

The Role of Accounting Disclosure on Environmental Costs in Improving Environmental Performance:

(A Field Study of The Cement Company in The City of Benghazi)

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Abstract: This study aims to show the importance of environmental costs, and the role of these costs to improve the quality of financial reporting in Libyan Cement Company in The City of Benghazi and offering the suggestions to develop it. To achieve the objectives of the study, the researchers developed a questionnaire contains (17) questions, distributed to (34) Financial Manager, Accountant and costs Account Manager, and Internal Auditor collected and used in the analysis, a one sample T-test was used however only (25) questionnaire has been returned. It seems to the researchers that there was the presence of environmental awareness and the company's strategy towards environmental issues, the study also showed there are obstacles that limit the application of measurement and disclosure of environmental costs. Moreover, it seems to the researchers that the measurement models for environmental costs increase the company's commitment to environmental responsibilities. The results of the study also showed the presence of a statistically significant relationship between applying measurement models to environmental costs and increasing disclosure of the company's commitment to its environmental responsibilities in the cement company in Benghazi, also there is a statistically significant relationship between environmental costs and the decision-making process in the cement company in Benghazi- at a significant level and finally, there is statistically significant relationship between accounting disclosure of environmental costs and improving environmental performance in the cement company in Benghazi - at a significant level. The study suggested some recommendations to develop the application of accounting for environmental costs and disclosure to provide appropriate information to rationalize and take

decisions in the Cement Company in Benghazi city, as well as the need for companies to protect the environment and provide funding and support to preserve the environment.

Keywords-component; Accounting Disclosure, Environmental Costs, Environmental Performance.

I. INTRODUCTION:

The problem of environmental pollution has received great attention in various countries of the world, due to the high rates of environmental pollution that arise from wastes resulting from the practice of many companies that carry out their various activities. These wastes have a clear impact on the environment, causing harm to humans, plants and animals, thus to the country's economy in general (Al-Amin, 2017).

From the above, this led to companies bearing additional costs to address their effects, whether to prevent damage to the environment or to treat it, also with the passage of time, this subject began about environmental accounting, which is considered one of the stages of development in the accounting approach. It is one of the pivotal issues in accounting science.

Environmental accounting has become a broad term that covers environmental performance activities at the local, regional, besides scientific levels with associated interactions with stakeholders, which include the processing of financial as well as non-financial information related to the

environmental impacts of various parties (Abdalmajeed, 2021).

This important role is achieved through accounting information related to the environmental activities performed by industrial companies in their financial statements as the main means of assistance in setting plans, making decisions, along with drawing up policies aimed at preventing, reducing, or minimizing environmental impacts.

Thus, disclosing as well as measuring the costs of damage and treatment of pollution have become necessary despite the difficulties facing these two processes. Measuring the costs of environmental pollution damage means determining the amount of damage caused to society as a result of industrial companies carrying out their activities.

Therefore, it is clear to us that environmental issues represent a major challenge for accountants through their analysis together with measurement of environmental costs alongside other costs, which adds a new advanced dimension to accounting, which previously looked at the financial plus monetary features while neglecting the environmental aspects of the company.

The challenge here lies on the difficulty of disclosing as well as measuring some environmental costs plus how to address them. Furthermore, it is necessary to find methods for measuring and disclosing the environmental obligations that arise from industrial companies carrying out their activities, which leads to the depletion of part of the surrounding environment.

II. THE PROBLEM OF THE STUDY

The problem of the research can be highlighted by the following question: What is the role of accounting disclosure of environmental costs in improving the environmental performance of a cement company in Benghazi?

