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THE EFFECTS OF ENVIRONMENTAL ACCOUNTING ON CORPORATE PERFORMANCE (AN EMPIRICAL STUDY OF SOME COMPANIES IN MAGZI OMBE)

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Abstract

Environmental Accounting is a crucial issue in today's corporate social responsibility. The present status and future focus gives every indication that it is going to capture a permanent position in the bundle of general purpose financial statements because protecting the environment is the social responsibility and commitment of companies towards the society. Our main objective in this study was to assess the effect of environmental accounting on corporate performance and these objectives were guided by four hypotheses and the variables to the study were environmental cost, profit from environmental activities, and management of firm's resources and identification of environmental liability. The area of study was Development and management mission for industrial zones (MAGZI) Ombe. The analysis was computed using descriptive and inferential data gotten through the use of questionnaires that is purely primary data was used. Forty respondents were taken from six companies as sample from the population. The one way analysis of variance and the Pearson correlation methods of data analysis were used in analyzing the data gotten. From the analysis, we concluded that Environmental Accounting has a significant relationship with the Corporate Performance of companies.

Keywords: Environmental Accounting, Corporate Social responsibility, Performance, Environmental Cost, Environmental Liability

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INTRODUCTION

The creation of accounting and reporting methods of environmental accounting is a great problem to the accounting profession. Accountants, as the main controllers and bearers of economic development can no longer close their eyes to the impacts of environmental issues on business management, accounting, audits and disclosure systems. This days, accountants are expected to take a forward-looking role in the environmental protection process with the coming of liberalization, removal of trade barriers makes it reasonable that the costs of environmental degradation caused by industrial activities should be brought into corporate accounts to the extent possible, that is why environmental accounting and reporting therefore is of great importance today. Accountants are encountering the problems of placing accurate and reliable value on environmental impacts. In the African context, no one has come up with an acceptable, reliable, objective variable measurement technique for environmental accounting. Therefore, the need for accounting and reporting on the environment has greatly been felt. Hence, accounting of environmental impacts and their disclosure in the annual reports has become an important part of corporate accounting and reporting systems.

According to Federation des Experts Compatibles Europeans (FEE) (FEE, 1995) Environmental accounting concerns the treatment of environmental impacts in the financial statement, and environmental evaluation. Environmental reporting is usually not in the same area as financial reporting because it usually takes place in a separate report or in separate section of the financial statements. Environmental accounting refers to the accounting for environment which is made up of our natural physical surroundings which includes land, air, water, flora(plants), fauna(animal life) and non-renewable resources, such as fossil fuel and minerals.

Environmental accounting is a system for assigning, arranging, controlling, managing and delivering data and information on the environment through monetary or physical indicators. It constitutes an indispensable tool for applying the sustainable development concept and now commands acceptance as a means of ensuring the preservation of the environment. Conventional instruments of economic analysis do not in fact enable political decision makers to measure reliably the effectiveness of the environmental policies implemented or the impact of economic policies on the environment. It is therefore necessary to adopt suitable environmental monitoring and information systems which can serve as a basis for political decisions.

Environmental accounting describes the effort of accounting standard setters, professional organizations and governmental agencies to get corporations to participate proactively in cleaning and sustaining the environment and to describe fully, their environmental activities in either their annual reports or stand-alone environmental disclosure. There is an

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increasing sense among stakeholders that traditional financial reporting, which for most large and listed companies is based on International Financial Reporting Standards (IFRS), is insufficient for the purpose of investing based on the lack of information about future activities. Apart from key areas such as performance and conformance, stakeholders are also interested in the sustainable value creation activities of the organisation.

In general terms, there is a call for more information. This is because advances in information technology (in particular, sophisticated software agents) mean that large quantities of data can be searched and analyzed based on the user's individual specifications. More specifically, however, there is a call for information that is forward-looking and/or non-financial in nature. This information may be quantitative or qualitative and is intended to supplement and not replace the existing set of largely historical, financial information contained in the financial statements.

There are two main reasons for this adjustment in the nature of the reportable information. First, it is recognized that many non-financial performance indicators lead financial performance indicators, and therefore providing more up-to-date information about the future. This is important in a world where rapid change means that companies must adjust in order to survive. Second, it can be argued that the complete reliance on financial performance indicators, which appears to privilege the interests of shareholders, is not consistent with the pluralist approach to business. Non-financial performance indicators, for example employee turnover and average delivery time, address directly the specific interests of these stakeholder groups.

Several of the reports share the concept of a business having key drivers of success that must be identified and communicated. Unfortunately, the terms used vary. The AICPA refers to 'critical success factors', Price Waterhouse (1997) refers to 'value drivers', while ICAS (1999) refers to 'drivers of company performance'. In the call for more forward-looking and non-financial information, we can identify four broad issues about which such information is considered valuable.

First, there is forward-looking information about strategy. Second, there is information relating to risk. Third, the reports all tend to discuss (although at different levels of detail) value drivers and related non-financial performance measures (or performance indicators). The fourth and final area where additional information is required is background information, principally about the business of the company and the people who manage it. The awareness of the environment and man's ability to cause damage started from the fifties of the 19th century. This concern had been repeatedly expressed in a series of international summits and consensus right from the sixties. The starting point that composed an organized through proves a large

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scale the celebrated public action of the club of Rome entitled “Limit to Growth that initiated a worldwide debate of economic growth at the expense of natural environment (Shil & Iqbal, 2005).

Between 1968 and 1972, two international conference were held to assess the problems of the global environment and more importantly, to suggest corrective action. The world conference held in stocking on global environment and more importantly to suggest corrective actions. The aim of the conference was to create a basis for comprehensive consideration with the United Nation of the problem of human environment and to focus the attention of the governments and public opinion to various countries on the importance of the problem (Touche, 1998). United Nations Conference on Trade and Development, an inter-governmental body and the principal organ of the United Nations General Assembly in the field of trade and development, plays a positive role in the matter of environmental accounting. As its part, Inter-Governmental Working Group of Experts on International Standards of Accounting and Reporting considered the feasibility of developing a possible "conceptual framework for environmental accounting."

The General Assembly organised the United Nations Conference on the Human Environment which was held in Stockholm in 1972 and led to the creation of the United Nations Environment Program (UNEP). UNEP has attempted to find solutions to various environmental problems, including pollution, deforestation, desertification, drought, depletion of the ozone layer and global warming. Much disagreement has risen regarding the scientific bases of environmental concerns and the questions of how to combine the goals of environmental protection and development. The work of UNEP on corporate environmental reporting was noted as was the need to supplement this work with national policies and programmes encouraging companies to use information produced for outside stakeholders also for internal management policies. This idea was discussed at a panel in conjunction with the 1998 session of the Commission for Sustainable Development.

The United Nations Economic and Social Council (ECOSOC) are interested in improving standards for financial disclosure, reliability and comparability of financial reports. In 1972, work by the international experts led to the creation of the Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR). ISAR’s standards are comparable to those in ISO 14000. In 1992 the United Nations’ conference on the environment (Earth Summit in Rio de Janeiro) marked a decisive turning point by approving Agenda 21 (outlined global strategies for cleaning up the environment and encouraging environmentally sound development) for sustainable development, which introduced the concept of environmental accounting as a tool for implementing coherent policies in this area.

