



## CHALLENGES FACING ACCOUNTING IN LIGHT OF SUSTAINABLE DEVELOPMENT

Researcher / Bushra Hamed Al-Asami

Workplace / University of Al-Qadisiyah,

Email / [bshry945@gmail.com](mailto:bshry945@gmail.com)

| Article history:   | Abstract:   |
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| <b>Received:</b> 26 <sup>th</sup> April 2024<br><b>Accepted:</b> 24 <sup>th</sup> May 2024 | Accounting faces many challenges in light of sustainable development related to addressing the environmental, social and economic dimensions of business operations, and the aim of the research is to understand and identify the challenges facing accounting in light of sustainable development, as well as proposing and identifying solutions to those challenges and directing legislation and policies related to that, and the problem of research lies in the fact that traditional accounting focuses only on the financial element without focusing on the environmental and social influences of business activities, which exposes organizations to environmental and social risks, which leads to Hindering sustainable development. The research was divided into two axes, the first axis was devoted to knowing the current role of accounting in light of sustainable development and identifying weaknesses, either the second axis was quotas to assess the effects resulting in the inclusion of sustainable development, i.e. estimating the impact of including sustainable development concepts in accounting on financial performance and organizational behavior, and the results of the research indicated the need to develop accounting standards in order to be able to provide comprehensive information that keeps pace with sustainable development, which takes into account the environmental and social impacts, as well as enhancing training and education for accountants to increase their awareness. The importance of sustainable development and how to include it in their work. |

### Keywords:

### INTRODUCTION:

During the past three decades, the world has witnessed a growing realization that the current development model is no longer sustainable, after the consumer lifestyle emanating from it has been associated with serious environmental crises, prompting a number of critics of that development model to call for a sustainable alternative development model that works to achieve harmony between achieving development goals on the one hand and protecting and sustaining the environment on the other. The prevalence of the idea of sustainable development in the literature of political development since the mid-eighties of the twentieth century represented in part an attempt to overcome the failure of behavioral theory in the field of development, which adopted the model of modernity, and the search for a new model that works to reconcile the requirements of development and maintain a sound and sustainable environment, and during This research dealt with the challenges facing accounting in light of sustainable development in order to meet the requirements of the contemporary environment.

### The first topic: research methodology

#### First: The research problem:

The problem of the research is that traditional accounting focuses only on the financial element without focusing on the environmental and social influences of business activities, which exposes organizations to environmental and social risks, which leads to hindering sustainable development.



### **Second: The importance of research:**

The importance of the research from the role of accounting lies in providing information to decision makers on the size of the financial effects of the activities of companies in light of sustainable development, and the importance of the integrated environmental and economic accounting system in achieving the requirements of measuring development within the national accounts, and the importance of the research came from the importance of the role of environmental disclosure in supporting sustainable development through the disclosure of environmental spending by companies separately so that it shows the extent of these companies' contribution to environmental protection and in a way that suits the requirements of the contemporary business environment.

### **Third: Research Objectives:**

The research aims to understand and identify the challenges facing accounting in light of sustainable development, as well as proposing and identifying solutions to those challenges and directing legislation and policies related to this in a way that suits various environmental changes.

### **Fourth: Research hypothesis:**

The research is based on the basic premise that accounting works to provide appropriate information to decision makers in light of sustainable development.

### **Fifth: Research Sample:**

The research sample is represented by a group of administrators, financial analysts, accountants and auditors working in companies listed on the Iraq Stock Exchange.

## **The second topic: the theoretical aspect of the research**

### **First: The concept and goals of sustainable development:**

Sustainable development is development that responds to the needs of the present without jeopardizing the ability of future generations to meet their needs, taking into account the social and environmental dimensions as well as the economic dimensions of the good use of available resources to meet the needs of individuals while preserving the right of future generations. The gravity of environmental degradation that must be overcome while not abandoning the needs of economic development (Honiara, 2022:3) .

Sustainable development requires improving the living conditions of all individuals without increasing the use of natural resources beyond the resilience of the planet, and sustainable development is carried out in three main areas: economic growth, conservation of natural resources, environment and social development (Khan & Muttakin, 2019:169) .

One of the most important challenges to sustainable development is the eradication of poverty, by promoting balanced production and consumption patterns, without over-reliance on natural resources (Fifka & Drabble, 2012:456). ) .

