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The Relevance of Environmental Cost Classification and Financial Reporting: A Review of Standards

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Abstract
Oil prospecting companies and host communities in Nigeria has been having series of conflicts in the past decade. The complaint is always firms not meeting up with their environmental responsibilities generated through the negative production externalities. This study takes a critical evaluation of some aspects of IAS and selected companies' financial statement to see the level of companies' response to such responsibilities as reflected in the financial statements. Using a content analysis, the researchers discovered that firms report their environmental cost with no specific classification of to enable them report in the either the income statement or the statement of financial position. The result is that firms only give a descriptive disclosure of environmental cost with no monetary value in the chairman's or director's report. The researchers recommended that cost should be reported in the income statement if it is not intensive, otherwise it should be reported in the statement of financial position.
Keywords: Relevance, Environment, Cost, Classification, Financial Reporting and Standards.

INTRODUCTION

Since the 1990s, the subject of Environmental Accounting generates numerous debates within Professional and non-Professional Accounting bodies, in the process of structuring the notion of Environmental Accounting.

The process of formalization of Environmental Accounting began in the 1990s (Gray 2002) in France. The Accounting National Council stretched from 1980, the beginnings of an Environmental balance sheet, but it was only in 1996 that the Order of the Chartered Accountants proposed a classification of the Environmental allowances or still, that the first work on "Green Accounting" was published (Oyadonghan and Gbalam 2013). At the European level, it was as well during this decade that the system of Economic and Environmental Accounting was created.

These attempts to establish the Environmental Responsibility of a Company, constitutes a means to bring a quantified proof of operational effects on the Environment by Firms financial statements, so as to perfect the decision process, to legitimize the Organization towards its Environment, or still to improve the Organization (Gray 2002). In recent years, Environmental Accounting has been attracting increasing attention throughout the World, due to increase in the monetary consequences of corporate Environmental impacts and incidents (Appah 2011).

There are various definitions of Environmental Accounting, but basically, an Environmental Management Accounting system can be thought as a Management Accounting system that has been refined so as to enable users of the system to be provided with information that reflects the environmental performance of the organization. It is principally concerned with the generation, analysis and use of financial and non-financial information in order to evaluate and control the environmental aspects of an Organization. It is an important tool for understanding the role played by the natural environment in the economy. It provides data which highlights both the contribution of Natural Resources to Economic well-being and the costs imposed by Pollution or Resource Degradation (Appah 2011).

In response to various pressures, Businesses have begun to report externally on their Environmental policy and performance. The significance of such external reporting depends on the extent of changes in Management Culture and Systems and on how new measures influence Management decisions. Environmental accounting, also known as "Green Accounting" involves a reappraisal on how to identify and measure the relevant costs of processes and products (such as total cost assessment) and a redesign of incentive mechanisms. Through these changes, Managerial decisions and corporate behavior may be focused towards the goal of achieving sustainable development. For example, by pursuing a viable industrial ecology, (Gray 2002).

Evidence to date suggests that organizational ineptitude including the relative lack of involvement on the part of Accountants themselves, inhibit such changes. There is however a paradox that improving Environmental performance is often advocated as remedying defects in a Company's assessment of their own self Interest. ( ).

One very important element of Environmental Accounting is Social cost. This cost is being paid by those who are resident in areas affected by production externalities, (Oyadonghan and Gbalam 2013). But in recent times, corporations have been making or incurring some kind of recompense to operational externalities. Costs incurred under such acts are to be accounted for, either in the Balance sheet statement through capitalization or in the Profit and Loss by way of expensing them. The big question now lies on the basis of classifying such costs into expense and or capitalization costs. Most firms disclose such costs as notes to the final accounts (Appah 2011) such Accounting has flaws such as violating the matching concepts and its effect on the annual profit and loss account.

Not knowing how to classify Environmental Recompensing Costs into expense and capitalization often amounts to presenting such cost as additional note to the accounts as a practice by many firms. In this practice basic accounting concepts, like matching concept is ignored, arising to a bias view in the computation of Net Profit, Uniform presentation of financial statements, as to trueness and creates information asymmetry by corporate operations in the society. Such scenarios often result to conflicts between business operators and bearers of social cost leading to production shortfalls and reduction of corporate profits, (Oyadonghan and Gbalam 2013).

Having identified the above problem, this research is designed to achieve the following objectives as a means of solving the problem.

