

# ENVIRONMENTAL ACCOUNTING PRACTICE, REPORTING AND SOCIAL RESPONSIBILITY PERFORMANCE: EVIDENCE FROM MANUFACTURING FIRMS IN NIGERIA

**Sani Alfred Ilemona (Ph.D.)**

*Department of Accounting and Business Administration.*

*Federal University Kashere, Gombe state, City Code: 76022, Email: adabunuu05@gmail.com@gmail.com*

**Nwite S. (Ph.D.)**

*Department of Business Management, Ebonyi State University, Abakaliki, City Code: 480213*

*Email: saniilemona@gmail.com*

## ABSTRACT

The paper examined the relationship between Environmental Accounting Practice (EAP) reporting and Social Responsibility Performance (SRP) also the relationship between Environmental Conservation Cost (ECC) and Environmental Conservation Benefits (ECB). Data for the study were obtained from randomly selected six (6) manufacturing firms in Plateau and Kano states of Nigeria. Structural Equation Modeling (SEM) was used in analyzing the data collected. The model was statistically evaluated and validated using Composite Reliability (CR) and discriminate validity criterion. Results indicated a positive relationship between EAP and SRP and also between ECC and ECB. It is recommended that organizations in Nigeria especially the manufacturing outfits should in addition to preparation of annual accounts, disclose sufficiently in a separate document on environmental and social responsibility reports, the effects of their activities on the environment particularly, their concern about environmental conservation and associated benefits. The disclosure can be enforced through legislation and guidelines on environment of relevant agencies at federal and state level.

## ARTICLE INFO

### Keywords:

Environmental Accounting Practice, Social Responsibility Performance, Environmental Conservation Benefits, Positive Relationship.

### Article History:

Received: 19 Dec 2019

Revised: 13 Feb 2020

Accepted: 25 Apr 2020

Available Online: 02 Jun 2020

© 2020 The authors. Published by ZARSMI UAE. This is an open access article under the Creative Commons AttributionNonCommercial 4.0

## 1. INTRODUCTION

In modern time, increasing number of organizations all round the world are engaging in environmental management interims of conservation as part of their corporate social responsibility. Environmental conservation activity is one of the effective ways in which an entity can maintain a sound business relation with stakeholders as part of its social responsibility (Guishe & Burlta 2007). The issue of environmental conservation requires internal business decision, for proactive environmental management activities. It is in relation to this proactive action that accounting developed to assist organizations to accurately identify, assess, measure investment, cost and benefit of activities related to environmental conservation. Also by providing an insight into the potential benefits of investment in its environment and associated costs using environmental accounting, an enterprise can in addition to improving the transparency of its operation will also be able to make rational and informed decisions relating to how it can deal with environmental issues. Environmental accounting (EA) emerged to address the limitations of convectional management accounting as it has broaden the scope of accounting by considering and reporting the effect of business activities on the environment as businesses are not only held accountable by stakeholders for profit they make but also for how they take care of their environment from where resources are derived (Walder, 2009; Jack & Ali, 2011). These environmental activities are expected to be included in the annual reports of companies to communicate in clear terms, the economic benefits created by environmental activities and associated costs (shane & Datti 2012; Marrte & moore, 2014).

The need for environmental reporting as part of entity's corporate responsibility has tremendously increased nowadays due to disasters that continue to occur around the world. Some of these ugly incidence according to Nkkole (2008), Chamberlin (2010) include the union carbide disaster at a pesticide factory at Bhopal, India in 1984 where over 3800 persons died with many left disabled, the explosion at the Chemobyl nuclear power that occurred in 1986 at former Soviet Union now Russia where some harmful radioactive particles were released, the oil spill from tanker Exxon valdez in 1989 at Alaska, USA which affected over 36000 migrating birds and aquatic animals and the ever damaging effect of oil