III. HYPOTHESIS OF THE STUDY:

Companies are limited to the cost elements used in production, which are materials, wages, and services, which no longer reflect the actual value of the production factors used. In fact, the environment has become one of the most important factors affecting the cost of production, therefore the need has arisen to measure and analyze environmental costs. To answer the study question, the following hypotheses can be proposed for the study:

H01: There is no statistically significant relationship between applying measurement models to environmental costs and increasing disclosure of the company's commitment to its environmental responsibilities in the cement company in Benghazi- at a significant level ($\alpha = 0.05$)

H02: There is no a statistically significant relationship between environmental costs and the decision-making process in the cement company in Benghazi- at a significant level ($\alpha = 0.05$)

H03: There is no statistically significant relationship between accounting disclosure of environmental costs and improving environmental performance in the cement company in Benghazi - at a significant level ($\alpha = 0.05$).

IV. OBJECTIVES OF THE STUDY

The objectives of the study can be defined in the following points:

- clarify the role and importance of environmental costs improving the environmental performance to rationalize the decision-making process in the company under study.

- clarifying the role and effectiveness of environmental accounting in providing appropriate information about environmental costs.

- Failure to disclose environmental costs in the financial statements leads to inaccurate information and decisions based on wrong

foundations and weakens the company's competitive ability to keep pace with the challenges facing companies in light of industrial and economic expansion.

-Identify about measurement and accounting disclosure of environmental costs.

-Study and analyze the nature of the relationship between measuring and disclosing environmental costs and the efficiency of environmental performance.

-Explaining the role of accounting disclosure of environmental costs in improving the environmental performance of a cement company in Benghazi.

V. IMPORTANCE OF THE STUDY

The study derives its importance from the importance of its subject by highlighting the positives that companies achieve with regard to improving environmental performance, which in turn leads to improving their performance, as companies incur additional financial burdens to protect the environment and improve their image before society, by highlighting the role of accounting in measuring and analyzing environmental costs and their inclusion in the total costs when determining the results of activity operations and disclosure in the financial statements.

VI. PRACTICAL STUDIES

The study Al-Fakhri & Al-Waridi (2016) the study aimed to find out the impact of accounting measurement of environmental costs and disclosing them in the financial statements to improve environmental performance through an exploratory study of the viewpoint of academics. The results of the study showed, through statistical analysis when testing the hypotheses, that there is a relationship to the impact of measurement and

accounting disclosure of environmental costs in improving and developing performance in Libyan institutions.

The study Bicer & Eldarewi (2019) This study aimed to demonstrate the importance of environmental costs and their role in improving the quality of financial reports in Libyan oil companies and to provide proposals to develop them. The study found that there is environmental awareness among companies regarding environmental issues. The results of the study also showed that there are obstacles that limit the application of measurement besides disclosure of environmental costs. Moreover, the existence of environmental cost measurement models increases companies' commitment to their environmental responsibilities. It also showed that there is a statistically significant relationship between environmental costs with the increase in the quality of financial reports. Finally, there is a statistically significant relationship between environmental costs and decision making.

The study Khairuddin, Aloun & Rafif (2022) aims to highlight the impact of the accounting disclosure of the environmental costs on the financial statements' quality. The study concluded that the accounting disclosure and measurement of the environmental costs one of the pillars of environmental costs, and a two-way indicator, as it shows whether the

industrial institution aware of issues that affect its survival and continuity, on one hand, while measure for financial statements users to find out the environmental events plus the institution efforts in managing environment and its financial implications, on the other hand. the study al anssari (2023) environmental management places improving the company's environmental performance at the forefront of its objectives. it strives to use the best environmental control systems on its operational processes and environmental tools according to the requirements imposed on it. the study concluded that the special needs of each institution must be considered when deciding which of the current approaches to environmental cost accounting in businesses to use. additionally, environmental cost accounting strives to increase management effectiveness, quality which has a wide range of potential applications in institutions as a tool for environmental control

THE FIRST SECTION

Environmental Accounting: as an extension of financial accounting, which is a branch of accounting that includes methods of measuring and disclosing information related to the activities plus procedures of the institution that have an environmental impact in financial reports or independent reports (Abusatala & Joudi, 2022), and that measurement and

disclosure within its framework includes environmental costs.