1. To determine the extent of Environmental Financial Reporting Practices among Companies in Nigeria
2. To determine the level of Social cost, borne by Companies occasioned by production externalities.
3. To determine the relevance of methods used in classifying such Social cost incurred by Companies.
4. To determine the extent of the effect of such cost classification in fair presentation of Financial Statements by Companies in Nigeria.

LITERATURE REVIEW

ENVIRONMENTAL ACCOUNTING

Environmental Accounting, a little more than a decade ago was rather a spasmodic and rare activity. Today, the term relates to a widespread and exceptionally diverse range of activities. Accounting at the level of an Organization, can be broadly defined as the collection and aggregation of Information for decision makers, both internal (e.g. managers) and external (investors, regulators, lenders and the broader public). There are usually two types of Accounting within a company: Financial Accounting, which focuses on monetary information and is regulated at the National and International level by laws, standards and guidelines and is intended for external users and Management Accounting, which deals both with monetary and Physical Information. Although considered as Parallel information flow, there are in practice many interlink between Financial and Management accounting systems, (Ofurum et-al 2008). Thus, in order for Environmental concerns to become more of a focus, they need to be included within those accounting systems. Doing so, will inform and motivate behaviors towards linking sound environmental management with everyday Business and decision making, (salem et al, 2012)

The understanding by both some environmental and accounting practitioners of the necessity of linking environmental data to accounting systems favored the birth of Environmental Accounting as a subset of the broader Accounting Systems. From a company's perspective there seems to be two underlying forces during company interest in various kinds of Environmental performance data that might be considered varieties of accounting. The first is a growing demand from company stakeholders, based on an increased interest in environmental issues. Interested stakeholders are not only the consumers but also industrial customers, financial institutions and others. For this reason, more and more companies are producing Environmental reports, but these are often low on data content, which adversely affects companies' credibility on Environmental issues. (Mamman 2004).

The second reason for environmental accounting is for internal information purposes. As information becomes increasingly accessible in modern society, the form the information is imparted becomes essential. Assembling information relevant to environmental issues in a system where various performance indicators would be readily available would enable management to better encompass environmental concerns in decision making process. For data processing, it is required that as much information as possible is expressed as quantified data. Another important incentive is the possibility of quantitative expression of objectives in Environmental issues, which also implies the possibility of expressing achievements in percentage of objectives and goals.

Based on this definition and according to the traditional separation between financial and management accounting the following split can be made between;

a. Environmental Financial Accounting (EFA), which is aimed at external reporting of environmental and financial benefits in (sometimes verified) corporate environmental reports or published annual reports, EFA is partly governed by Accounting Standards, issued by different professional bodies. For instance, traditional corporate financial statements usually include environmental remediation and liability issues, linked to a company's activities, (Rogers 2005; Gamini 2005).
b. Environmental Management Accounting (EMA), which is an Accounting approach that considers the financial impacts of environmentally related activities, such as the implementation of

Environmental protection expenditure, costs of legislative compliance and investments. The costs are allocated and tracked to meet the organizations own business needs, mirroring the traditional management accounting techniques (Schaltergger 2005, 2004). EMA is aimed at enabling to take corrective management actions to reduce the environmental impacts and cost and is therefore a tool for environmental cost control and management in order to positively correlate economic and environmental performance.

THE IMPORTANCE OF ENVIRONMENTAL FINANCIAL ACCOUNTING AND REPORTING

Environmental Financial Accounting deals with accounting for, and reporting on environmental transactions and events that affect or are likely to affect the financial position and the performance of an enterprise. Laws and regulations promoting cleaner environment have led corporations to take actions relating to the environment which are costly and which has resulted in substantial financial consequences for companies, but on the other hand, companies have not been pressed enough to report these information to the various stakeholders (Davis and Okoritee 2007). This means a large number of interested groups are not getting information relevant to their decision making needs. On one hand environmental issues can dramatically impact a company's financial position and its changes for long term success. Today, this new variable should be considered in financial accounting and reporting as well as in modern financial analysis because they substantially influence risk and opportunities of companies and in extreme situations also the continuity of the business. Example of environmentally induced financial impacts on companies are environmental charges, fees, fines, sanctions, site abandonment costs, lower value of polluting production devices, environmental liabilities, etc.

Financial markets react to environmental impacts of a company as soon as the impacts are made material for the company. Financial analysts asses and consider environmentally induced financial risks and opportunities only if they posses reliable and comparable information, as a consequence, disclosing environmental data in annual reports may affect the perceptions of an enterprise' earnings and cash flow, Perez et al (2007), Branco and Rodrigues (2007).