exploration activities in the Niger Delta region of Nigeria that continue to damage the environment making the region inhabitable for both humans and animals. In Nigeria though the issue of environmental accounting and social responsibility are not explicitly provided for in Companies and Allied Matters Act (CAMA), Layo and Hameed (2017) observed that many organizations into manufacturing have chosen to elaborately disclose in their annual reports, information relating to pollution control using recyclable materials, developing environmental friendly products and the effects of their operations/activities on the environment in which they operate. On the contrary Talim and Kayode (2017) viewed that the practice of environmental reporting by companies in Nigeria is not yet common. Collaborating Talim & Kayode (2017) Pukle (2018) observed that while financial statements of most enterprises especially manufacturing firms fail to provide information on environment and social responsibility efforts, quite a few do provide but in a scanty and insufficient manner as critical areas such as company's environmental policy, environmental management system of the entity, money spent or provided for to conserving the environment, extent of compliance with any environmental regulations and organization's accounting policies relating to reports on environment are not adequately captured in the annual statements of companies in Nigeria.

Ofor and Maduna (2019) echoed the views of Talim & Kayode (2017) and Pukle (2018) stating that scanty reports on socio economic effects of business activities on the environment impairs the ability of enterprises to establish a clear relationship between environmental accounting practice and social responsibility compliance vis-à-vis the relationship between cost of environmental conservation and associated benefits. Ability to report in an unambiguous manner the nexus between environmental accounting practice and social responsibility, costs and benefits of environmental conservation are critical and germane to transparency, true and fair reporting (Tim & Kitto, 2011; Boateng, 2012; Rislán, 2016). The social responsibility issues surrounding the operations of many companies in Nigeria are centered on the questions of how much of the resources of these enterprises are devoted to tackling the many challenges in their operating environment are transparent disclosure of same for harmonious relation. The prevalent rate of issues of hostility and agitations of hosting communities of manufacturing companies in Nigeria are founded on doubts of how much of the enormous resources of these enterprises are channel toward conserving the environment that provide most of the input (Tim & Kayode, 2017; Pukle, 2018). Good harmonious relation of companies with host community or communities to a greater extent, is a function of much of the organizational finances in curbing issues of its social responsibility and environment of the host community. Social responsibility performance and deliberate action of an enterprise to reduce the negative impact of its operation on the environment are critical to business existence as faithful reporting it triggers good relation with all stakeholders.

### **1.1 Objective of the study**

The general objective of the study is to examine the relationship between environmental accounting practice, reporting of entities and performance in terms of curbing the negative effects of business activities on the environment in which they (businesses) operate. However the specifics are as follows: To examine the relationship between accounting practice and reporting of manufacturing entities and social responsibility performance in terms of environmental conservation. To ascertain the relationship between environmental conservation cost (ECC) of manufacturing enterprises and environment conservation benefits (ECB).

### **1.2 Hypotheses**

To guide the study, the following conjectural statements are put forward:

H1: There is no relationship between environmental accounting practice, reporting and social responsibility performance of entity.

H2: There is no relationship between ECC and ECB.

## **2. LITERATURE REVIEW**

### **2.1 Conceptual Clarification**

Environmental Accounting (EA): Ofor and Maduna (2019) defined EA as the practice of using traditional accounting and financial principles to calculate the costs that business operations/activities will have on its environment. The basic function of EA is to provide quantitative information of financial nature, the cost of environmental activities of a business entity and the benefits of such activities to its immediate/host community. Thus, EA is that branch of accounting structured to identify measures that enable companies communicate its activities on environmental conservation efforts and associated benefits (Tim & Kitto, 2011; Ijisan Reni, 2013). Collaborating Tim & Kitto (2011) and Ijisan & Reni (2013), Rishan (2016) viewed EA as a procedure that allows companies communicate its activities to identify the cost of environmental conservation activities, the benefits of such activities, provide the best possible means of quantitative measurement in monetary value or physical units and support the communication of results. The positive end result of environmental conservation activities for which EA aids is prevention of all negative impact/effects of business operation in the environment. Thus, Boateng (2012) stated that EA is that aspect of accounting that helps organizations to quantify in monetary terms the cost of prevention, reduction and/or avoidance of environmental impact, removal of such impact for restoration and associated benefits. Generally, EA is set is a set of approaches and principles employed by management of