In addition to other elements related to environmental activities, such as environmental assets, benefits, and liabilities. It aims to provide internal parties and groups of the organization's external environment with the information necessary to make decisions, monitor plus evaluate the organization's environmental performance (AL Anssari, 2023). In addition to other elements related to environmental activities, such as environmental assets, benefits, and liabilities. It aims to provide internal parties and groups of the organization's external environment with the information necessary to make decisions, monitor plus evaluate the organization's environmental performance (AL Anssari, 2023). From this, it can be said that environmental accounting is one of the branches of accounting that works to identify, measure, and communicate data related to environmental activities along with natural resources for the purpose of providing decision makers with information that enables them to improve environmental performance together with develop clean products through clean technology as well as controlling environmental costs. Therefore, environmental accounting is a field of accounting science that specializes in recording, classifying,

measuring, and then disclosing environmental information for the purpose of assisting management in addition to external parties in the process of making decisions that will improve the environmental performance of the organization (Abdelhalim & Houaria, 2023). Environmental accounting has importance in economic institutions as follows (Amamra, Mellah & Zerfaoui, 2020):

- Helping managers make decisions that contribute to reducing costs and environmental burdens.
- Expanding the scope of the evaluation and investment analysis process to include potential environmental impacts.
- Achieving a better understanding of environmental costs and the performance of processes and products and pricing them accurately.
- Assist in developing and operating an environmental management system for the unit as a whole.

Ignoring the measurement of environmental costs resulting from environmental pollution misleads many performance measurement indicators and inflates the results.

Accounting derives its existence from society's recognition of its results through the functions of measuring, communicating financial, economic information to society, along with the continued demand for the services of the

accounting and auditing profession, which necessitates meeting the growing needs for environmental and social information in addition to financial information.

- For the purpose of rationalizing administrative decisions and ensuring the accuracy of accounting information on the basis of which administrative decisions are made, by helping to compare between administrative alternatives while when making comparisons between commitment and non-compliance with environmental programs (Abdalmajeed, 2021).

Environmental Costs: Industrial institutions bear a set of items of expenses and costs as a result of their commitment to implement a set of activities that will protect the environment from the harm of elements of environmental pollution. These are called environmental costs or material sacrifices, which institutions bear in order to comply with the standards that regulate environmental laws, in addition to achieve targeted growth rates, achieve sustainable development (AL Anssari, 2023), and among the elements it bears in exchange for are the following (Al-Fakhry & Al-Waridi, 2016): Reducing or limiting loss or waste in raw materials, manufacturing, and production materials.

- Reducing energy and power consumption.
- Reducing water consumption.

- Reducing and recycling solid waste.
- Costs incurred by the company as a result of compliance with environmental laws and legislation.
- The value of the insurance premium that companies bear to cover environmental risks.

Accounting Measurement of Environmental

Costs: As a result of changing the outlook on accounting as well as considering it an economic information system whose goal is to provide stakeholders with appropriate data (Abusatala & Joudi, 2022), it has increased the importance of the accounting measurement function along with accounting disclosure, two pillars of the information system in the company, plus the essence of the accounting measurement process is the actually existing situation. That is, the components of assets, liabilities, property rights and the changes that occur to them are measured over a specific period, Therefore, ignoring the impact of the environment on the company in terms of including the costs of activity on the economic, environmental, and social aspects is considered a deviation from the real actual situation (Al-Shawawreh, Al Smirat, & Alamro, 2023).

Costs are no longer seen as the value of the production factors necessary to achieve production, but they must also be dealt with in compensating society for the damages sustained as a result of the company's

economic activity (Ramos Ramos, 2015). Therefore, the measurement process is considered a translation of the various activity processes in a way that is more effective in making decisions, and this requires the accounting measurement of the company's operations in the environment should include the company's environmental activity, which include descriptive environmental information that differs from economic activity data (Yozmane & Benbilel, 2018).