INTERNATIONAL ACCOUNTING STANDARDS AND THE ENVIRONMENTAL ISSUES

From the functions of accounting and the users of financial reporting, the role of accounting standards becomes clear. Standards provide a firm basis on which to record, compare and analyze financial positions and performance of an enterprise. (Moisescu and Milhaio, 2006)

International accounting standards board (IASB) has issued standards that are of particular relevance to environmental issues, in particular IAS 36 on impairment of assets, IAS on provisions, contingent liabilities and contingent assets and to a lesser extent, IAS 38 on intangible assets. Although the technical parts of the standards do not refer explicitly to environmental issues, there are sufficient examples and illustrations provided elsewhere in the documents enabling to guide through the core areas of environmental liabilities and provisions. For example, appendix c to IAS 37 contains among others, examples dealing with contaminated land-legislation virtually certain to be enacted, contaminated land-constructive obligation and offshore oilfields – decommissioning costs. These also feature in IFRS 4, 6,

On a number of occasions, it has been suggested that environmental issues may arise on which there is no relevant guidance within the existing set of international accounting standards. There is also a view that environmental liabilities and asset impairment are not unique and that the accounting principles set out in the standards are already adequate to deal with the problems that may arise. To some extent, both positions can be justified. The observations that follow consider some of the issues in more detail. The IASB framework for the preparation and presentation of financial statements draw attention to the need for a narrative discussion about environmental risks, where these exist, and explain that an item of a relatively small amount that may not be material in itself may be significant in its impact on a company's reputation and public image. The main standards that are of particular relevance to environmental accounting are presented below.

IAS 1 – Disclosure of accounting policy

IAS 1 requires that all significant accounting policies should be disclosed in all notes to the financial statements. With the growing significance of environmental issues affecting many businesses, it is possible that reference will be needed to the way in which environmental liabilities and impaired assets have been treated. For enterprises operating in environmentally sensitive sectors, such as the chemical industry, or holding large land banks, the absence of a stated policy may be a cause for criticism.

There are no requirements in IAS 1 that would result in separate disclosure of environmental costs or liabilities. Environmental costs are rarely disclosed separately unless they represent an exceptional item, and there is often no reason to treat such cost in a different way from other costs. The recognition of environmental liabilities may require greater clarity in identifying and defining the underlying costs since they often involve uncertainty as regards their timing and measurement. The disclosure of such information, together with an appropriate explanation is likely to be expected by users in view of the increasing importance of the environment. Where environmental costs are disclosed, the way in which such costs are identified should also be explained in order to ensure that comparisons between enterprises do not result in misleading conclusions.

IAS 1 should require the separate disclosure of environmental costs and liabilities where these are material to the enterprise, where the effect of the information on the financial position of the enterprise could influence the economic decisions of a wide range of users of the financial statements. Where environmental costs are separately disclosed, the accounting policies should state what these costs represent, the accounting treatment adopted and in the case of environmental costs that are capitalized whether the amount concerned is derived from an allocation of total costs, or is it restricted to those costs that relate "wholly and exclusively" to environmental factors. Therefore IFRS should make this separate disclosure a necessity for inheriting the standards of IAS.

IAS 16- Property, plant and equipment

IAS 16 deals with the recognition and measurement of property. Plant and equipment may be acquired partly or mainly for environmental reasons. In broad term, as in the case of other items capitalization is appropriate if the expenditure is expected to result in future economic benefits to the enterprise. IAS 16 permits subsequent expenditure relating to an item of property, plant and equipment to be capitalized only when it is probable that future economic benefits, in excess of the originally assessed standards of performance of the existing assets will flow to the enterprise. The question therefore arises as to whether capitalization of subsequent expenditure that simply enables existing property plant and equipment to continue to produce future economic benefit rather than increase those benefits is permitted. It needs to be clarified that even though no increase in future economic benefit is produced, such acquisitions qualify for recognition as assets.

In the case of environmental expenditure, the mitigation of environmental damage and the avoidance of future closure, for example, where new laws would otherwise require an enterprise to curtail its operations should be regarded as a form of future benefit, while not directly increasing the future economic benefits of any particular existing item of property, plant and equipment. The acquisition may be necessary to enable the enterprise to obtain future economic benefits from its other assets.