entities to provide, insight into the physical flows, costs and anticipated benefits that energies successful completion of environmental conservation activities that are in facets. The facets according to satu and Paulo (2016) are essentially two namely: Environmental conservation costs (Monetary value) and environmental socioeconomic benefits (physical units and monetary value). Accurate quantitative measurement of data using EA relating to each of the facts is an effective way to identifying and measuring investments of organization in its environment. EA data is not only used by companies internally, but also externally, by public for information about social responsibility concern of an entity. Thus, Fadile and Motten (2016) viewed that EA information in annual reports of entities are critical as the information is a disclosure of performance in terms of social responsibility and accountability. The aim of the disclosure is to enable enterprises achieve sustainable existence and maintaining harmonious relationship with the host community while pursuing effective and efficient environmental conservation (Boateng, 2012; Fadile & Motten, 2016).

Social Responsibility (SR): There are divergent views regarding the concept of social responsibility. This is because of different expectations as regards what businesses suppose or ought to do in different countries across the globe. For instance in Britain, the society see social responsibility as good industrial relations (Mamman 2004). In, Germany, social responsibility is seen as the extent to which workers participate in the decision making process of the organization they work (Yusuf & Abdullahi, 2016). In USA and Nigeria, social responsibility is regarded as company's performance in relation to pressing societal issues such as that of physical environment among others (Nwachukwu, 2007). Generally, SR is an objective and sincere concern for the welfare of the society that restrains individual and corporate behavior from harmful and destructive activities in the society (Nwachukwu, 2007). Areas where businesses owe most social responsibility to society is environmental conservation in terms of preventing water, air, odor, noise pollutions, vibration, ground contamination, land degradation etcetera,.

## **2.2 Empirical Review**

Ralf, Mustafa and Mehmet (2016) did a study on environmental accounting practice: Analysing the extent and qualification of environmental disclosures of Turkish companies. The aim was to analyse the extent and qualification of environmental disclosures of publicly quoted firms and how it varies from sector to another. Data for the study were obtained from annual activity reports of companies listed on the corporate index (BIST – XKURY) Istanbul. Content analysis was the methodology used to measure the extent of environmental disclosure. It was found that information about environment are disclosed in various variables against what the firms suppose to disclose. Likaodui and Osei (2019) conducted a study on social and environmental accounting reporting and financial performance in Ghana. The aim was to ascertain the effect of social and environmental disclosure on the financial performance of companies registered on Ghana Stock Exchange (GSE) over a period of three (3) years (2015-2017). Data for the study were obtained from the annual statements of all registered companies on GSE. The analysis was done using regression model and t-test. Findings suggest that there is positive correlation between social and environmental accounting reporting and companies' financial performance. Mohammad, Sutrisno and Prihat (2013) did a study on the effect of environmental performance and environmental information disclosure as medication on company value. The aim was to examine the effect of environmental accounting implementation on company value. Using purposive sampling technique, 59 companies were selected. Data obtained from the companies were analyzed using partial least square (PLS). Results indicated that EA implementation affects company value.

Gilbert (2018) examined the effect of environmental accounting, corporate social responsibility and corporate performance on corporate reputation. The aim was to investigate the effect of moderating variable of corporate reputation on environmental accounting, corporate social responsibility with corporate performance. Data for the study were obtained from manufacturing companies listed on Indonesia Sstock Exchange (ISE) for 2014-2016. The results of regression analysis indicated that variable corporate reputation, EA and social responsibility simultaneously influence corporate performance and value. Hamzah, Ahmed, Ghaleb and Faten (2018) did a study on environmental strategy, environment management accounting and organizational performance: Evidence from the United Arab Emirate (UAE) markets. The aim was to examine the association between environmental strategy and environmental management accounting usage. Data for the study were collected from companies listed on UAE stock markets. Results of structural equation modeling showed that environmental strategy positively affects the level of environmental management accounting and also a positive relationship between environmental management accounting and organizational performance. Amer, Hamza, Emad and Ali (2018) examined the role of EA in sustainable development of the environment. An empirical study. The aim was to explore the role of EA in sustainable development of the environment. The exploratory review indicated that good environmental accounting practice is vital for sustainability development as it helps organizations in focusing on ecosystem services.