Environmental Accounting Disclosure: It can be defined as a presentation of a group of information items related to the performance and activities of the company's environmental management as well as its implications in the present and future. Accounting disclosure supports the trust, respect of society and individuals in institutions. Thus increases the demand for its products besides expands its investments, which ultimately reflects its impact on the outcome of its activity and its financial position (Bonson, Perea & Bednarova, 2020).

Without any doubt that the accuracy and quality of financial statements depends on the availability as well as accuracy of financial and non-financial information. As a result of the development of the company's business environment, the complexity of types of industries, the intensity of competition, and the

trend of many companies towards corporate governance, it has become necessary for companies to disclose non-traditional information and consider it in various ways (Al-Fakhry & Al-Waridi, 2016). Its decisions together with forecasting future performance in light of the environmental risks surrounding companies, Therefore, disclosing environmental information, whether within the financial statements or independently, leads to the need to improve the quality of the disclosed information plus more transparency in the financial statements on the one hand, also increases the accuracy as well as effectiveness of the various decisions that will be based on this disclosed information (Yozmane & Benbilel, 2018). **Environmental Costs and Their Role in Decision-Making:** The need for information on environmental costs has increased recently by both industrial companies as well as investors to make more rational decisions, such information affects those decisions in the long or medium term and determining the appropriate approach to protection from pollution It often leads to consequences that must be considered when making decisions (Razzaqia & Qardi, 2017). The relationship between environmental costs and the decision-making process in the organization is a relationship with mutual influence. In this regard, environmental costs

arise from various administrative decisions, such as (Tipping, 2021):

First: Administrative decisions that result in environmental costs: factory location, quality of products, production and operation process, quality of packaging materials, methods of transporting, shipping products, how the product is used by the consumer, and finally methods of disposing of the product after use.

Second: Administrative decisions that use environmental costs: Some of these decisions are as follows (Abdelhalim & Houaria, 2023):

- Making new decisions that are more rational than existing decisions, such as closing an existing production line, or opening a new one.
- Spending a portion of the institution's funds in areas of research and development related to the environmental aspect that will benefit the institution through the savings and developments brought about by such research.

Third: Decisions taken in light of environmental costs: Some of these decisions are as follows (Abdul Samad, 2015: AL Anssari, 2023):

- Correct measurement of the value of investment as well as the size of environmental costs, in order to determine the impact of this investment on improving the effectiveness of performance and building logical decisions through the use of the return/cost indicator.

- Disclosing environmental costs to evaluate the organization's trends towards environmental management by setting a percentage.
- The company's environmental costs are added to the total costs of activities, which enable information users to be informed about the company's activities towards environmental protection, which leads to an evaluation of the company itself.
- Decisions to rationalize the use of resources, as environmental costs contribute to reducing the misuse of used resources that are characterized by scarcity, which increases the technical and economic efficiency of industrial institutions.
- Decisions to determine the technology used in production, and the nature of production processes that reduce the volume and level of environmental pollution to the lowest possible extent.

The Role of Measuring and Disclosing Environmental Costs in Improving Environmental Performance:

Financial reports are not an end in themselves, however they aim to provide information that is useful in making decisions, whether financial or non-financial information. Therefore, there was a necessity to demand new standards for measurement, disclosure, and to increase the amount of information that It is disclosed to

meet new information requirements, which leads to developing as well as improving the disclosure of information in financial reports, resulting in the possibility of relying on it in making decisions related to improving environmental performance (Tipping, 2021).

Disclosing environmental information, whether within the financial statements or independently, will lead to increasing the quality of accounting information through the availability of quality characteristics of accounting information, which represent a framework for the quality of financial reports. Thus, environmental cost accounting contributes to improving environmental performance through the following (Bicer & Eldarewi, 2019; Abdul Samad, 2015).