IAS 16 require that if the recoverable amount of an item of property, plant and equipment has fallen below the carrying amount, due to impairment, the carrying amount should be written down and the reduction should be recognized as an expense. Assets acquired are only recognized to the extent that the resulting carrying amount involve does not exceed the total amount recoverable from that asset and related assets. For example a chemical manufacturer may have to install new chemical handling processes in order to comply with environmental requirements. Related plants enhancements are recognized as an asset to the extent that they are recoverable, because without them the enterprise is unable to manufacture and sell chemicals. If an enterprise purchases a contaminated asset and the purchase price include an allowance for the cost of remedial work for which the acquirer has an obligation, it could be argued that to avoid "double counting" the asset should be included on an unimpaired amount and provisions made for the remedial costs. IAS 16 should provide some guidance on the treatment of environmental expenditure relating to property, plant and equipment but should clarify the criteria for capitalization as regards whether an increase in expected economic benefits rather than continued economic benefits is required. This also should be incorporated by IFRS.

IAS 36 impairment of asset

Whilst the general principle of reviewing assets values for possible impairment should apply equally to assets affected by environmental factors, this type of impairment often carries particular uncertainties regarding estimation of the time scale and recoverable amount. IAS 36 lists a number of indications of possible impairment. This include significant changes with an adverse effect on the enterprise that have taken place during the period or will take place in the near future, in the technological market, economic or legal environment in which an asset is dedicated . Environmental factors both internal and external to the enterprise, such as contaminated land are possible indicators of impairment. IAS 36 does not specifically address the problems involved in measuring the related impact of such environmental factors on asset values. IAS 36 attaches little importance to the relevance of management intent in determining the appropriate accounting treatment. A bias against such factors is difficult to justify in the case of environmental impairment, where an enterprise's plan for repair or abandonment are, may be a key consideration. A board decision to become more environmental friendly, with the regular publication of an enterprise's policy, targets and achievements, is likely to lower the threshold at which an asset would be considered to be impaired.

Measurement of an environmentally impaired asset may be affected by;

a. Delayed disposal of the asset, due to the need to deal with contamination, resulting in clean up costs and increased interest charges.
b. Uncertainties due to the possibility of improvement with related technology or changes in legislation.
c. Risks arising from the stigma effect, deterring potential purchasers and resulting in a more restricted market.

Stigma is an aspect of asset contamination arising from various factors ranging from possible public liability and additional health hazards to fear of the unknown. It might be regarded as the extent to which diminution in value of an asset attributable to the existence of contamination exceeds the cost attributable to remediation of the asset, the prevention of future contamination, any known penalties or civil liabilities, insurance and future monitoring.

IAS 36 mentions that the recoverable amount of a cash generating unit is sometimes determined after consideration of assets that are not part of the cash generating unit but the standard does not extend this approach to the impact of contaminated land whilst the stigma effect might be recognized in practice by applying a further discount to the value of an asset after allowing for all expected remediation costs, the standard should refer to this problem. Where the effect cannot be measured reliably, e.g. where there has been no disposal of comparable contaminated sites, adequate disclosure should nevertheless be made. IAS 36 addresses the problem of measuring impairment of assets due to environmental factors, the difficulties of determining the recoverable amount and the uncertainties as regards the timing involved. Reference should also be made to the stigma effect that environmental impairment may have on potential purchasers.

IAS 37 provisions, contingent liabilities and contingent assets.

The recognition and measurement of provisions and the disclosure of contingent liabilities are the main areas in which environmental issues are likely to have an impact on financial reporting. IAS 37 requires that a provision should be recognized when an enterprise has a present legal or constructive obligation as a result of a past event which can be reliably estimated and it is probable (more likely than not) that an outflow of resources embodying economic benefits will be required to settle the obligation clean-up costs and penalties for unlawful environmental damage are mentioned as examples of obligations that would lead to such an outflow of resources, regardless of the future actions of the enterprise.

Environmental issues are likely to give rise to one or more of the following questions;

Whether there is a present obligation, whether a constructive obligation arises in circumstances where there is no legal obligation, whether a proposed change in law that is yet to be enacted gives rise to an obligation, whether problems of uncertainty, either as regards the timing of clean-up or technology available, prevent the amount of the obligation being measured with sufficient reliability.

Under IAS 37, a constructive obligation is an obligation that derives from an enterprise's actions, whether past practice or a published statement or policy indicates that it will accept responsibility and the enterprise has thus created an expectation that it will discharge that responsibility. In this context, it is also relevant to note that IAS 37 envisages that an obligation may be to the public at large. However, where the enterprise can avoid future environmental expenditure, such as by delaying the fitting of smoke filters, the standard prohibits the recognition of a provision.