Toyin (2017) conducted a study on EA: A tool for conserving biodiversity in tropical forests. The study aimed at estimating the rate of deforestation and its effect on biodiversity for accounting purpose. The study was conducted in the forest reserves of Osun state-Nigeria. Data obtained from the records of the forest management department were analyzed using Logit Regression Model (LRM), it was found that a per capital annual cost of over N2 billion loss were recorded due to depreciation of biodiversity.

### 2.3 Theoretical Framework

The study is anchored on legitimacy theory derived from the concept of organizational legitimacy as defined by Dowling and Pfeffer (1975). The theory posits that organizations continually seek to ensure that they operate within the bounds and norms of their respective societies. In adopting the legitimacy theory, perspective, a company would voluntarily report on activities if management perceive that those activities were expected by the communities in which they operate (Deegan, Rankins & Vought 2000; Cormier & Gordon, 2001; Deegan, 2002). The theory assumes that there is a social contract between a business and the society in which it operates (Shocker & Sethi, 1973; Patten 1992; Mathew 1993; Deegan, 2000). Where society is not satisfied that organization is not operating responsibly in a legitimate and acceptable manner, then, the question of legitimacy will arise which may sometime lead to seizure of operation which ultimately terminates the contract (Deegan & Rankin, & 1997). Embedded in the assumption also is the dynamic and ever changing nature of societal expectations.. The non static expectations of business therefore, require organizations to be responsive to the society and the environment in which they operate at all times (Deegan, 2000). Where managers perceive that organization's operations are not commensurate with the society as embedded in the contract then, remedial actions may be taken to legitimate (Dowling & Pfeffer, 1975). For legitimate remedial actions to have effect on external parties (society and other stakeholders), it should be accompanied by public disclosure in annual reports (Cormier & Gordon, 2001). The emphasis of theory is on justification of existence legitimacy of business in the society through satisfaction of societal expectations and disclosure in annual statements. The theory is therefore relevant to this study for the fact that environmental conservation activity is one of the ways manufacturing businesses can justify and legitimate their existence in Nigeria given the enormous damages to the environment caused by operations of manufacturing firms in the country (Tim & Kayode, 2017).

### 3. METHODOLOGY

Data for the study were obtained primarily through questionnaire distributed to senior managers of six (6) manufacturing firms namely, Nasco Biscuit company, Nasco Carpet manufacturing company, Dangote Cement manufacturing company, African Textile manufacturing company, Nigerian Spinners and Dyers and Ajaokuta Iron and Steel company in Jos, Plateau state, Kano state and Kogi state Nigeria. The questionnaires were structured to reflect five (5) point scale. EA practice (EAP), Social Responsibility Performance (SRP), Environmental Conservation Cost (ECC) and Environmental Conservation Benefits (ECB) were measured using seven (7) indicators for each. Respondent are to state their perception of how they strongly agree or disagree with each statement of the construct. Out of forty two (42) questionnaires distributed, seven (7) for each firm, twenty eight (28) of them were returned representing approximately 67 percent response rate.

### 4. RESULTS

#### 4.1 Evaluation of Measurement Model (EMM)

Internal consistency reliability of each item of the construct was done using Composite Reliability (CR) and Discriminant Validity (DV). They provide a less biased estimate of reliability than Cronbach's Alpha (Peterson & Kim, 2013).

