Of Social And Environmental Disclosures Content Analysis, *Accounting, Auditing & Accountability Journal,* Vol. 12, No. 2 [237-256]

Myers N. (1994), The Environmental Basis of Sustainable Development, in Schramm G. and Warford, J.J.(eds.) *Environmental Management and Economic Development.* A World Bank Publication [57-68]

O'Donovan G.(1999), Managing Legitimacy through Increased Corporate Environmental Reporting: An Exploratory Study, *Interdisciplinary Environmental Review*, Vol. 1, No. 1 [63-99]

O'Donovan G.(2002), Environmental Disclosures in the Annual Report: Extending the Applicability and the Predictive Power of Legitimacy Theory, *Accounting, Auditing & Accountability Journal*, Vol. 15, No. 3 [344-371]

Olorode O. (2000), The Crises in the Oil Producing Communities in Nigeria" in Raji, W., Ale, A. and Akinsola, E. (eds.) *Boiling Point*, a CDHR Publication, Ikeja, Lagos, Nigeria [13]

Owolabi A.A. (2001), *An Evaluation of Managers' and Accounting Professionals Perception of Environmental Issues and Reporting in South Western Nigeria*, an Unpublished M.Phil. Thesis, Obafemi Awolowo University, Ile-Ife, Nigeria.

Pfeffer J. and Salancik G.R. (1978), *The External Control of Organizations: A Resource Dependence Perspective*, New York, NY, Harper and Row

Pfeffer J. and Salancik G.R. (2003), *The External Control of Organizations: A Resource Dependence Perspective*, California: Stanford University Press

Roberts R. W. (1992), Determinants of Corporate Social Responsibility Disclosure: An Application of Stakeholder Theory, *Accounting, Organizations and Society*, Vol. 17, No. 6 [595-612]

Roberts R. W. and Mahoney L. (2004), Stakeholders Conceptions of the Corporation: Their Meaning and Influence in Accounting Research, *Business Ethics Quarterly*, Vol. 14, No. 3 [399-431]

Rockness J. (1985), An Assessment of the Relationship Between U.S.Corporate Environmental Performance and Disclosure, *Journal of Business Finance & Accounting*, Autumn [339-354]

Rockness J. and Williams P. F. (1988), A Descriptive Study of Social Responsibility Mutual Funds, *Accounting, Organizations and Society*, Vol. 13, No. 4, [397-411]

Shane P.B. and Spicer B.H. (1983), Market Response to Environmental Information Produced Outside the Firm, *The Accounting Review*, July [521-538]

Spicer H.H. (1978), Investors, Corporate Social Performance and Information Disclosure: An Empirical Study" *Accounting Review*, January, [94-111]

Suchman M.C. (1995), Managing Legitimacy: Strategic and Institutional Approaches, *The Academy of Management Review*, Vol. 20, No. 3 [571-610]

Tinker T. and Niemark M. (1987), The Role of Annual Reports in Gender and Class Contradictions at General Motors, *Accounting, Organisations and Society*, Vol. 12, No. 4 [71-88]

Unerman J. (2000), Methodological Issues: Reflections on Quantification in Corporate Social Reporting Analysis, *Accounting, Auditing and Accountability Journal*, Vol. 13, No. 5 [667-680]

United Nations (1992) Environmental Accounting, Current Issues, Abstracts and Bibliography. New York: United Nations

Walden W.D. and Schwartz B.N.(1997), Environmental Disclosures and Public Policy Pressure, *Journal of Accounting and Public Policy*, Vol. 16, No. 2 [125-154]

Wilmshurst T.D. and Frost G.R. (2000), Corporate Environmental Reporting: A Test of Legitimacy Theory, *Accounting, Auditing & Accountability Journal*, Vol. 13, No. 1 [10-26]