An event that does not give rise to an obligation immediately may do so at a later date because of changes in the law. However, the effect of possible new legislation is (only) taken into consideration in measuring an existing obligation when sufficient objective evidence exists, that the legislation is virtually certain to be enacted. The standard observes that, in many cases, sufficient objective evidence will not exist until the new legislation is enacted.

The problems of uncertainty, either as regards the timing of clean-up or technology available, prevent the amount of the obligation being measured with sufficient reliability. In such circumstances, IAS 37 requires contingent liability to be disclosed. Where the effect of the time value of money is material, such as a present obligation that will result in cash outflow sometime after the balance sheet date, the provision is discounted to present value. This presupposes that the timing involved and the appropriate discount rate can be determined with sufficient reliability. A related uncertainty concerns the technology that will be available when the clean-up occurs. The standard suggests that the amount of the provision to be recognized should reflect the reasonable expectation of technically qualified objective observers, taking account of all available evidence as to the technology that will be available at the time of the clean-up. Where there is an obligation for which provision is made or a contingent liability that is disclosed, the financial statements are required to include a brief description of the nature of the item. In the case of a provision, disclosure includes the expected timing of any expenditure, an indication of the uncertainties involved and the amount of any expected reimbursement. In the case of a contingent liability, the estimated financial effect, uncertainties involved and the possibility of any reimbursement are only required to be disclosed where practicable. Given that many environmental liabilities arise over a long-term and are therefore difficult to determine because of uncertainties about future legislation, the extent and timing of clean-up that will be required and the technology available, a provision may not be recognized under the strict criteria in IAS 37 even though it is probable that expenditure will be necessary. In such circumstances, it is important that the existence of a contingent environmental liability should at least be disclosed.

Appendixes to IAS 37 provides some helpful examples to illustrate the application of the standards in various circumstances, including cases of cleaning up contaminated land and the adoption of preventative environmental measures (the fitting of smoke filters) in the case of smoke filters that are not fitted by the effective date of the relevant legislation, it seems counter-intuitive that this is treated as the absence of an obligating event and that provision is only recognized for an obligation to pay fines and penalties. Where legislation has only recently been introduced, estimating the amount of such penalties may be more difficult than predicting the cost of fitting smoke filters. In any case an enterprise would normally which to adopt the more positive step of recognizing a provision for fitting smoke filters, particularly if it intends to take such a measure within the foreseeable future. The example could therefore be misleading. It may also suggest that the rules regarding an obligating event need to be reviewed to enable situations such as the failure to fit smoke filters to be treated as the obligating event.

IAS 37 recognizes the difficulties in recognizing and measuring provisions for environmental costs. It is also a matter for concern that adopting a restrictive approach in such cases may have the undesirable effect that a provision for clean-up costs is not recognized when it would be prudent to do so. It should also provide more specific guidance to ensure that environmental liabilities that are contingent on an uncertain future event are recognized, if it is probable that they will arise, and that, where it is not possible to estimate the amount of the liability, its nature and existence are disclosed.

IAS 38 intangible assets

The development and increasing use of certain intangible assets in the environmental area, such as pollution permits and emission rights, would appear to meet the criteria for recognition as intangible assets, in that they are likely to result in future economic benefits to the enterprise, which would otherwise be unable to operate, and have a cost that can be measured reliably. IAS 38 should clarify whether such items as pollution permits and emission rights, which are increasingly used in the environmental area, would meet the criteria for recognition as intangible assets.

Accounting involvement in environmental protection activities

Constant degradation of the environment and the growing number of environmental disasters has caused environmental problems to have a greater importance. Integrating environmental issues in life requires entities to consider them at economic and legal, accounting, financial and technical level. (Lafontaine, 2002; Jahamani, 2003)). In economic terms taking into account environmental parameters in the cost of services or products ,enable entities ,on the one hand to rationalize energy consumption of natural resources, achieving substantial savings and secondly, to meet the requirement of environmental compliance consumer health. Legal consideration of environmental risk is required to take the responsibility of the entity. This responsibility arises from failure to comply with environmental legislation and may result in administrative sanctions, civil or criminal offences. From the accounting and financial point of view, recording of environmental cost and determining environmental cost generated by the entity and related financial disclosure is the way of evaluating the performance of work (Betianu, and Georgescu 2008).