**Table 1.** Summary of measurement model -CR and Average variance Extracted (AVE))

Construct	Item	Factor loading	CR	AVE			
Environmental Accounting Practice	EAP1	0.764	0.684	0.784			
	EAP2	0.791					
	EAP3	0.846					
	EAP6	0.769					
	EAP7	0.828					
	Social Responsibility Performance	SRP1			0.835	0.815	0.911
		SRP3			0.745		
SRP4		0.731					
SRP5		0.913					
Environmental Conservation Cost	SRP7	0.863	0.734	0.652			
	ECC2	0.749					
	ECC3	0.811					
	ECC4	0.742					
	ECC5	0.826					
	ECC6	0.832					
	ECC7	0.793					
Environmental Conservation Benefit	ECB1	0.869	0.821	0.743			
	ECB2	0.714					
	ECB4	0.801					
	ECB5	0.756					
	ECB6	0.825					
	ECB7	0.761					

Source: Computation using R – Statistical package



The result in the Table 1 above indicate that all loadings are higher than 0.7 except EAP 4,5 SRP 2,6, ECC1 and ECB3 which have been removed as recommended (Hair Hult, Ringle& Sarstedt 2017)

#### 4.2 Discriminant Validity

The accepted value of DV obtained from the square root of AVE should be more than 0.5 (Fornell & Larcker, 1981; Hair et al 2017)

**Table 2.** Discriminant Validity Evaluation of Measurement Model.

Construct	EAP	SRP	ECC	ECB
Environmental Accounting Practice	0.885			
Social Responsibility Performance	0.052	0.954		
Environmental Conservation Cost	0.134	0.214	0.807	
Environmental conservation benefit	0.165	0.053	0.126	0.862

Source: computation using R – statistical package

**Table 3.** Structural Model Analysis (Hypotheses Testing)

Construct on Relationship	Standard Beta	Standard Error	t-value	p-value
EAP => SRP	0.193	0.037	4.71	0.000
ECC => ECB	0.342	0.068	5.03	0.012

Source: Computation using R-Statistical package.

## 5. FINDINGS AND DISCUSSION

The EMM of the study is proven as the CR and AVE loading for all items of the construct are higher than 0.7 with DV values of 0.885, 0.954, 0.807 and 0.862 for EAP, SRP, ECC and ECB respectively are all higher than 0.5. The figures therefore suggest that the internal consistency reliability and DV required values are satisfied (Fornell & Locker, 1981; Hair et al 2017). The internal consistency and DV satisfaction further confirm the extent to which all items on the scale measured the same thing with correlation among the construct achieved. The result of the structural model analysis used in testing the formulated hypotheses showed that EAP is positively related to SRP (B = 0.193, t = 4.7 and P < 0.000) indicating a positive and significant relationship between EAP and SPR. Therefore, the first hypothesis of the study is rejected. This result is consistent with that of Hamzah et al (2018), Mohammed et al (2018) and Likaodi (2019) that discovered in their studies that there is a positive correlation between social and environment reporting and organizational performance. Similarly, a positive relationship exist between ECC and ECB (B = 0.343, t = 5.03, and P < 0.012) and therefore the second null hypothesis is rejected. This therefore implies that environmental conservation activity of an enterprise is beneficial to the society (Tim & Kitto, 2011; Ijasa & Reni, 2013; Rislana, 2016). Harmonious industrial relation is one of those many benefits of EAP as the disclosure of the quantum of organizational resources deployed to solve environmental problem can trigger good relations (Satu & Paulo, 2016; Pukle, 2018). Unfortunately, the practice of this lofty branch of accounting (EA) is not common in Nigeria where companies pay little or no attention to environmental protection (Talim & Kayode, 2017)