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Statement of the Problem

Environmental accounting is very important for an organization to be able to control and improve a company's cost structure and environmental performance. An increase in energy consumption, earth quakes, tsunamis, hurricanes, drought and flood might occur frequently due to development and hence negatively affect the future and present generations. In other words the emergence of environmental issues which increased the awareness of environmental protection among society has pushed organizations to become environmentally responsible (Schaarsmith, 2005). Organizations that ignore these problems may not be able to maintain its position in the market place in the long run as this issue has become a threat to business survival (Sulaiman, M. & Mokhtar, N., 2010). The need to account for the environment and the economy in a joint way comes up because of the functions of the environment in economic performance and in the generation of human welfare. These functions include; the provision of natural resources to consumption and production activities, waste collection and treatment by environmental media and environmental services of life support and other human amenities. However new shortages of natural resources threaten the sustained productivity of the economy and economic production and consumption activities may destroy environmental quality by overloading natural sinks with waste and pollutants. By not properly accounting for the private and social cost of using natural resources and the depletion of the environment, conventional accounts may send wrong results of progress to decision makers who may then set society on a non-sustainable growth and development path.

The increase in environmental problems and the award of ISO 14001 Certificates to organizations that are environmentally conscious has moved governments to encourage and promote environmental accounting within countries (Simkins, 2004). Therefore accounting is facing the problem of measuring and accounting for environmental effects and management of environmental performance. Environmental accounting is the provision of actual environmental cost incurred to stakeholders of an organization (Deegan, 2003).

According to (Holt D. & Barkemeyer, R., 2012) there is an increasing trend to judge an enterprise in relation to the community in which it operates. The impact of activities of the organization on the environment with respect to pollution of water, air, land and abuse of natural resources are coming under the scrutiny of government, shareholders and citizens. Unless proper accounting work is done either by the individual organizations or by the government itself, it cannot be determined that both have been fulfilling their responsibilities towards the environment.

Given the far-reaching changes in the general environment, business practices, and business information technology, it is not surprising that the relevance of the traditional

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accounting model is being called into question. Five key features of the traditional accounting model are coming under attack. The arguments being presented by critics are as follows;

i. Companies are no longer relatively stable groupings of the factors of production hence the fundamental entity and going concern assumptions are limiting.
ii. The periodic nature of current reporting sits uncomfortably with the real-time nature of modern information flows.
iii. The high degree of information aggregation is no longer necessary or desirable, since sophisticated software agents reduce the problem of information overload.
iv. The historical, backward-looking perspective of the traditional model is not fully consistent with the manufacturing and commercial flexibility now required for company survival and success. As the pace of change quickens, the past becomes a less useful predictor of the future.
v. Finally, the traditional model, rooted in financial information, is shown to be incomplete and partial when set against the broad range of financial and non-financial performance measures now widely accepted as useful indicators of corporate success.

As a consequence of this misfit between the traditional accounting model and the modern business world, various organizations around the world have begun to examine the future of external reporting. The two countries that have been at the forefront of this debate are the US and the UK. The American Institute of Certified Public Accountants (AICPA) (1994) report represents a significant point in the development of this debate. Although not a turning point, this report marks the start of the latest phase in the ongoing discussion.

The limited awareness of environmental costing principles and methodology has become an important issue to be addressed. If environmental issues and activities that are vital are not disclosed, financial statement cannot be said to reveal state of a “true and fair view of affairs”. That is, financial statements fail to provide useful information, on a timely basis. Since current requirement for reporting on environmental issues is voluntary, it is observed from most financial statements of corporate organizations that it has engendered disclosures of information which totally exclude environmental issues.

In the recent times there has been an increased awareness of the interaction between firms and environment in which they operate, this enlightenment has been sharpened by concerns about resources depletion, resources scarcity, environmental degradation and the activities of these firms that lead to the depletion of the ozone layer and thereby causing an imbalance in the environmental system. The increasing concern about environmental degradation, resources depletion and the sustainability of economic activity have made the development of Environmental accounting and corporate performance an area of significant

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interest in the business world and Cameroon is not an exception. The success or failure of a company may be determined not only by the products or services it deals with but also by the complexity of it environment. Therefore the need for an empirically study to know the Effect of Environmental Accounting on Corporate Performance in MAGZI Ombe.

The following are the research questions;

i. How does environmental cost influence corporate performance?
ii. How do profits from environmental activities affect corporate performance?
iii. To what level can environmental accounting help firms manage their resources?
iv. How does environmental liability affect corporate performance?

Objectives of the Study

The main objective is to assess the effect of environmental accounting on corporate performance on some selected companies in MAGZI Ombe. The specific objectives are;

i. To ascertain the extent to which environmental cost influences corporate performance.
ii. To evaluate how profits from environmental activities influences corporate performance.
iii. To evaluate how environmental accounting can help firms manage their resources.
iv. To assess the effect of environmental liability on corporate performance.

Research Hypotheses

H_{01}: Environmental cost has no significant effect on corporate performance.

H_{02}: There is no significant effect on profit from environmental activities on corporate performance.

H_{03}: Environmental accounting has no significance in a firm's resource management.

H_{04}: There is no significant effect of identification of environmental liability on corporate performance.

Significance of the Study

Environmental accounting ensures efficient and cost effective use of natural resources, protecting nature, preventing or reducing pollution by avoidance of things that cause it, improving public policy decision making towards sustainable development and providing industrial environmental performance information. This study can be important to the various groups of people.

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The study would add the existing literature on environmental accounting and the limitations to the study will bring up new areas of research for other researchers.

The government will also benefit from this study since environmental national accounting considers national level accounting with a particular focus on natural resource stock and flows, environmental cost, externality cost which aids in decision making on matters that concern the economy.

LITERATURE REVIEW

Conceptual Literature

Environmental Accounting

Environmental accounting is a term with a variety of meanings. Environmental accounting is the identification, measuring and reporting of environmental specific costs, such as liability costs or waste disposal costs. Environmental accounting involves any costs and benefits that come as a result of changes to a firm's products or production processes, where the change also involves a change in environmental impacts (James, 1998). He further highlight that environmental accounting information is not the product of accountants, nor is it used only by accountants. Instead, it is any information which has either explicit or implicit financial content that is used as an input to firm's decision making. Product designers, financial analysts, and facility managers are also users of environmental accounting data. He stated that almost any type of information collected and analyzed by firms will qualify. Examples include input prices, research and development studies that relate production processes to physical outputs and legal marketing and financial analyses. Environmental Accounting, when well managed and used can be of great benefit to the companies and their stakeholders. Some of the benefits include;

a. It can help in bringing increased turnover for the companies because of improved company and product image through better costing and pricing of product.
b. It can make a company's share more attractive to investors and hence increase the share prices due to improved company or product image and environmental risk rating. It makes the shares attractive because investors need information on environmental performance and expenditure to make decisions.
c. Environmental Accounting can help the firm get better access and better interest rates and terms from lending institutions because of reliable environmental risk incidents.
d. Environmental accounting guarantees that the firm is respecting environmental laws which will help reduce its exposures to future financial loss arising from environmental

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incidents. It also leads to avoidance of penalties or fines given by Environmental Protection Agency in the countries where such legislation exists.

e. Environmental Accounting brings about an increase in the company's profile as a result of an increase in the area of environmental responsibilities.

f. Environmental Accounting promotes research and development which will eventually translate into significant reduction in many environmental costs through the design of more environmental friendly production process (Medley, 1987). That is it can lead to new inventions because organizations can recycle what was formerly considered waste to invent new products. (Dorwayiler, 2002)Environmental Accounting may attract incentives from the government in form of tax reduction and subsidies.

g. Environmental Accounting can lead to the development of Environment Management System (EMS) which is necessary for companies engaged in International Trade.