The question is; which department of an entity will be most suitable for the management of environmental information? (Moisescu and Milhaio, 2006)

According to Tabara et al (2007) the only subdivision that could meet the challenge, is the accounting department, reflected as financial and economic conditions of the entity and changes of the conditions in the most comprehensive and multilateral way. He proposes to develop an international standard for environmental accounting, to implement a uniformed solution across the globe titled “Reporting on Environmental Regeneration” aimed at determining the organization and implementation of reporting and environmental regeneration within the entities that pollute, and those who consume natural resources. (Betianu, 2009)

Environmental Accounting Treatment Applicable to environmental costs.

No matter what their activity is, entities must be within the general rules of an open democratic society, one of the most important rules of democracy is transparency. Transparency requires activity “in daylight” or “sight”. From this point of view, the entities cannot hide behind secrecy, at least some of their aspects. They are forced to provide information about aspects of their activities in order to allow external control of the company on such issues (Todea, 2009). From the view of the entities, activities necessary to be disclosed are related to the economic and financial activities. Such as how to obtain funding necessary to conduct normal business conditions, the use of these funds, their efficiency, entities providing such information to various categories of users, including the public, the result of existence and operation of an economical information system. The idea is drawn from the international accounting standards, namely IFRS which show that “the objective of financial statements is to provide information about the financial position, financial performance and changes of the financial position of an entity; this information is useful to a broader sphere of users in making economic decisions “(IFRS, 2007).

Recommendation of CE, 453/2001, defines environmental costs as “those costs to prevent, reduce or recover damages that the entity has caused or is likely to cause on the environment as a result of its activities. These include prevention, elimination or reduction of waste and wastewater, air emissions, treatment of contaminated soil, groundwater, noise and vibration levels, the landscape changes, research and innovations of products and cleaner production processes, control of environmental quality”. Canadian institute of chartered Accountants (CICA) present environmental costs as environmental costs which generate, directly or indirectly benefits of the current period, the period which they occur, providing a series of details in this regard. Thus we have:

A. Costs generating direct benefits of the current period: expenditure on waste treatment and monitoring, recovery and cleanup costs associated with current business of the entity;
B. Indirect costs which generate the current period's benefits: the cost administrative activities, compliance, evaluation and environmental audit, courses and seminars related to staff training on environmental protection;
C. Costs regarded as losses for the period ; costs that do not generate future economic benefits that cannot be capitalized (costs related to research performed to design cleaner products and processes, costs of participation in recycling programs), costs related to activities undertaken but that generated a benefit that expired (cost recovery and cleaning of polluted land), costs that have not generated any benefit (fines, penalties, failure to comply with environmental regulations and legislation). As shown in the list above, we can see that the costs of penalties and fines for failure to comply with environmental legislation are not included in the environmental category. In our opinion they should be part of the environmental costs, at least in the case of sanctioned entities.

The potential of environmental management accounting to reflect environmental costs.

According to Moisescus and Milhaio (2006), the "concepts of "General Accounting" and "Analytical Accounting" are recognized by experts for a long time. Today, the practice tends to enshrine the names of "financial accounting records flows as an economic entity and its environment, expressed in the published financial statements is governed by standards and regulations, providing information to external users." Financial accounting includes most environmental costs along with other costs, and thus environmental costs cannot be identified. To reduce pollution, some entities granted significant sums. In some cases they are easily identifiable, but environmental costs are much higher than those relating to pollution prevention and control and are often included in hidden costs. Management accounting is an "Internal Accounting" providing information for internal users. As in all cases, environmental management accounting is a tool to inform managers about the environmental costs, to qualify the environmental effects of the entity. It appeared as a result of increasing pressure on the entity`s management to reduce costs and minimize environmental impact activities (United Nations sustainable Development Division, 2003).