## 6. CONCLUSION AND RECOMMENDATION

Environmental conservation practice and the disclosure of the cost and benefits of the practice using EA is one of the ways a business can relate harmoniously with its environment and the immediate community where it operates. Business stakeholders particularly the host community what to be communicated in clear terms, the benefits created by organization for resources taken from the environment in terms of conservation and preservation. Indicators of environmental conservation benefits include decrease in emissions of environmental pollutants, decrease in noise vibrations and odours, decrease in wastewater, decrease in total waste emissions, increase in ratio of recyclable waste, decrease in emission of hazardous waste and decrease in environmental pollutants contained in waste among others. Making public in the financial statements how much a business is contributing to a healthy environment is a key process in performing accountability rewarded by cooperation and fair assessment of the public. It is therefore recommended that:

Companies in Nigeria through appropriate legislation should be made to develop elaborate accounting policy relating to their environment, disclose in a sufficient manner in annual reports or in separate document titled Environmental and Social Responsibility Report, the effect of their activities on the environment. Entity's environmental report should sufficiently disclose organization's efforts on environmental conservation and associated benefits as part of social responsibility performance. For activities of companies that are mandated to have their accounts published, environmental protection agency in each state of the federation should develop a well defined guideline on environmental protection for such businesses. The guidelines should be followed in preparing a separate report of their operation tagged Environmental

Protection Report to be submitted either monthly, quarterly, or yearly for compliance scrutiny by appropriate agency of government.

## **REFERENCES**

- Amer, S., Hamza, A., Emad, A. & Ali, A (2018) The role of environmental accounting in sustainable development. The empirical study, *Journal of Applied Finance and Banking* 8(1), 1 – 5.
- Boateng, C.O (2012) Keys to effective business environmental impact assessment and sustainability reporting. *Journal of Business and Management Studies* 2(3), 63-77
- Chamberlin, A.A (2010), Issues of environmental management in developing and developed economies. *Journal of Environmental Science and Management* 2(5), 13-24.
- Company value. *International Journal of Business and Management Invention* 2 (10), 55 – 67.
- Cormier, D & Gordon, I (2001), An examination of social and environmental reporting strategies. *Accounting, Auditing and Accountability Journal* 14(5), 587-616.
- Deegan, C & Rankin, M (1997) The materiality of environmental information to users of annual reports, *Accounting, Auditing and Accountability Journal* 10(4), 562-583.
- Deegan, C (2000) *Financial accounting theory*, Sydney, Hill Book Company.
- Deegan, C (2002) The legitimizing effect of social and environmental disclosures: A theoretical foundation. *Accounting, Auditing and Accountability journal* 15(3) 282-311.
- Deegan, C, Rankin, M & Voght, P (2000) Firms disclosure reactions to social incidents: Australian evidence. *Accounting Forum* 24(1), 101- 130.
- Dowling, J & Pfeffer, J (1975). Organizational legitimacy: Social values and organizational behavior *Pacific Sociological Review* 18(1), 122 – 136.
- Fadile, L.T & Motten, W.N (2016), Balancing social responsibility of firms: Issues of note. *Journal of Contemporary Financial Studies* 1(3), 38-51
- Fornell, C & Larcker, D.F (1981), Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Gibert, R (2018) The effect of environmental accounting, corporate social responsibility and corporate social responsibility and corporate performance to corporate reputation. *Research journal of finance and accounting* 9(14), 68-79.
- Guishe, C.T & Bulta, O. (2007), Corporate social responsibility for good business relations. *Journal of Business and Management Studies* 2(4), 38 – 49.
- Hair, J.F, Hult, G.T.M, Ringle, C.M & Sarstedt, M (2017) *A premier on partial least square structural equation modeling* 2<sup>nd</sup> ed. Thousand Oaks C.A Sage.
- Hamzah, A, Ahmed, A, Ghaleb, A.R & Faten, K (2018) Environmental strategy, environmental management accounting and organizational performance; Evidence from UAE markets. *Journal of Environmental Accounting and Management* 6(2), 109 – 118.
- Ijasan, M.M & Reni, A (2013) Environmental accounting for social responsibility disclosure of firms *Journal of Accounting, Business and Financial Studies*, 4 (2), 34 – 47
- Jack, F & Ali, T.C (2011) Annual reports and accounts of companies: Expectations of users. *Journal of Auditing and Management* 3(2), 96 – 117.
- Lakaodi, Z. M & Osei, A.B.M (2019), Social and environmental accounting, reporting and financial performance in Ghana. *International Journal of Economics and Finance* 11(4), 82 – 93.
- Layo, B.E & Hameed, R (2017, Corporate social response of companies using environmental reporting: A case of manufacturing firms in Nigeria. *Journal of Management and Entrepreneurial Studies* 3(4), 76 – 87.
- Mamman, S (2004) Disclosure of corporate social responsibility performance in annual report in Nigeria *Journal of Finance and Accounting Research* 1(1) 14 – 23.
- Marrte, K & Moore, V (2014) strategies for developing environmental friendly products: lessons for manufacturing firms. *Journal of Environmental Science* 4(1), 31 – 43.
- Mathew, P.M (1993), *Socially Responsible Accounting* London Chapman & Hill.
- Muhammad, I, Sutrinso, T & Prihat, A (2013) Effects of environmental accounting implementation and Environmental performance and environmental information disclosure as medication on
- Nikkole, O.K (2008), Corporate social responsibility disaster management and corporate profitability. *Journal of Environmental Science* 1 (2), 12 – 23.
- Nwachukwu, C.C, (2007) *Management theory and practice* 2<sup>nd</sup> ed. Africana First Publisher Ltd.
- Ofor, N,K & Maduna, G.T (2019) imperatives of environmental reporting by manufacturing firms in Nigeria. *Journal of economic and entrepreneurship* 1(1), 97-113.
- Patten, D.M (1992), Intra – industry environmental disclosure in response to the Alaskan oil spill: A note on legitimacy theory. *Accounting, Organization and Society* 17(5), 471 – 75.
- Pukley, Y. T (2018), Omissions in financial reporting and transparency issues. *Journal of Commerce and Contemporary Management* 1 (2), 72 – 83.