Corporate Performance

Corporate performance is a composite assessment of how well an organization executes on its most important parameters, typically financial, market and shareholder performance. Like the concept of business sustainability, corporate health is now considered to involve not only financial considerations but also other factors including social responsibility and reputation, innovation, employee morale and productivity. As such performance is no longer measured only on key performance indicators such as revenue, return on investment, overhead and operational costs.

Corporate performance can also refer to the collaborative accomplishment, successes and failures of an organization.

Corporate Reporting

Corporate reporting refers to the disclosure and presentation part of reporting which includes integrated reporting, financial reporting, corporate governance and corporate responsibility. Corporate reporting provides companies with corporate annual, non-financial and information disclosure reporting and consulting services to tell their stories to their stakeholders. According to (Deegan, C. & Rankin, M., 1996) Corporate environmental reporting refers to the way and manner by which a company communicates the environmental effects of its activities to particular interest groups within society and to society at large. Companies through the process of environmental communication may seek to influence the public's perception towards their operations. They attempt to create a good image.

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Green Accounting

Green accounting is a quantitative assessment of the cost and effectiveness of enterprises in environmental protection activities. Enterprises are required to have systematic records and reports and are guided to maintain a positive relationship with ecological environment to implement effective and efficient environmental activities. The final goal is to accomplish sustainable development. Green accounting is said to ensure weak sustainability which should be considered as a step towards ultimately a strong sustainability.

The major purpose of green accounting is to help businesses understand and manage the potential relationship between traditional economic goals and environmental goals. It also increases the important information available for analyzing policy issues especially when those vital pieces of information are often overlooked (Rout, 2010).

Environmental Liability

Environmental liability means all liabilities, obligations, damages, losses, claims, actions, suits, judgments, orders, fines, penalties, fees, expenses and costs (including administrative oversight costs, natural resource damages and remediation costs), whether contingent or otherwise, arising out or relating to (1) compliance or non-compliance with any environmental law, (2) the generation, use, handling transportation, storage, exposure, release, treatment or disposal of any hazardous materials, (3) any contract, agreement or other consensual arrangement pursuant to which liability is assumed or imposed with respect to any of the foregoing.

Environmental liability refers to the potential environmental cost that a buyer is conducting due diligence on the property and will be required to take ownership of the asset and all liabilities associated with the asset post acquisition. An environmental liability has been defined as an obligation relating to environmental costs that are incurred by any enterprise and the settlement of which is expected to result in an outflow from the enterprise in future.

Social Accounting

Social accounting can be defined as a set of organizational activities that deals with the measurement and analysis of the social performance of organizations and the reporting of results to concerned groups, both within and outside the organization.

According to (Bebbington J., 2007), social accounting is an inclusive field of accounting for social and environmental events which are as a result of, and are intimately tied to the economic actions of organization. (Gray R. K., 1996), defines social accounting as accounting for a range of social and environmental events rather than merely accounting for economic

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events. Social accounts are often presented in non-financial terms and are likely to be a combination of quantified non-financial information and descriptive, non-quantified information.

Sustainability Accounting

Sustainability accounting is the generation, analysis and use of monetarized environmental and socially related information in order to improve corporate environmental, social and economic performance for reporting to stakeholders.

Sustainability is defined as meeting the needs of the present without compromising the ability of future generations to meet their own needs. It is a global mission, a necessity and a reality. Sustainable development is aimed at a rational utilization of natural resources while maintaining capacity for renewal and ecological stability and respect for inter-generational solidarity. Given the fact that the whole world is facing the same problem, every individual is called upon to contribute and to communicate about the problems, the activities and the accomplishments in the different areas. Sustainability is a quality of a product pertaining to its creation, use and the impact its disposal has had on environmental, social and economic systems.

Corporate Social Responsibility

The world business council for sustainable development 2009 defines CSR as the commitment of business to contribute to the sustainable economic development working with employees, their families, the local community and the society at large to improve their quality of life.

The European Union commission 2002 defines CSR as a concept companies integrate social and environmental concerns into their business operation and their interaction with their stakeholders on a voluntary basis. From the above definitions, it is evident that CSR seeks to redefine how businesses interact with society.

Environment Management Accounting (EMA)

Environment Management Accounting (EMA) is the identification, collection, estimation, analysis, internal reporting, and use of materials and energy flow information, environmental cost information, and other cost information for both conventional and environmental decision-making within an organization. For companies that have the goals of saving money, especially environmental costs, and reducing environmental impacts, EMA provides essential information for meeting those goals. Accounting for the costs of past, present, and future environmental activities is becoming increasingly important.

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EMA is a business tool that provides essential data for corporate environmental management ranging from simple to comprehensive methods that link physical and monetary information for decision making.

EMA can therefore be defined as management of environmental performance through the benefits of environmental information in order to increase material efficiency, reduce environmental impact and cost (Bennett, M. D., Bouma, J.J., Wolters, T.J., 2002).

EMA is the development and implementation of an environment-related accounting system that helps enterprises manage their environmental and economic performance in the conduct of reporting and audit of corporate information (IFAC, 2009).

Full Cost Accounting

Environmental full cost accounting is a method of cost accounting that traces direct cost and allocates indirect cost by collecting and presenting information about the possible environmental, social and economic cost and benefits or advantages.

This is used to describe desirable environmental accounting practices. In management accounting, full costing means the allocation of all direct and indirect cost to a product or product line for the purpose of inventory valuation, profitability analysis and pricing decisions.

Societal Cost

Refers to cost which has an impact on the environment which results from company's production activities. These costs do not directly affect the company's bottom line. Societal costs are also known as external cost or externalities.

Environmental Cost

Environmental costs comprise of the cost of steps taken or required to be taken by a company to reduce adverse impact of its activities on the environment as well as costs driven by the environmental objectives of the enterprise.

Theoretical Literature

Although scholars have considered different theoretical views to explain the relationship between environmental accounting and corporate performance, till date theories have not been conclusive and empirical evidence has been mixed. In this section we look at the most eminent views.

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Stakeholder Theory

The theory was formulated by (Freeman, 1984), the basic proposition of the stakeholders' theory is that the firm's success is dependent upon the successful management of all the relationships that a firm has with its stakeholders. The Stanford Research Institute (SRI) refers to stakeholders as those groups without whose support the organization would cease to exist. Freedman came up with the thought that stakeholders refers to those people who can influence an organization's set goal or can be influenced through the process of achieving those goals. He also brings in entities like local communities, government departments and environmentalism to be considered as stakeholders. (Clarkson, 1994) Proposed that stakeholders can be seen as those who invest in real capital, human capital, financial capital and any meaningful value and partake in the risk factors. Later on, stakeholder theory scholars stated that stakeholders are people who allocate specific assets to companies and groups that are already taking risky capital. The early stakeholder theory's main area of interest was on shareholders and creditors. And then, as sustainability becomes more valued, scholars offer more comprehensive stakeholders: stakeholders are the employees and the customers; they could also be suppliers or pressure groups. But in most instances, stakeholders are categorized as follows: owners and shareholders, banks and other creditors, suppliers, buyers and customers, employees and customers, competitors and governments. The stakeholder theory's assumptions are;

a. Stakeholder Theory tends to assume that there exist a social contract between business and society that provides a moral basis for the social control of business activity.
b. It assumes that the actions of enterprises can be legally and morally constrained, and that moral (rather than merely legal) obligations can be placed on corporations because business is a creature of society.
c. It assumes value is produced by the enterprise itself and that stakeholders have a claim on some of this value because the enterprise is a creature of society.
d. It assumes that capitalists produce value, that all transactions are voluntary and that people can take legal action to recover damages in the case of harms caused by others. The moral responsibility of the owner of a business is that of any individual in society.
e. Stakeholder Theory implicitly assumes: most enterprises, indeed most corporations, have clearly identified owners who directly or indirectly control their activities and set the objectives for the enterprise. It is their interests that drive the enterprise, and it is they who have moral obligations to those with whom they do business and to those who are harmed or benefited indirectly by externalities.