Table 1. Empirical review of related studies

Authors	Methodology and sample	Main findings
Appah E (2011)	Content and simple percentage analysis on 40 companies listed in the Nigerian stock exchange for a period of 2005 to 2007	i. Nigerian companies prefer to disclose social accounting in the director's report, chairman's report and notes to the accounts. ii. the most popular themes in the report are, human resources, community involvement and environmental effects
Ponnu and Okoth (2009) Kenya	Content analysis and chi-square of all the 54 listed companies in Nairobi stock exchange	Corporate social disclosure is given only a modest attention, based mainly on community involvement.
Owolabi (2008)	Content analysis on 20 listed companies in the Nigerian stock exchange, covering 10 sectors of the economy from 2002 to 2006.	i. 35% of companies show social disclosure in their annual reports. ii. social information is disclosed by multi-national companies more than indigenous companies.
Kamla (2007) Saudi Arabia	Content analysis of 68 companies annual reports from Saudi Arabia, Oman, Kuwait, Syria, Jordan and Egypt.	i. employee disclosure is more in the financial statements. ii. environmental disclosure is low in Arab Countries.
Oyadonghan and Gbalam (2013). Nigeria	Uses least square regression analysis on 3 big oil companies and 30 host communities in the Niger Delta region of Nigeria. On the challenges of adopting environmental accounting	Significant factors influencing social and environmental accounting practice are lack of a viable legislation, cost of implementation and top management lack of support.

SOURCE: Several Authors

RESEARCH METHODOLOGY

Following the nature of the study, the researchers used a survey design for the study. A group of selected companies' financial statements were used to generate information for the study. The entire study was

descriptive and explanative because the research was base entirely on post-facto events of the companies. The research population of companies was drawn from the following sectors of the economy: chemical & paints, breweries, building/materials, construction, food/ beverages, health care and petroleum.
This study used stratified sampling technique. This is done by just grouping the firms into different sectors, after which the researchers uses a judgmental basis in the selection of the number and types of firms in each sector. A total of forty (40) companies were selected for the study with their reports covering from 2008-2012. The research instrument is the Nigeria fact-book containing secondary data of the firms selected. The financial reports of the firms for a period of five years were used for the study, which was collected from the Nigeria stock market, Port-Harcourt.
Since the issue is environmental cost classification and method of distribution, the researchers preferred content analysis for the study. Content analysis is defined as research tool, for an objective, systematic and qualitative description of the manifested content of communication (O` Doyer, 2005). It is a method of coding content into various groups or categories based on selected criterion.

DATA ANAYSIS AND RESULTS
The results in this section are based on the level of disclosure. The form of Environmental Accounting Reporting (EAR) disclosure, the location of EAR, and the qualification of the amount of environmental cost, the trend of disclosure and the classification of costs as it affects the location of the disclosure.
Table 2: Level of Environmental accounting disclosure by companies in Nigeria from 2008-2012

Industries	No. of Companies	No. of companies that disclose EAR	Percentage of disclosure
Breweries	3	2	66.7
Building materials	4	3	75.0
Chemical paints	4	4	100
Conglomerates	6	4	66.7
Construction	2	2	100
Food/beverages	10	8	80
Health	6	5	83.3
Petroleum	5	5	100
Total	40	33	82.5

Annual reports of selected companies, from the stock market.
Table 2, above, indicated that 82.5% of the firms in the study population market disclosed environmental accounting reports in their annual financial accounting statements in Nigeria. At least for one year out of the five years. This indicated that there is a growing concern for company's environmental accounting in their financial statements.
Table 3, Format of Environmental accounting disclosures in annual reports.

Year	Environmental accounting disclosure by narration in %	Environmental accounting disclosed by monetary basis in %
2008	31 social cost and human	19 Human resources
2009	54 social cost and philanthropic	16 same
2010	34 social cost	16 same
2011	62 social cost and employees	18 same
2012	41 employees and environment	19 same

Annual reports of selected companies, from the stock market.
Table 3 above shows that 2008 environmental accounting information is disclosed in pictures and narratives by 31%, only 19% of the companies presented the information in monetary terms & values. The report shows that the companies that disclose in monetary value, only did so on areas of human resources, training and development, scholarship e.t.c but the effect of their activities on the environment are disclosed by descriptive narratives with the social cost involved. This is same for all the years under study.

Table 4. Location of Environmental accounting disclosure in the financial statements.

Location	No. of companies	Cost classification	%
Chairman`s report	4	-	12.12
Director`s report	17	-	51.51
Statement of accounting policies	2	-	6
Profit & loss account	-	-	0.00
Balance sheet statement	-	-	0.00
Value Added & cash flow	-	-	0.00
Notes to the accounts	10	-	30
Total	33	0	100

Annual reports of selected companies, from the stock market.

Table 4. above, revealed that environmental accounting information is merely disclosure more in the directors report (51.51%) followed by the notes to the accounts (30%) and chairman's report (12.12%). In the main books of account, no environmental accounting information is presented, neither as cost to the firm incurred or as effect to the society induced by the production activities. Again cost which is incurred by the firm to either remedy the negative externalities or philanthropic gestures and compensation are not classified in the financial statements. Again, the social cost borne by the environment due to the externalities is not classified.