The following is an example of the most important SDGs through some of the items that will directly affect people's living conditions (Jasch, 2010:212). ) :

1. **Water:** Sustainable development aims to ensure an adequate supply of water and raise the efficiency of water use in agricultural, industrial, urban and rural development. Social sustainability aims to secure access to water in the area sufficient for domestic use and small agricultural enterprises for the poor majority. .
2. **Food:** Sustainable development aims to raise agricultural productivity and production in order to achieve regional and export food security. Social sustainability aims to improve productivity and profits of small-scale agriculture and ensure household food security.
3. **Health:** Sustainable development aims to increase productivity through health and preventive care, improve health and safety in the workplace, and impose air, water and noise standards to protect human health and ensure health care .
4. **Business:** The widely accepted standard for corporate sustainability constitutes the effective use of natural capital. This eco-efficiency is usually calculated as the economic value that a company adds in relation to its combined ecological impact.



5. **Income:** Sustainable development aims to increase economic efficiency, growth and employment opportunities in the formal sector. Social sustainability aims to support small enterprises and create jobs for the poor majority in the informal sector.

### **Second: Cultural elements in sustainable development frameworks :**

Recently, human-centered design and cultural cooperation have been grassroots frameworks for sustainable development in marginalized communities and these frameworks include an open dialogue involving participation and discussion, as well as a comprehensive assessment of the location of development especially when working on sustainable development in marginalized communities (Margin, et.al., 2020; 114) .

Cultural focus is a decisive factor in project decisions, as it greatly influences aspects of their lives and traditions. Collaborators use drafting theory in co-design. This allows them to understand each other's thinking process and their understanding of sustainable projects. Using the co-design method, the overall needs of the beneficiaries are considered and decisions and final applications are made regarding social, cultural and environmental factors (Kitties, 2007:118).)

The user-oriented framework relies heavily on user participation and user feedback in the planning process, and users are able to provide new perspective and ideas, which can be considered in a new round of improvements and changes, and it is argued that increased user participation in the design process can get a more comprehensive understanding of design issues, due to more contextual and emotional transparency between researcher and participant (Alex, 2018:78) .

Many communities express environmental concerns, so life cycle analysis is often carried out when assessing the sustainability of a product or prototype. Evaluation is carried out in stages with rigorous cycles of planning, design, implementation, evaluation, material selection decision highly weighted for longevity, renewal, and efficiency. These factors ensure that researchers recognize societal values that are in line with positive environmental, social and economic impacts (Girvan, et.al., 2020:32).)

The United Nations Conference on Sustainable Development, also known as Rio 2012, was the third international conference on sustainable development, which aimed to reconcile the economic and environmental goals of the global community. One of the outcomes of this conference was the development of the Sustainable Development Goals (SDGs), which aim to promote sustainable progress and eliminate inequalities around the world. However, few countries have met the WWF definition of sustainable development criteria developed in 2006. Although some countries are more developed than others, all countries are constantly evolving because each country struggles to perpetuate inequalities and inequalities in access to fundamental rights and freedoms (Jeffrey, et.al. 2011:45).)

### **Third: Measuring Sustainable Development:**

In 2007, a U.S. Environmental Protection Agency report stated, "While much of the discussion and effort has gone into sustainability indicators, none of the resulting systems clearly tell us whether our society is sustainable. At best, they can tell us that we are going in the wrong direction or that our current activities are not sustainable. Often, they simply draw our attention to the existence of problems and do little to tell us the origin of those problems rather than to tell us how to solve them" (Barless, 2013:9).)

However, the majority of authors assume that a well-defined and coordinated set of indicators is the only way to make sustainability tangible. These indicators are expected to be identified and adjusted through empirical observations (Kitties, 2007:118).)

The most common criticisms relate to issues such as data quality, comparability, substantive function and resources needed. However, the most general criticism comes from the project management community: how can sustainable development be achieved globally if we cannot monitor it in an individual project? Cuban-born researcher and producer Sonia Bueno proposes an alternative approach based on the integrated long-term cost-benefit relationship to make sustainability tangible. These indicators are expected to be identified and adjusted through empirical observations as a tool for measuring and monitoring the sustainability of each project, activity or project. Moreover, this concept is intended to be a practical guideline towards sustainable development that follows the principle of preserving value and



increasing its value rather than restricting the consumption of resources by economic institutions (Kitzman, 2010:20).)