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According to (Lawal, B. A., Florence, M. & Willy, M., 2016) in (Friedman & Miles, 2002), the concept is about how the organization should be and how it should be conceptualized. They state that the organization should be thought of as —a grouping of stakeholders and its purpose should be to manage the interests, needs and viewpoints of the stakeholders. Managers must manage the organization for the benefit of the stakeholders, ensuring that their rights are taken care of and those they participate in decision-making processes. The scholars argue that this is critical to the long-term survival of the corporation. In a broader view, the concept of stakeholder view can be expressed in the sense that the role and purpose of the organization is not anymore guided by profit-making and maximization of shareholder's wealth; but also to defend the image and values respecting the special relationships that arise and develop between it and all its stakeholders (Friedman & Miles, 2006).

(Myers, 1989), observes that the quest for development has led to massive destruction and degradation of the environment and natural capital. This of course, is a threat to sustainable development. The theory is much concerned with active management of the business environment, relationships and the promotion of shared interests in order to develop business strategies.

This theory is relevant because it is much concerned with the active management of the business environment, relationships and the promotion of shared interests in order to develop business strategies. Hence management should try and build a framework that will be responsive to the concerns of its stakeholders' environment which will lead to better performance by the firm.

Legitimacy Theory

The legitimacy theory is derived from the concept of organizational legitimacy, which has been defined by (Dowling, J. and Pfeffer, J., 1975) as a condition or status which exists when an entity's value system is congruent with the value system of the larger social system of which the entity is a part. When a disparity, actual or potential, exists between the two systems, there is a threat to the entity's legitimacy.

According to the legitimacy theory, a company's performance is legitimate when it is judged to be fair and worthy of support, that is, when it is socially accepted. Legitimacy can be considered as a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs and definitions (Suchman, 1995) .It is not the actual behavior of an organization that is important, but what society knows or perceives about the organization's behavior. This means that information disclosure is of high importance when establishing corporate legitimacy. The

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organization must appear to consider the rights of the entire society and not only the rights of its investors. If an organization fails to comply with the expectations of society, the social contract that has been negotiated with society could be revoked for example by imposing fines on the organization for not complying with environmental restrictions (Deegan, C., & Unerman, J., 2011) .The main assumption of the legitimacy theory is fulfilling the organisation's social contract which enables the recognition of its objectives. This in turn requires the adoption of a corporate social responsibility strategy affecting various areas of activity. That is this theory assumes that there is a threat or gap to organizational legitimacy.

The legitimacy theory stresses the necessity to avoid any threat to an organization's legitimacy, but is less specific on the consequence of being or not being legitimate. It looks at how firms manage their image when the social expectation is assumed and the targeted audience is not explicitly named.

Milne and Patten (2002), explain that organisations strive for a balance between organisational values and societal values. When it is achieved, there is a, so-called, social contract between the organisation and the society. If the society observes that the organisation fails to operate as the social contract, the societal values are not in accordance with the organisational values, so there will be a negative societal opinion about this organisation. Such a negative opinion might be a threat to the organisation's going concern. When the organisation is operating in such a manner that does not satisfy the society, it will break the organisation's social contract. The societal reaction will be, for example, reduced demand by consumers for the products or services from the organisation, and suppliers will limit the supply of resources to the firm and a broken social contract is referred to as a legitimacy gap. In response to this gap, organizations will do the best they can to repair or compensate the broken contract (Deegan c. , 2002) .

The relevance of this theory is that it explains how organisations ensure survival and growth by placing emphasis on the environment since the continual survival of the organisation is not based only on the efficiency and financial performance.

Ecocentric Theory

Ecocentrism is defined as a philosophical stance that acknowledges nature's intrinsic value, that is; the value nature possesses independently of human values (Kortenkamp, 2001). (Goodin, 1992) asserts that ecocentrism is based on the concept of 'deep ecology' which points to the reverence of all natural resources whether they are valuable to humanity or not; all natural resources have intrinsic value which surpass their ability to satisfy the needs of humanity. This

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implies that humanity is not only part of a universal natural entity, but also has a moral duty as the main custodian of environmental resources. The assumptions of this theory are;

a. Nature's intrinsic value: Nonhuman nature has intrinsic value, independent of human values and human consciousness, which places limits on the extent of human prerogatives to use and alter it.
b. Technology is viewed as a Faustian bargain, trading current gain against future survival.
c. Coexistence of Postmodern and Modern Positions in Ecocentrism.
d. The flourishing of nonhuman life requires a substantial decrease in the human population.
e. Subject-object dichotomy under the lenses of ecocentrism. Mankind being object and the environment subject.

According to (Eckersley, 1992), ecocentrism underscores the need for involving all stakeholders in the environmental decision making and also understanding that there are limits to the rights humanity has over environmental resources; the role humanity is expected to play as the most advanced ecological specie is that of a steward responsible for conservation and protection of environmental resources from exploitation and destruction. In a developing country like Cameroon, convincing people about the intrinsic value of environmental resources is a very serious issue due to corruption, high unemployment and economic inequality among others. For example, a poor peasant woman in a rural area who needs firewood to cook for her family cannot be easily persuaded to conserve communal forests which serve as her only source of heating fuel. The same also goes for a hunter told to preserve certain animal species faced with the danger of extinction, when hunting down these animals provide his only source of livelihood. Ecocentrism fails to embrace the capacity of human intellect and, thus, the whole of reality. Ecocentrism offers little guidance concerning the horrors of expanding poverty, human-rights abuse and massive displacement that currently beset much of the developing world. It fails to adequately address issues of unemployment, income inequality, and other social pathologies that grip the industrial world.

This theory is important to our study because it explains the effect that our environment has on human and non-human performance and hence a better study of the effect of the environment on the performance of firms.

Empirical Literature

This area reviews what other researchers have said about environmental accounting and corporate performance around the world.

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(Bassey, E., Sunday, O., & Okon, E., 2013) empirically studied the impact of environmental accounting on organizational performance with the case study being oil and gas companies operating in the Niger Delta Region of Nigeria. Data gathered were shown using tables and the data were analyzed using the Pearson's product moment correlational analysis method of data analysis. It was discovered with the help of inferential statistics that environmental cost has a good correlation with firm's profitability. It was concluded that environmentally conscious firms will significantly disclose environmental related information in financial statements and reports. The study suggested that company should adopt the same method of reporting and disclosing environmental issues for the purpose of control and measurement of performance and that accounting standards should be published locally and internationally and reviewed continuously to ensure compliance and to meet environmental and situational needs.