- Measurement and disclosure of environmental costs expresses the environmental processes together with events carried out by the organization in a way that the user can rely on in making the decisions he deems appropriate (Ramos Ramos, 2015).
- Measuring and analyzing environmental costs in determining the final cost of the product or service contributes to increasing the effectiveness of accounting information.
- Disclosing environmental costs helps decision makers predict the future environmental performance of companies

in light of the risks surrounding their operating environment.

- Unifying methods and policies for measuring environmental costs results in uniformity in results, therefore the financial statements in this case are characterized by stability with comparability.
- Measuring environmental costs and disclosing them in the financial statements provides correct and easy accounting information for users to make decisions.
- Measuring and disclosing past, present, and future environmental costs leads to increasing the information disclosed in the financial statements plus providing accurate accounting information, which leads to obtaining quality accounting information.

THE SECOND SECTION: PRACTICAL STUDY:

Introduction: The study aimed to clarify the role and importance of environmental costs improving the environmental performance to rationalize the decision-making process, in addition to clarifying the role of accounting disclosure of environmental costs in improving the environmental performance of the cement company in Benghazi. This section presents a description of the study methodology, the study population, study tools, sources for obtaining information, study variables and statistical treatments used, and a test to verify the suitability of the data for statistical analysis.

Methodology of the Study: This study consists of two aspects, a theoretical aspect and an applied aspect. To answer the study question and test the validity of the hypotheses, the descriptive approach was adopted related to the scientific concepts of accounting for environmental costs and improving environmental performance, as well as measuring and disclosing them, as well as the use of the analytical approach to study the role of accounting disclosure on environmental costs in improving environmental performance, the case study approach was also used in the applied aspect.

Study Population and Sample: The study population consists of the National Cement Company in Benghazi, and the study sample consists of employees in the company's financial management. (34) questionnaires were distributed, of which (25) questionnaires were returned, meaning a percentage of (73.5%). This percentage is considered good and represents the percentage of the study population (Al-Ali, Dripati, 2021).

Design of the Questionnaire Tool: To answer the study question was relied on the questionnaire as a main tool in collecting data and the SPSS 25 program, to develop the database, extract arithmetic means and standard deviations, and conduct one-sample tests to prove the hypotheses.

Determine The Answer Scale: A five-point Likert scale was adopted to classify answers related to studying the role of accounting disclosure of environmental costs in improving environmental performance in the company under study. The impact was classified from strongly agree (five degrees) to strongly disagree (one degree), as shown in **the table (1)**

Table (1): Shows the Response Scale for Positive Questions

Answer Style	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Score	5	4	3	2	1
percentage	Greater than 80%	%80-%60	%60-%40	%40-%20	Less than 20%
SMA	5 - 4.21	4.20- 3.- 41	3.40 - 2.61	2.60- 1.81	1.8 - 1

Source: Author's Compilation

Study Tool and Statistical Methods Used:

After completing the process of collecting the questionnaire forms, then tabulating and analyzing the obtained data, the answers were coded and entered directly into the SPSS 25 program. In line with the objectives of the study and with the aim of testing the availability of reliability and internal consistency between the answers to the questionnaire questions, the Cronbach's Alpha coefficient was calculated. The frequencies and percentages of answers obtained from the study population were also used.

In addition, a One Sample T-test was used in the study, and the value is statistically

significant if the Sig is less than the acceptable level (0.05), and the arithmetic averages are used with the standard deviation to determine the extent of dispersion or not between the opinions of the study participants.