#### **Fourth: The role of accounting in achieving sustainable development:**

In this era when technologies determine competitiveness, accounting can play an important role in sustainable development, as the potential of accounting can be harnessed to achieve sustainable economic, social and environmental development, through the promotion of technology for sustainable development as follows: (Barless, 2013:10))

1. Promote research and development activities to promote new materials technology, information and communication technology, biotechnologies, and the adoption of sustainable mechanisms.
2. Improving the performance of private enterprises through specific inputs based on new technologies, as well as the development of new institutional patterns that include technology cities and incubators.
3. Promote capacity building in science, technology and innovation, with the aim of achieving sustainable development goals in a knowledge-based economy, especially as capacity building is the only way to enhance competitiveness, increase economic growth, generate new jobs and reduce poverty.
4. Develop plans and programs aimed at transforming society into an information society.. so that new technologies are integrated into social and economic development plans and strategies, while working to achieve global goals such as the Millennium Development Goals.
5. Develop national innovation policies and new technology strategies with a focus on ICTs.

Accounting is, of course, an essential element for the success of sustainable development, as it helps the information provided by accounting to cope with social, economic and technological changes, and helps to improve agricultural productivity and food security. However, this knowledge and information must be effectively transmitted to people in order to benefit from it, through communication, where communication for development includes many media such as rural radio for community development, multimedia roads, etc. (Girvan,et.al.,2020:33) .

#### **The third topic: the applied side of the research**

##### **First: Research population and sample and statistical methods used :**

The research community is represented by individuals working in companies listed on the Iraq Stock Exchange from administrators, financial analysts, accountants and auditors, either the research sample has been selected from members of the community (85) people, and the questionnaire form has been distributed to them, and all of them have been retrieved and are amenable to statistical analysis, and the researcher has conducted steps to stabilize the same survey sample in two ways, the half-segmentation method and the alpha cro nabach coefficient, for the half-segmentation methodThe Pearson correlation coefficient was found between the rate of odd and even questions and the correlation coefficients were corrected using the Seberman-Brown correlation coefficient for correction, and Table (1) showed that, which reassures the researcher on the use of the questionnaire.

Table (1)  
Stability coefficient using the half-fractionation method

| Number of paragraphs | Correlation coefficient | Corrected correlation coefficient | P-value |
|----------------------|-------------------------|-----------------------------------|---------|
| 12                   | 0.851                   | 0.928                             | 0.000   |

Source: Prepared by the researcher.

As for the Cronbach alpha method, this method was used to measure the stability of the resolution, and Table (2) may show that the stability coefficients are high, which reassures the researcher to use the resolution.

Table (2)  
Coefficient of stability using Cronbach alpha method

| Number of paragraphs | Cronbach's alpha coefficient |
|----------------------|------------------------------|
| 12                   | 0.844                        |

Source: Prepared by the researcher.



To achieve the objectives of the research and analysis of the collected data, many appropriate statistical methods were used using Statistical Packages for Science (SPSS) and the data was coded and entered into the computer, according to the Likert five-point scale.

### **Second: Testing the research hypothesis and analyzing the results:**

The hypothesis of the research states (that accounting works to provide appropriate information to decision makers in light of sustainable development), and to test this hypothesis, the arithmetic averages and standard deviations of each paragraph or variables of the research hypothesis were extracted, as shown in the following table:

Table (3)

Arithmetic averages and standard deviations of the answers of the research sample for the paragraphs of the research hypothesis

| No. | Paragraphs  | Arithmetic mean | Standard deviation |
|-----|---|-----------------|--------------------|
| 1   | Accounting helps provide appropriate information to change consumption patterns that waste biodiversity, and to make continuous reductions in wasteful consumption levels of energy and natural resources   | 4.219           | 0.518              |
| 2   | Accounting information builds a development pattern to achieve self-sufficiency, allowing for regional cooperation and active trade among these countries   | 4.332           | 0.667              |
| 3   | Accounting improves living standards, which leads to the revitalization of development and economic growth in the country.  | 3.983           | 0.484              |
| 4   | Accounting helps in increasing economic welfare by increasing the profits of economic units and thus expanding them and then working to hire new labor  | 3.516           | 0.428              |
| 5   | Accounting helps to provide appropriate information to promote active development to help slow the movement of migration to cities and is concerned with taking special measures that lead to minimal environmental impacts.                          | 3.815           | 0.453              |
| 6   | Accounting information works to provide basic services such as shelter, clean water, sanitation, and support social infrastructure to ensure the right of citizenship in education, work, training and health care.                                   | 4.523           | 0.518              |
| 7   | Accountability helps in equality in employment in the sense of providing equal opportunities for women, to work and practice various income-generating activities and their right to education.   | 4.125           | 0.498              |
| 8   | Accounting provides the necessary information to make the economic unit questionable and accountable by all bodies in society, and to confirm the right of participation of individuals and bodies in making decisions related to their life affairs. | 3.809           | 0.382              |
| 9   | Accounting helps provide appropriate information for the protection of natural resources through soil protection to the protection of land allocated for trees and the protection of fisheries and agricultural land                                  | 4.292           | 0.511              |