(Mohammad, I., Sutrisno, T., Prihat, A. & Rosidi, 2013), investigated the effect of environmental accounting implementation and environmental performance and environmental disclosure as a mediation on company value. 59 companies were selected using purposive sampling technique. Technique used to analyze the data gotten was the Partial Least Square (PLS). Outcome indicates that environmental accounting implementation is able to affect company value, environmental accounting implementation has an effect on environmental information disclosure, environmental information disclosure affects the company value, environmental performance also affects the company value, environmental performance has an effect on environmental information disclosure. However, environmental accounting implementation has not been able to affect company value via environmental information disclosure, as well as environmental performance has not been able to affect company value through environmental information disclosure.

(Jalaludin D., Sulaiman M., Ahmad Nazil, 2010) carried out a study on Environmental management Accounting (EMA), an empirical investigation of manufacturing companies in Malaysia. This study offered a review of literature regarding EMA adoption followed by a survey report. The study also explores the association between EMA, environmental performance and economic performance. To test the proposed relationships, a survey questionnaire was administered to accountants and environmental managers of manufacturing companies in Malaysia. The results of correlation analyses support the hypothesized relationships. That is the results to the study showed that adoption of EMA is not at an encouraging level.

(Al-Tuwaijri S., Christensen T., Hughes K., 2004) employed simultaneous equations approach to investigate the relations among environmental disclosure, environmental

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performance and economic performance. They used proxy for environmental performance using the percentage of total waste generated recycled as identified using the TRI database and measure environmental disclosure using a content analysis in four categories, potential responsible parties' designation, toxic waste, oil and chemical spills, and environmental fines and penalties, disclosures which are largely non-discretionary. Based on these proxies, Al-Tuwaijri et al. (2004) documented a positive association between environmental performance and environmental disclosure.

(Gray R.H., Bebbington J., 2001) Have examined the relation between corporate characteristics and environmental disclosures by taking a sample of 100 UK companies drawn from the Centre for Social and Environmental Accounting Research (CSEAR). The authors observe that the volume of disclosure in each individual year from 1988 to 1995 inclusive, together with the whole eight-year period, is related to the turnover, capital employed, number of employees and profit, as larger and more profitable firms have disclosed more environmental information. The study supports the opinion of (Haniffa, R. M. & Cooke, T. E. , 2002). It is expected that there will be a negative association between company listing age and the extent of disclosure. This is principally due to the upsurge of companies, particularly in the financial sector, that were recently listed in the Nigerian Stock Exchange.

Research Gap

However, previous studies failed to investigate the effect of environmental accounting and how it affects corporate performance of companies.

The present debate in this study is performance that is environmental accounting and effect on corporate performance. The first times environmental reporting were a public relations exercise which showed proof that companies are committed to their environment. However, such standalone environmental reports are never a substitute for clear disclosure of environmental matters like; cost in the financial statements. A company cannot be regarded as successful if it earns its profits by misusing natural resources and does not disclose the cost of these activities by its practices and performance.

As such there is a debate that requirements to disclose environmental cost (on waste, pollution) would encourage and hold companies accountable and responsible for misconduct. These are the research gaps this study wishes to bridge. It is for this reason this study investigated the effect of environmental accounting on corporate performance in some companies in MAGZI Ombe.

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METHODOLOGY

Scope of the Study

This research seeks to investigate the Effect of Environmental Accounting on Corporate Performance in some selected companies in MAGZI Ombe. This study is carried out in some selected companies in the industrial zone found in Ombe using questionnaires with the determinants of performance being; profits of the firm, being socially responsible and reputation of the firm based on its activities, ability to create new products or adjusting old products (innovation), employee morale and productivity.

Area of the Study

The area of the study shall be some selected companies in Development and management mission for industrial zones (Mission d'Amenagement et des Gestions de Zone Industrielles) (MAGZI Ombe). The Ombe industrial zone (ZIOMBE) is located in Ombe near Limbe, in the South-West region about 86km from Douala. This industrial zone has about 20customers installed within it for a viabilisation rate of 60%. ZIOMBE is a multi-sector industrial zone for hundreds of jobs whose nomenclature is as follows; industrialized agriculture (palm, rubber, banana, tea, fruits and others), Oil and gas exploitation and Marine and fluvial fisheries

Research Design

This research shall be designed to check the effect of environmental accounting on corporate performance of some selected companies in MAGZI Ombe. This work is descriptively focused and information used is both quantitative and qualitative in nature. The aim of quantitative research is to develop and employ mathematical models, theories and or hypothesis relating to our study. The measurement process is focused on quantitative research because it provides the essential connection between empirical observation and mathematical expression of quantitative relationships. Quantitative data refers to data that is numerical in nature like; statistics and percentages. The researcher is hoping the numbers will give an unbiased result that can be used for generalization to a large population.

Model Specification

The dependent variable in our study is corporate performance and our independent variable is environmental accounting and its elements are; environmental cost (EC), profit from environmental activities (PEA), management of firm's resources (MFR) and identification of Environmental Liabilities (IEL).

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Dependent variables = Independent variables

$Y = F(X)$ …………………………..…… Equation 1

$Y = X_1 + X_2 + X_3 + X_{4 \ldots} X_n$ ………………………… Equation 2

$Y = EC + PEA + MFR + IEL$ ………….. Equation 3

Where Y= dependent variables

X= independent variable

Our model is given as;

$Y = \beta 0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$ ……… Equation 4

Where

Y – dependent variable

X_1 - Environmental Cost (EC)

X_2 – Profits from Environmental Activities (PEA)

X_3 – Management of Firm's Resources (MFR)

X_4 – Identification of Environmental Liabilities (IEL)

ε - is the error term which is assumed to be normally distributed with mean zero and constant variance

β - Parameters to be estimated

β_1 - Coefficient of independent variable X_1

β_2 - Coefficient of independent variable X_2

β_3 - Coefficient of independent variable X_3

β4 - Coefficient of independent variable X_4

β0 - is a constant (intercept)

Sources and Method of Data Collection

In our study, we are going to use mainly primary data which will be gotten directly from the field using questionnaires. The questions in the questionnaire will be prepared such that the respondents give in detail the impact of environmental accounting in relation to reporting for the companies they work for.

Questionnaires are preferred because; they attempt to standardize the questions answered so that the responses can be comparable, they produce primary data which is the sole type of data used in our study and it is usually easy to analyze and they give the current opinion and impressions of the business operation in relation to the specific study of concern.

In order that the questions in the questionnaire are reliable and valid, some questions will repeat themselves but having a different presentation such that we can analyze if the

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respondents are sincere in their answers to the questions asked and we will also set questions that do not give direct answers that is answers that can be explained further.

The sample size to be used in our research work constitutes of six (6) companies in the Ombe industrial zone due to the constraints of gaining access to relevant information from all companies in this industrial zone. Random sampling technique will be used in our study. This sampling technique is good because it gives everyone an equal chance to be chosen or selected. The companies selected were;

a. Verteran Service company (VERSECO) dealing with AZA – AfriGaz.
b. TELLCO – PRESWOOD (Fine Furniture) dealing with processing of timber to furniture.
c. Metropolitant Plastic Limited dealing with the production of cartoon and plastic.
d. Brasseries du Cameroun dealing with drinks, water and a by-product used as feed for animals.
e. Pacific Plastic Company Ltd (PAPLAST) dealing with the production of bags.
f. SAMCO Paper Company Limited dealing with the importation and processing of reels of paper into books, sheets and packages.