Table (2): Cronbach's Alpha Coefficient Test Result

Hypotheses	N	Cronbach Alpha
Apply Measurement Models to Environmental Costs and Increasing Disclosure of The Company's Commitment to Its Environmental Responsibilities (AI)	5	
Relationship Between Environmental Costs and The Decision-Making Process (ED)	5	
The Relationship Between Accounting Disclosure on Environmental Costs and Improving Environmental Performance in The Cement Company in Benghazi (AE)	7	
All	17	.791

Skewness and Kurtosis, the Skewness value which considered as an indicator factor of the symmetry

that means the left and right side of the distribution graph are similar if its equals to 0 that means all median= mean= mode are equal and the distribution is normal, if it was is greater than 0 it means that the distribution of the data is on the right tail of the curve also it could be said that the distribution is right-skewed, if skewness is less than 0, at this point the distribution called left-skewed or the distribution of the data is on the left tail of the curve. while Kurtosis value considered as an indicator factor of the peakedness. If the value

equals to 0 that means a distribution is similar to the normal distribution. If Kurtosis value is greater than 0, then peak is higher in comparison to the normal distribution. If Kurtosis is less than 0, then it is flatter comparison to normal distribution. (Pallant,2007)

First: Stability of The Study Instrument:

The validity and reliability of the study tool was Consistency was achieved in management the internal consistency of the study using the Cronbach-Alpha equation, with a reliability coefficient of (90.4%). This stability is acceptable for study purposes, and the most important results reached were summarized in the table (2)

Second: Presentation of Data and Testing of Hypotheses:

During this part, the field data collected through the questionnaire is presented and analyzed, in order to ascertain the extent of acceptance or rejection of the hypotheses that were previously identified.

❖ **Description of the Study Sample:** The sample items are distributed according to demographic variables as follows:

Table (3): All Characteristics of Responders

		Frequency	Percent
Level of Education	Higher Diploma	4	16%
	Bachelor's degree	17	68%
	Master's degree	4	16%
	Total	25	100
Profession	Financial Manager	2	8%
	Accountant	15	60%

Experience	Account Manager	4	16%
	Internal Auditor	4	16%
	Total	25	100
	6-10 years	2	8%
Experience	11-15 years	2	8%
	More than 15	15	84%
	Total	25	100

The demographic characteristics of the study sample were presented and analyzed as follows:

According to the obtained above data it could be seen that, the level of education for participants mostly was bachelor's degree with about 68%, on the other hand the Higher Diploma as well as master's degree have the same range with around 16% of the participant. While it could also be seen that most of participants' Profession was accountant with about 60%, on the other hand the Financial Manager was the least profession between the participants with about 8%. Moreover, the years of experience as categorized above it could be seen that the category was more than 15 years participant with about 84 % despite the fact that category 11-15 years as well as 6-10 have the same range with about with about 8% of participants. This raises the level of confidence in the information and opinions obtained by them.

❖ Hypothesis Testing

One Sample T-Test: To test the study hypotheses, a one-sample T test was used, so that the item is positive, meaning that the sample members

agree with its content if the calculated T value is greater than the tabulated T value, which is equal to 1.98 (or the significance level is less than 0.05), and the item is negative, meaning that the sample members do not agree. on its content if the calculated T value is smaller than the tabulated T value, which is equal to -1.98 (or the significance level is less than 0.05), and the sample's opinions in the paragraph are neutral if their significance level is greater than 0.05, as well as calculating the arithmetic means and standard deviations for the study sample's answers as it was explained previously.

The First Null Hypothesis: Which States: "There is no statistically significant relationship between applying measurement models to environmental costs and increasing disclosure of the company's commitment to its environmental responsibilities- at a significant level ($\alpha = 0.05$)"

Table (4): Distribution of The Responses of Study Sample Members Related To The Application of Measurement Models to Environmental Costs and Increasing Disclosure of The Company's Commitment to Its Environmental Responsibilities.