|           |   |              |              |
|-----------|---|--------------|--------------|
| <b>10</b> | <b>Accounting works to preserve the water environment and conserve water by putting an end to wasteful uses, improving the efficiency of water networks, in addition to improving water quality</b> | <b>4.344</b> | <b>0.546</b> |
| <b>11</b> | <b>Accounting helps protect the climate from global warming and not risk changes that lead to the destruction of the Earth's ozone layer by human actions.</b>                                      | <b>3.981</b> | <b>0.385</b> |
| <b>12</b> | <b>Accounting helps reduce species shelters, reduce the extinction of animal and plant species, and preserve the richness of the earth and biodiversity for future generations.</b>                 | <b>4.615</b> | <b>0.575</b> |
|           | <b>Overall average</b>  | <b>4.130</b> | <b>0.497</b> |

Source: Prepared by the researcher.

It is clear from the table above that the paragraph (accounting helps to provide appropriate information to change consumption patterns that waste biodiversity, and to make continuous reductions in wasteful consumption levels of energy and natural resources) has obtained an arithmetic mean (4.219) and a standard deviation (0.518), or the paragraph (accounting information adopts a development pattern to achieve self-sufficiency, allowing regional cooperation and active trade among these countries)It obtained an arithmetic mean (4.332) and a standard deviation (0.667), while the paragraph (accounting improves living standards, which leads to the revitalization of development and economic growth in the country) has obtained an arithmetic mean (3.983) and a standard deviation (0.484), and the paragraph (accounting helps to increase economic welfare by increasing the profits of economic units and thus expanding them and then working to employ new labor) has obtained an arithmetic mean (3.516) and commit suicide Standard P (0.428), and the paragraph (Accounting helps to provide appropriate information to promote active development to help slow the movement of migration to cities and is concerned with taking special measures that lead to minimal environmental impacts) has obtained an arithmetic mean (3.815) and a standard deviation (0.453), either paragraph (accounting information works to provide basic services such as shelter, clean water, sanitation, support social infrastructure to ensure the right to Citizenship in education, work, training and health care) has obtained an arithmetic mean (4.523) and a standard deviation (0.518), and that the paragraph (accounting helps in equality at work in the sense of providing equal opportunities for women, to work and practice various income-generating activities and their right to education) has obtained an arithmetic mean (4.125) and a standard deviation (0.498), and the paragraph (accounting provides the necessary information to make the economic unit questionable and accountable by all bodies). in society, and affirming the right of participation of individuals and bodies in making decisions about their lives) has obtained an arithmetic mean (3.809) and a standard deviation (0.382), while the paragraph (accounting helps in providing appropriate information for the protection of natural resources through soil protection to the protection of land allocated for trees and the protection of fisheries and agricultural land) has obtained an arithmetic mean (4.292) and a standard deviation (0.511), and the paragraph (accounting works on the barefoot)On the water environment and water conservation by putting an end to wasteful uses and improving the efficiency of water networks in addition to improving water quality) has obtained an arithmetic mean (4.344) and a standard deviation (0.546), either paragraph (accounting helps protect the climate from global warming and not risk making changes that lead to the destruction of the Earth's ozone layer by human actions) it obtained an arithmetic mean (3.981) and a standard deviation (0.385), and the paragraph (accounting helps in reducingBiological species shelters, reducing the extinction of animal and plant species, and preserving the richness of the earth and biodiversity for future generations) have obtained an arithmetic mean (4.615) and a standard deviation (0.575), and finally, all paragraphs have obtained an arithmetic mean (4.130) and a standard deviation (0.497), which indicates the acceptance of the research hypothesis initially. To test this hypothesis, the T test was used for one sample, and the results were as shown in Table (4).