Data Analysis

The data gotten from the questionnaires will be analyzed using one way analysis of variance and the Pearson correlation methods of data analysis. The one-way analysis of variance is used to determine whether there are any statistically significant differences between he means of two or more independent (unrelated) groups (although you tend to only see it used when there are a minimum of three rather than two groups). The choice of correlational survey research design is because it will be used to explore relationships between variables and to predict a subject score on one variable given his or her score on another variable. This method permits one to analyze interrelationships among a large number of variables in a single study. It also allows one to analyze how several variables either singly or in combination might affect a particular phenomenon being studied. The method also provides information concerning the degree of relationships between the variables being studied.

Ethical Issues

The following ethical issues have being followed and still have to be followed in our study;

Autonomy: this describes acknowledgement of the right of the individual to determine their own course of action in accordance with their own wishes and plans.

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Free and informed consent: Informed consent comprises three major elements which are information, voluntariness and comprehension. When providing information researchers must ensure that participants are given sufficient details about the nature of the research and the procedures involved; this should highlight the objectives of the study, potential risks and benefits and any alternative treatments must be made clear. Consent must be freely given and may be withdrawn at any time.

Veracity: Truthfulness is also central to obtaining informed consent since, without this, participants cannot exert their right to informed consent, justice or fairness.

Privacy and confidentiality: each individual is entitled to privacy and confidentiality both on ethical grounds and in terms of the protection of their personal and sensitive data under. Therefore each person has the freedom to decide the time, extend and circumstances under which they will withhold or share information.

Justice and Inclusiveness: In procedural terms, justice requires that ethics review processes involve methods that are fair and transparent, that established standards and procedures for reviewing research protocols are in place and that the process is effectively independent.

RESULTS

In order to analyze the data gotten from the questionnaires, some items were coded. These are;

a. Responses; Strongly agree (SA) = 5, Agree(A) = 4, Not Sure(NS) = 3, Disagree(D) = 2 and Strongly Disagree(SD) = 1
b. The variable of the study; Environmental Cost = EC, Profit from Environmental Activities = PE, Management of Firm's Resources = MFR and Identification of Environmental Liability = EL
c. Question numbers; the questions under each variable was changed to the abbreviation of the variable and a number added to it. That is environmental cost questions were numbered as EC1, EC2, EC3, EC4, EC5, EC6, EC7, EC8 and this order follows for the questions under the other variables.
d. The number of respondents for each statement was represented as "N"

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To ascertain the extent to which environmental cost influences corporate performance

Table 1: Presentation of Mean for Environmental Cost

Factor	N	Mean	StDev
EC1	40	3.975	1.23
EC2	39	4.308	1.055
EC3	39	1.025	1.025
EC4	35	3.4	1.311
EC5	39	4.128	1.08
EC6	40	3.975	1.074
EC7	40	3.575	1.238
EC8	40	3.975	1.121

Pooled StDev = 1.14372

From the table above, EC1 which was answered by 40 persons with a mean of 3.975(1.23) shows that most of the people who answered this question agree that environmental cost increases the firm's reported expenses that is their responses were mostly agree(4) and strongly agree(5) on a scale of 5. EC2 answered by 39 people with mean 3.975(1.055) shows that most the respondents agree and strongly agree that a good environmental performance practice will improve a company's relationship with its host community. EC3 had an N of 39 with mean of 1.025(1.025) shows that most respondents disagreed and others were not sure that when environmental costs are reported in financial statements, the firm coves the legitimacy gap. This was because most of them didn't understand the term legitimacy gap.

EC4 was answered by 35 persons and had a mean of 3.5 (1.311) which indicates that environmental accounting affects the firm's performance. EC5 with N 39 and mean 4.128(1.08) tells us that incurring cost in environmental activities makes the firm socially responsible and increases its reputation.

Question EC6 was answered by 40 persons having a mean of 3.975 (1.074) explains that the respondents strongly agreed that some environmental expenses do not result in a separate economic benefit but enhance utility of an existing asset. Question EC7 was answered by 40 persons and had a mean of 3.575(1.238) tells us that most of the respondents agreed or strongly agreed that identification of environmental costs associated with a product facilitates the reduction or elimination of associated losses and risk. EC8 had N as 40 with mean

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3.975(1.121) shows that most of the respondents selected agree (4) and strongly agree (5) that the disclosure of environmental cost in financial statements has an impact on the firm's growth.

Table 2: One-Way Analysis of Variance (One-Way ANOVA) for Environmental Cost

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Factor	7	35.67	5.096	3.9	0.000
Error	304	397.66	1.308		
Total	311	433.33			

From table 2, the F – value is 3.9 when compared to its closeness to one (1) it cannot be considered close since it is far above one which means that the null hypothesis is not true. A P – Value of 0.000 indicates that this result is statistically significant since it is less than 0.05. F – Value 3.9, P – Value 0.000 with degree of freedom (DF) of 7 using 5% significance level, we reject the null hypothesis and conclude that the is a significant relationship between environmental cost and corporate performance of firms.

Table 3: Model Summary for Environmental Cost

S	R-sq	R-sq(adj)	R-sq(pred)
1.14372	8.23%	6.12%	3.32%

The model to our study explains 8.23% of the variance between our dependent variable corporate performance and our independent variable environmental cost. That is a unit change in environmental cost explains the 8.23% of variation of corporate performance (Table 3).

To evaluate how profits from environmental activities influences corporate performance

Table 4: Presentation of Mean for Profits from Environmental activities (PE)

Factor	N	Mean	StDev
PE1	40	3.975	1.405
PE2	40	3.525	1.062
PE3	40	2.25	1.235
PE4	38	2.605	1.242
PE5	40	3.475	1.301
PE6	40	3.15	1.189
PE7	40	3.775	1.368
PE8	40	3.925	1.071

Pooled StDev = 1.23961

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From the analysis, PE1; The management of waste like the re-use of materials reduces cost and therefore increases profits is accepted since the mean is between the range of 3 and for that is 3.975(1.405) and this question is answered by 40 respondents. PE2 was answered by all 40 respondents and it had a mean value of 3.525, standard deviation of 1.062 which shows that most respondents agreed to the statement that the recording of a company's environmental information and performance practice will bring about good financial performance.

From the table, PE3 was answered by 40 respondents and has a mean of 2.25(1.235) indicating a higher number of disagrees and strongly disagree responses to the fact that profits from environmental activities does not affect the firm's performance. This shows that the respondents are for the idea that profits from environmental activities affect the firm's performance. PE4 had N as 38 and mean 2.605(1.242) shows that more respondents disagree that benefits gotten from environmental activities are not significant since the cost incurred is high. That is they think that the benefits gotten from environmental activities are significant and can cover the cost incurred.

PE5 has N as 40 and mean is 3.475 (1.301), this analysis agrees to the assertion that the measurement of environmental impacts is difficult therefore the benefits gotten from it cannot be clearly stated. PE6 has N as 40 and mean 3.15(1.189) shows that the level of agreement was not very high, some respondents explained that the increase in the firm's profit does not necessarily lead or imply an increase in employees pay, this increases in the profit will influence mostly the shareholders.

PE7 Profits from environmental activities improve the firm's financial performance. This statement resulted to a mean of 3.775(1.368) which implies that respondents strongly agreed to this assertion. PE8 the identification of environmental cost helps the firms create remedies to future environmental problems. This statement resulted to a mean of 3.925(1.071) which Implies that the respondents agree to this statement.