This non-classification of environmental cost makes it difficult to determine in which book of account is environmental cost incurred to be reported such as treating it as expense in the profit and loss or as capitalized cost in the statement of affairs. This absence cost classification means that financial statements had failed to present a true and fair value of the business and reported profit lacks objectivity due to non-disclosure of material facts relating to environmental accounting information.

Table 5 Area of Environmental Accounting disclosure

Area	No. of companies	%
Human resources	12	36.36
Fair business practice	2	6.06
Host community development	9	27.27
Energy	3	9.09
Environmental effect	5	15.16
Products	2	6.06
Total	33	100

Annual reports of selected companies, from the stock market.

In table 5, the table indicated that the trend or area of environmental accounting disclosure is basically on the discretion of the company. Most companies concentrated on human resources resulting to 36.36% while on, the environment is 15.16% and product quality and fair business practice is only 6.06% each. This indicates how much companies avoid environmental effect-disclosure of their activities in the financial statements.

Discussion of findings

The study examined environmental accounting disclosure of 40 companies for five year period from 2008-2012. A total of 33 out of the companies has a form of partial disclosure in the financial statements as shown in table 2 which means Nigeria companies practice the disclosure of Environmental financial reports by 82.5%. Again, the result also shows a high level of compliance with the environmental accounting disclosure.

In table 3 the result revealed that no specific method is used by any of the companies to classify Environment accounting cost in the financial statements. Also this informs the reason why environmental reports are not presented in monetary values and in the main books of final accounts of companies published financial statements as shown in table 3 above.

In the specific areas of such report, most companies based their report on human resources and community development, areas that bring direct benefits to the firm in return and abandon reports relating to negative externalities in the environment and the social cost borne by the society.

Product quality and customer satisfaction also suffers this account for the fake products and less quality materials used in production in Nigeria. Such that their inferior products might not be revealed in the financial statement as in table 4

Discussion on Research questions

1. The extent of environmental accounting report practice in Nigeria is 15.16% as in table 4.
2. The extent of environmental accounting standard compliance in Nigeria is not determined because no

company follows the IAS relating to environmental accounting as no such variable is found in the financial statements. Meaning that there is no rigid compliance with specific in the standards.

3. Compliance with environmental accounting laws in Nigeria cannot be determined because no level of compliance is reflected in the accounts, the reports only account for environmental externalities by 15.16% disclosure and percentage of amount paid for social cost cannot be determined because, no such classification is found in the financial statements.

4. Since social cost is not classified nor presented in the financial statement in monetary terms, it shows that the financial statements failed to present an objective assessment of the firms activities so not fairly presented, it also mean that actual profits are different from the book profits presented in the financial statements.

CONCLUSION AND RECOMMENDATIONS

The study revealed a pattern of environmental cost disclosure that is not regulated by the Nigerian Government. The act of negligence by the legislative arm had hindered the disclosure of relevant cost and effect relating to corporate activities that had a direct effect on the environment. In addition, firms that try to disclose environmental effects could not translate such into monetary terms. This defect is believed to have been caused by the non-classification of the cost incurred. It is evidence that firms incurs considerable cost in an attempt to reduce environmental externalities. Classifying such cost into appropriate cost centres will determine in which account such cost could be recorded, either as capitalized cost in the balance sheet statement (statement of financial position) or in the profit and loss (income statement) as an expense.

The standards reviewed as provided by IAS, are all related to capitalized cost. Cost relating to philanthropic, remedial and compensatory activities of firms in response to corporate negative externalities are not presented in the accounts as cost or expense relating to environmental cost. This silence gives the public a negative view about such companies for not responding to their environmental responsibilities, thereby creating conflicts among firms and host communities, oil theft and illegal bunkers in the Niger Delta region of Nigeria.

To solve these problems, the researchers are recommending that.

A strong legislature should be enacted for companies to account for the corporate externalities generated by their production activities.

Environmental cost incurred to prevent, remedy, compensate, sympathized with, impelled to, obliged by law or by an act of philanthropy in nature should be reported in the income statement as environmental cost (if it is not capital intensive).

Environmental cost incurred by way of equipment and machinery for the purpose of preventing, reducing and complying with environmental laws should be reported in the statement of financial position as environmental plant and equipment

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