- Ralf, P, Mustafa, N.D & Mehmet, N.S (2016) Environmental accounting practice: Analysing the extent and qualification of environmental disclosures of Turkish companies located in BIST – X Kury index *International Journal of Economics and Management Engineering* 10(7), 2395 – 3405.
- Rislan, T.R (2016) Effective environmental accounting policy: A strategic tool for good relations and survival. *Journal of Management and Entrepreneurship Studies* 2(3), 31 -42.
- Satu, W & Paulo, K (2016), The imperatives of environmental accounting and disclosures. *Journal of Contemporary Financial Studies* 1 (3), 12 – 22.
- Shane, B.N & Datti, H.G (2012) The social and economic benefits of environmental accounting practice. *Commerce and Management Review* 1(3), 34 -45.
- Shocker, A. D & Sethi, S.P (1973), An approach to developing societal preferences in developing corporate action strategies. *California Management Review* 13(8) 97 – 105.
- Talim, G.N & Kayode, O.S (2017), The practice of social responsibility accounting and the extent of reporting in Nigeria. *Journal of Finance, Management and Entrepreneurship* 2(3), 56 – 63.
- Tim, H & Kitto, U (2011).Environmental accounting and reporting: Barriers to effective disclosure. *Journal of Accounting, Business and Entrepreneurship Studies* 2(3), 21 – 34).
- Toyin, E.O (2017) Environmental accounting: A tool for conserving biodiversity in tropical forest. *Journal of accounting and taxation* 9(9), 109 – 118.
- Walder, O.R (2009). Accounting for environmental information. A necessity for harmonious business relations. *Journal of Strategic Management* 6(3), 116 – 128.
- Yusuf, M.A & Abdullaihi, D.Z (2016). Corporate social responsibility and financial performance of money deposit banks in Nigeria. Conference paper organized by Nigerian Accounting Association, march 8<sup>th</sup> -9<sup>th</sup>.