Table 5: Analysis of Variance (ANOVA) for Profits from Environmental Activities

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Factor	7	109	15.567	10.13	0.000
Error	310	476.4	1.537		
Total	317	585.3			

From table 5, the F – value is 10.13 when compared to its closeness to one(1) it cannot be considered close since it is far above one which means that the null hypothesis is not true. A P – Value of 0.000 indicates that this result is statistically significant since it is less than 0.05. F

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– Value 10.13, P – Value 0.000 with degree of freedom (DF) of 7 using 5% significance level, we reject the null hypothesis and conclude that the is a significant relationship between Profits from environmental activities and corporate performance of firms.

Table 6: Model Summary for Profits from Environmental Activities

S	R-sq	R-sq(adj)	R-sq(pred)
1.23961	18.62%	16.78%	14.36%

From table 6 profits from environmental activities has a variance of 18.62% with corporate performance. That is the remaining percent of 81.38% is explained by the other variables in the study.

To evaluate how environmental accounting can help firms manage their resources

Table 7: Mean for Management of Resources

Factor	N	Mean	StDev
MR1	40	4.075	0.859
MR2	40	3.675	1.347
MR3	38	3.658	0.909
MR4	40	3.8	1.114
MR5	40	3.625	0.979
MR6	40	3.85	0.802
MR7	40	3.925	1.228
MR8	40	3.55	1.26

Pooled StDev = 1.08010. MR = Management of Resources

MR1 with mean 4.075(0.859) shows a strong level of agreement that reporting of environmental issues helps firms present a true and fair view in the financial statement. MR2 with Mean 3.675 is above average for a range of five (5) hence we consider that more respondents agree that the re-use or sale of materials helps reduce the firm's expenses and leads to a better management of resources.

MR3 with N 38 and mean 3.658(0.909) indicated that people agree to the statement that greener production methods increase quality of your firm's products but many others are not sure because most respondents didn't understand the term greener production which resulted to many responses been not sure. MR4 gave a mean of 3.8 that is being in between agreed and

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not sure because environmental accounting does not have a direct link with the management of the firm's resources but rather it has an indirect link.

The implementation of Environmental Management System prevents and control environmental impacts and helps firms manage their resources as MR5 with a mean of 3.625 (0.979) tells us that the people agree to this statement though a good number disagree. Allocation of revenue for research and development on environmental impacts makes the firm more innovative as MR6 with mean 3.85(0.802) tells us that the degree of acceptance is slightly above average.

MR 7 with N as 40, having a mean of 3.925 (1.2280) indicates the high acceptance rate that when environmental activities like clean-up campaigns are carried out, it creates awareness of the existence of the company and reduces advertisement cost. MR8 with N as 40 an the mean 3.55 (1.26) indicates that the responses for agree are above the disagree and not sure responses.

Table 8: One-Way Analysis of Variance (ANOVA) for management of resources

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Factor	7	8.59	1.227	1.05	0.395
Error	310	361.653	1.167		
Total	317	370.242			

From our analysis, the F – Value is 1.05 this is closer to one (1) though above one therefore the null hypothesis can be considered true to an extent. The P – Value is 0.395 which is above 0.05 therefore this variable is not significantly related to our dependent variable corporate performance. With degree of freedom being 7 at a 5% level of significance with P-Value of 0.395 and F-Value 1.05 we accept the null hypothesis and conclude that the is no significant relationship between environmental accounting and management of the firm's resources hence no better corporate performance.

Table 9: Model Summary for Management of Resources

S	R-sq	R-sq(adj)	R-sq(pred)
1.0801	2.32%	0.11%	0.00%

R^2 is given as 2.32% which shows that the variance between management of firm's resources and corporate performance is very big since R^2 value is just 2.32% and the adjusted

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R^2 is 0.11%. this shows that 2.32% change in corporate performance will be explained by a unit change in management of resources.

To establish the effect of identification of environmental liability on corporate performance

Table 10: Environmental Liability

Factor	N	Mean	StDev
EL1	39	3.795	1.128
EL2	40	4.125	0.966
EL3	36	2.917	1.052
EL4	40	2.5	1.198
EL5	40	3.125	1.362
EL6	39	3.385	0.935
EL7	40	3.475	1.261
EL8	40	3.15	1.099

Pooled StDev = 1.13495

EL1 with N 39 and mean 3.795(1.128) tells us that many respondents agreed that the identification of the firm's environmental liabilities helps it move towards a sustainable development part. EL2 with N 40 and mean 4.125(0.966) tells us that the greater portion of the responses selected agree and strongly agree to the statement that Identification of environmental liabilities makes the firm environmentally friendly and increases firm's performance since the society prefers environmental friendly firms.

EL3 the Company has allocated adequate financial resources for liability identification. The mean of 2.197 (1.052) shows that majority of the response are disagree, strongly disagree and not sure therefore we assume that very few companies allocate adequate revenue for liability identification. EL4 My Company considers disclosure of future cleanup costs. The mean of 2.5(1.198) shows that very few companies consider this disclosure as necessary and they do it. From this analysis you can see that environmental accounting is appreciated for its goodness but not practiced.

EL5 was answered by all 40 participants but the mean of 3.125 (1.362) shows an insignificant acceptance that companies takes a proactive approach to identification and assessment that will avoid the inefficiencies. Meaning most companies do not identify environmental liabilities in their operation and books. EL6 was answered by 39 people but

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the mean of 3.385 (0.935) shows that most companies barely undertake review of current standards and practices with regards to recognition, and measurement of environmental related liabilities.

EL7 has N as 40 with a mean of 3.475 (1.261) this shows that the respondents agree that identification of environmental liability affects the firm's performance. EL8 has N as 40 with a mean of 3.15(1.099) which shows that very few people agree that companies report information on contingent environmental liabilities in their financial reports. We can assume here that very few companies report on this item.

Table 11: One-Way Analysis of Variance (ANOVA)
for Environmental Liability

Source	DF	Adj SS	Adj MS	F-Value	P-Value
Factor	7	71.25	10.178	7.9	0.000
Error	306	394.16	1.288		
Total	313	465.41			

From table 5, the F – value is 10.178 when compared to one (1) it cannot be considered close since it is far above one which means that the null hypothesis is not true. The P – Value of 0.000 indicates that this result is statistically significant because it is less than 0.05. The F – Value 10.178, P – Value 0.000 with degree of freedom (DF) of 7 using 5% level of significance, we reject the null hypothesis and conclude that the is a significant but weak relationship between identification of environmental liability and corporate performance.

Table 12: Model Summary Environmental Liability

S	R-sq	R-sq(adj)	R-sq(pred)
1.13495	15.31%	13.37%	10.84%

From table 9, the model to this study explains 15.31% of the variance between our dependent variable corporate performance and our independent variable environmental liability. That is R^2=15.31% and R^2 adj = 13.37% means that 15.31% of variation in the corporate performance be explained by a unit change in environmental liability. The remaining percentage of 84.49% is explained by other variables.

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Table 13: Pearson Correlation for all variables

Variables	EC	PE	MR	EL
EC	1			
PE	0.65**	1		
MR	0.69**	0.65**	1	
EL	0.39*	0.34*	0.32*	1

**Correlation is significant (P = 0.01) level and * Correlation is significant (P = 0.05)
EC= Environment Cost, PE = Profits from Environmental Activities, MR = Management of Resources and EL = Environmental Liability

From table 10 above profits from environmental activities when compared to environmental cost gives a coefficient value of 0.65 which falls between 0.50 and 1 shows a strong correlation. Management of resources and environmental cost gives a coefficient value of 0.69 which tell us that these two variables have a strong correlation. Environmental liability has a weak relationship with the environmental cost because the coefficient value is 0.39 which is less than 0.50.