Question	Mean	Std. deviation	T	Skewness	Kurtosis
AI1	4.00	.000		.	.
AI2	4.36	.490	44.499	.621	-1.762
AI3	3.68	.476	38.648	-.822	-1.447
AI4	4.20	.577	36.373	.000	-.024
AI5	4.24	.436	48.636	1.297	-.354
All	4.096	.22450	91.225	-.138	-.544

According to the obtained data above, the mean between the different variables ranges between 4.24 to 3.68 for AI5 and AI3 respectively, On the other hand, the Std. Deviation value ranges

from .577 to .000 particularly in AI4 and AI1 sequentially. For instance, the Skewness value which used as an indicator factor of the symmetry, ranges from -1.297 to -.000 with the sign of the values is in negative which means according to Pallant the clustering of the data lay on the right hand of the graph, as demonstrated the Kurtosis value which means peakedness as an indicator factor, it ranges from -1.762 to -.024 at this point and also as Pallant also mentioned that the positive the values mean that the distribution is more centred however, the negative value means that the distribution is more in extreme flatten of the data, all in all the distribution of the data considered to be normal distribution. (Pallant,2007)

The Second Null Hypothesis: which states:" There Is No a Statistically Significant Relationship Between Environmental Costs and The Decision-Making Process- At A Significant Level ($\alpha = 0.05$)"

Table (5): Distribution of The Responses of Study Sample Members Related to Relationship Between Environmental Costs and The Decision-Making Process.

Question	Mean	Std. deviation	T	Skewness	Kurtosis
ED1	4.00	.645	30.984	-1.010	3.368
ED2	3.84	.800	24.000	-.754	.789
ED3	3.72	1.100	16.909	-.819	.176
ED4	3.68	1.030	17.872	-1.276	1.003
ED5	4.12	.666	30.939	-.134	-.557
All	3.872	.39531	48.975	-1.287	1.522

According to the data, it could be seen that the difference between variables ranges between 4.12 to 3.68 the higher beside lower values are within the Between Environmental Costs and

The Decision-Making Process and specifically in ED5 and ED4 respectively. On the other hand, the Std. Deviation value ranges from 1.100 to .645 particularly in ED3 and ED1 sequentially. For instance, the Skewness value which is an indicator factor of the symmetry, ranges from -.134 to -1.276 as could be seen that the sign of the values is in negative which means according to Pallant, that means the clustering of the data is lay on the right hand of the graph, as demonstrated the Kurtosis value which is a peakedness an indicator factor, it's ranges from 3.368 to -.557 at this point and also as Pallant mentioned that the positive the values mean that the distribution is more centered however, the negative value means that the distribution is more in extreme flatten of the data, all in all the distribution of the data considered to be normal distribution. (Pallant,2007)

The Third Null Hypothesis: Which States: "There Is No Statistically Significant Relationship Between Accounting Disclosure of Environmental Costs and Improving Environmental Performance in The Cement Company in Benghazi - At A Significant Level ($\alpha = 0.05$)"

Table (6): Distribution of The Answers of The Study Sample Members Related to The Relationship Between Accounting Disclosure on Environmental Costs and Improving Environmental Performance in The Cement Company in Benghazi.

Question	Mean	Std. deviation	T	Skewness	Kurtosis
AE1	3.72	.891	20.883	-.542	-.148
AE2	3.56	1.083	16.433	-.274	-1.168
AE3	3.64	.907	20.058	-.272	-.514
AE4	3.44	1.158	14.859	-.455	-.848
AE5	3.48	.714	24.365	-.297	-.052
AE6	3.72	.737	25.234	-.848	.994
AE7	3.72	.614	30.306	.224	-.445
All	3.6114	.69693	25.913	-.604	-.541

According to the obtained above data, it could be seen that the mean between the different variables ranges between 3.72 to 3.48 the higher beside lower values are within the Relationship Between Accounting Disclosure on Environmental Costs and Improving

Environmental Performance in AE1, AE6, AE7 and AE5 respectively. On the other hand, the Std. Deviation value ranges from .614 to 1.158 particularly in AE7 and AE4 sequentially. For instance, the Skewness value which is an indicator factor of the symmetry as mentioned above, ranges from -.224 to -.848 as could be seen that the sign of the values is in negative which means according to Pallant, that means the clustering of the data is lay on the right hand of the graph, as demonstrated the Kurtosis value which is a peakedness an indicator factor, it's ranges from -.052 to -.1.168 at this point and also as Pallant mentioned that the positive the values mean that the distribution is more centered however, the negative value means that the distribution is more in extreme flatten of the data, all in all the distribution of the data considered to be normal distribution. (Pallant,2007)

Table (7): Testing Hypotheses Using One-Sample Tests

Hypothesis	Mean Difference	Sig	T-Test Statistic		Accept/Reject
			T-Tabular Value	T-value	
(1)	4.0960	0.00	1.9847	91.225	Accept of H_1
(2)	3.8720	0.00		48.975	Accept of H_2
(3)	3.6114	0.00		25.913	Accept of H_3

Testing Hypotheses Using One-Sample Tests

It could be noticed from the previous table that the calculated T value for the first hypothesis was (91.225), is greater than the tabular value, which means rejecting the null hypothesis and accepting the alternative hypothesis. Also, the T value for the second hypothesis has been calculated and is equals (48.975) as a result of that the second null hypothesis has been rejected too. Furthermore, the same happens

for third hypothesis after calculating the T value which was equals to (25.913) and is shown that it's higher than the T-Tabular which means the third null hypothesis has been rejected too, accepting the second hypothesis as well as the third hypothesis.

RESULTS AND RECOMMENDATIONS

RESULTS:

Environmental pollution is considered as the most important challenges of the current era; pollution is caused via different human activities such as industrial pollution in particular. With all these those active in environmentally sensitive industries, have realized that to improve environmental performance to achieve besides sustain an environmental protection strategy they must include sustainable environmental aspects. As environmental awareness increased, the necessity of integrating the environment into the financial system of companies were considered. Thus, environmental accounting is the key to achieving these goals. Accounting for environmental costs is the expenses incurred by the company resulting from the use of technology that has a negative impact on the environment, as well as the treatment of damage that has been caused by the company that was unable to prevent or control.

The measurement and disclosure of environmental costs in the companies, and their

inclusion in the financial reports led to improved environmental performance in accordance with IAS 10, which emphasized expenditure on the future environmental costs of the company's activities, such as the costs of rehabilitation of some sites affected by the current activity or damage resulting from current environmental impact litigation. The disclosure of environmental costs is an important two-way indicator. It shows whether companies are aware of the environmental issues that may affect their presence on the one hand and represent the users of the financial reports as a measure of environmental events and the companies' efforts towards the environment and their financial implications. This can be achieved only if the department has clear and accurate information about these costs. This study assessed the role of environmental costs in improving the quality of financial reports in the cement company in the city of Benghazi, Libya. The results of the study showed that the T value of all hypotheses was higher than the T-critical value, and the significance level (0.00) was below the significance level of 0.05. It is, therefore, possible to say that there is a role for environmental costs in improving the quality of financial reports.

RECOMMENDATIONS:

1. The necessity of paying attention to environmental accounting in service companies in particular in terms of supporting them financially as well as morally in order to keep pace with the latest developments in the field of protection from the effects of pollution.
2. Focus on scientific seminars along with specialized workshops to further convince senior management in service companies in Benghazi of the importance of applying environmental accounting, and its positive impact on improving the image of service companies in front of society.
3. Holding training courses in the field of environmental accounting to raise the efficiency and experience of accountants in service companies.
4. The necessity of educating service companies about measuring and disclosing environmental costs and resources.
5. The necessity of taking legal measures against companies when they do not comply with the application of environmental accounting for legislation related to the company's contribution to protecting the environment.
6. Encouraging research that deals with measuring and analyzing environmental costs

because of its impact on improving the quality of financial reports.

7. The necessity of cooperation between service companies and researchers because of the scientific benefits and additions for all, so that these companies can play their positive role in activating the process of development and construction.

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