Environmental liability has a weak correlation with profits from environmental activities since the value is 0.34. Profits from environmental activities have a strong relationship with management of resources. A coefficient value of 0.32 shows that identification of environmental liability has a weak relationship with the management of resources.

DISCUSSION

Discussion of Results

This study is carried out to investigate the relationship between the Environmental Accounting and the Corporate Performance and it is very essential in our world today since the environment is of great importance to our daily activities. From the results gotten in our analysis, very few people are aware of the existence of environmental accounting and therefore the practice of this system of accounting is very limited, this could be as a result of the lack of viable legislations, non-existence of proper enforcement of environmental laws, cost of implementation and lack of support from top management and directors which leads to poor performance. An organization can contribute towards sustainable environment by innovating and improving their products and processes in order to use raw materials more efficiently, reduce the waste generated from their processes, improve the waste disposal methods and improve the working conditions (Seetharaman et al 2007). To conclude, environmental Accounting has a significant relationship with the corporate performance.

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Discussion of Hypothesis

H_{01}: Environmental cost has no significant effect on corporate performance.

Table 2 indicated that Environmental Cost positively and significantly influence corporate performance. Having a P-Value of 0.000 which is less than 0.005 explains this relationship. . Different firms may consider different elements into environmental costs but it is important that all significant and relevant costs are incorporated for sound decision making purpose. The general picture, which emerges from current reporting, is that since the disclosures of environmental information are voluntary, there is a diversity of reporting practice. Large companies tend to report more environment information in their annual reports than the medium scale businesses; and the disclosure, tend to be more qualitative than quantitative despite the fact that there is a significant relationship between environmental cost and corporate performance.

H_{02}: There is no significant effect of profit from environmental activities on corporate performance.

Our analysis show that profits from environmental activities has a significant relationship with corporate performance. The benefits gotten from environmental impacts may be difficult to measure but this benefits when measure and compared to cost incurred they improve or increase the firm's reported profits and hence better corporate performance.

H_{03}: Environmental accounting has no significance in a firm's resource management.

Looking at our analysis, the results show that environmental accounting has no significant link with the management of firm's resources and therefore we accept the null hypothesis. Items like clean-up campaigns create awareness and hence reduce advertisement cost but the reduction in environmental cost is not significant and hence cannot really be considered that resources would be managed as a result. Greener production methods will lead to the production of better quality products but this does not guarantee the management of resources because these better methods may cause the firm to incur higher production cost and possibly more raw materials and hence resources will not be managed. Therefore environmental accounting has no significant relationship with the management of resources.

H_{04}: There is no significant effect of environmental liability on corporate performance.

From the responses obtained in the questionnaire and the results from the data analyzed, the environmental liabilities is an important aspect that has a great link with corporate performance, but we noticed that most firms are not reporting environmental impacts in their financial statements and the few firms that report this issues do not create provisions for identification of environmental liabilities.

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SUMMARY

With the increasing importance of environmental issues both locally and internationally, coupled with the increasing trend in the demand from stakeholders for environmental accountability and transparency this study investigates the effect of Environmental Accounting on the Corporate Performance and the main data used was primary data and it was gotten through the administration of questionnaires.

Based on the findings it was concluded that environmental cost is a critical determinant of corporate performance. Accounting for environmental cost in the financial statements increases the reported expenses of the firm but this increases are balanced or set off by the benefits gotten from the environmental impacts, by improving the firm's relationship with its host community, by making the firm socially responsible and increasing its reputation. Therefore environmental cost has a significant relationship with corporate performance.

From our results, profits from environmental activities have a significant relationship with corporate performance. In order to see if the firm is making or has made profits, expenses are subtracted from revenue therefore when we evaluate the cost incurred in carrying out environmental activities from the revenues gotten it gives a positive answer which leads to better financial performance. Though companies acknowledge that these profits are good for the firm's performance they have issues in measuring the environmental impacts and so they do not do complete recording of this impacts.

Our results show that environmental accounting does not affect the management of the firms resources. Environmental accounting can help the firm identify future risk and hence resolve it beforehand but this does not directly affect the firm's resources since income will be spent now for that purpose but a direct benefit will not be gotten now. Environmental accounting also encourages the re-use of materials, this helps reduce the cost of production and increases revenue from the sale of by-products but it does not have a direct effect.

Based on our findings the identification of environmental liability has a significant impact on corporate performance. Most firms are not able to identify their environmental liabilities since there are no environmental accounting standards and they barely account for environmental impacts but they all agreed that identifying these liabilities will help them avoid future problems and they will be able to present a true and fair view in their financial statement.

The findings show that there is a positive relationship between environmental accounting and corporate performance. The results also show that the disclosure of environmental information and performance will bring about an improved company's relationship with its host community. That is the more companies are willing to be environmentally friendly to the environment in which they operate, the more the host communities will be willing to serve as a

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support system for such a company. This will in the long run bring about an improved image and performance for the companies.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations have been outlined which may be useful to the stakeholders such as accountant, auditors, company management, investors, community members, the government and regulatory bodies in charge of setting standards.

This study recommends that a detailed and well spelt out environmental disclosure themes and evidence must be established to provide foundation for improving social environmental disclosure among companies. That is standard setting bodies should come up with guiding principles or accounting standards in order to improve the financial and non-financial environmental disclosures.

Adequate steps should be put in place to encourage companies to practice the culture of environmental audit. This process systematically assess how well a company's environmental management practices conform to green production goals and help diffuse green production practices through the organization.

The government should encourage managers of enterprises on the need to embrace environmentally friendly practices in order to restore and guarantee a conflict free atmosphere needed by the country.

Managers are advised in line with the proposition of stakeholder theory on the need to embark on social environmental sustainability activities and the disclosure of such activities in order to gain the continuous support of the society in which they operate.

There should be a creation of awareness of environmental accounting through adverts, seminars, articles in newspapers, implementation of laws in relation to environmental accounting practices and others. Because so many companies and people are not aware of the existence of environmental accounting practices and even those who are aware do not implement these practices properly. For example most firms treat environmental cost as part of overhead cost instead of treating it as a cost on its own and many other mistakes.

CONCLUSION

Generally there is no doubt that several studies have been conducted so far (still ongoing) on the examination of the relationship between corporate performance and the extent of environmental accounting but the outcomes of these studies are mixed. However the is no mandatory requirement for companies to undergo environmental audit and there are no

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generally accepted standards regulating the nature of the presentation of environmental concerns but from our findings, we discovered that companies which have solid environmental accounting practices have a higher performance than those that do not practice environmental accounting. We therefore conclude that there is a positive relationship between environmental accounting and the corporate performance of companies in MAGZI Ombe.

AREAS FOR FURTHER RESEARCH

Possible areas require more extensive studies to explore the causal mechanisms liking environmental accounting and profitability and to determine whether or not those relationships hold consistently overtime, Possible bodies that could be created to regulate environmental accounting practices, relationship between environmental accounting and green production practices, the deterioration of environmental resources and the profitability of firms, the evaluation of environmental accounting in relation to the performance of industries, the relationship between disposal of waste and the performance of companies, the effect of environmental accounting and corporate performance with the case study being a particular sector and also the use of both secondary and primary data.

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