Table (4)

The results of (One Sample T-test) for the answers of the search sample for the paragraphs of the research hypothesis

| <b>Average Arithmetic</b> | <b>Deviation Normative</b> | <b>T value Calculated</b> | <b>degree Freedom</b> | <b>level Significance</b> | <b>Difference in Arithmetic mean</b> | <b>95% confidence interval for teams In the arithmetic mean</b> |
|---------------------------|----------------------------|---------------------------|-----------------------|---------------------------|--------------------------------------|---|
|---------------------------|----------------------------|---------------------------|-----------------------|---------------------------|--------------------------------------|---|



|              |              |              |           |              |              | <b>Lower</b> | <b>Upper</b> |
|--------------|--------------|--------------|-----------|--------------|--------------|--------------|--------------|
| <b>4.130</b> | <b>0.497</b> | <b>5.618</b> | <b>84</b> | <b>0.000</b> | <b>1.378</b> | <b>1.244</b> | <b>1.518</b> |

Source: Prepared by the researcher.

It is clear from the above table that there is statistical significance between the variables of the research hypothesis, depending on the calculated value of (T) (5.618), which is a statistically significant value at the level of significance ( $\alpha < 0.001$ ), and this indicates the acceptance of this hypothesis and indicates that accounting works to provide appropriate information to decision makers in light of sustainable development. Accounting helps to provide appropriate information to change consumption patterns that waste biodiversity, make continuous reductions in wasteful levels of consumption of energy and natural resources, and adopt a development pattern to achieve self-sufficiency, allowing regional cooperation and active trade among these countries, and accounting improves living standards, leading to the revitalization of development and economic growth. In the country, accounting helps in increasing economic well-being by increasing the profits of economic units and thus expanding them and then working to employ new labor, and accounting helps to provide appropriate information to promote active development to help slow down the movement of migration to cities and is concerned with taking special measures that lead to minimal environmental impacts, and accounting information works to provide basic services such as shelter, clean water, sanitation, support social infrastructure to ensure the right of citizenship in Education, work, training and health care

Accounting helps in equality in work in the sense of providing equal opportunities for women, to work and practice various income-generating activities and their right to education, and accounting provides the necessary information to make the economic unit questionable and accountable by all bodies in society, and to confirm the right to participate for individuals and bodies in making decisions about their lives, and accounting helps in providing appropriate information to protect the resources Natural through soil protection to protect the land allocated for trees and the protection of fisheries and agricultural land, and accounting works to preserve the water environment and water maintenance by putting an end to wasted uses and improving the efficiency of water networks in addition to improving water quality, and accounting helps protect the climate from global warming and not risk making changes that lead to the destruction of the ozone layer protecting the earth as a result of the actions of the Accountability helps reduce species shelters, reduce the extinction of animal and plant species, and preserve the richness of the earth and biodiversity for future generations. The prevalence of the idea of sustainable development in the literature of political development since the mid-eighties of the twentieth century represented in part an attempt to overcome the failure of behavioral theory in the field of development, which adopted the model of modernity, and the search for a new model that works to reconcile the requirements of development and maintain a sound and sustainable environment, and during this research the challenges facing accounting in light of sustainable development were addressed in order to meet the requirements of the contemporary environment, where Accounting helps to provide appropriate information to promote active development to help slow migration to cities and is concerned with taking special measures that lead to minimal environmental impacts.

#### **Fourth Theme: Conclusions and Recommendations**

##### **First: Conclusions:**

The research reached the following conclusions:

1. Sustainable development requires improving the living conditions of all individuals without increasing the use of natural resources beyond the resilience of the planet, and sustainable development is carried out in three main areas: economic growth, conservation of natural resources, environment and social development.
2. A widely accepted standard for corporate sustainability constitutes an effective use of natural capital. This eco-efficiency is usually calculated as the economic value added by a company in relation to its combined ecological footprint.
3. Accounting contributes to achieving the requirements of measuring development within the national accounts, as it helps in establishing an appropriate database for sustainable development policies that include development issues in the main policies.
4. Environmental disclosure works to create a sound strategic vision related to environmental protection, pollution reduction and the extent of nature's ability to meet the requirements of sustainable development related to future generations.
5. Accounting is an essential element for the success of sustainable development, as it helps the information provided by accounting to cope with social, economic and technological changes, and helps



to improve agricultural productivity and food security, but this knowledge and information must be effectively transferred to people in order to benefit from it.

### **Second: Recommendations:**

The research recommends the following:

1. The use of external costs that express the cost imposed by the company on others, whether individuals or other companies, such as the costs of air pollutants resulting from its economic activities, may impose health costs on families or individuals.
2. Display the volume of environmental spending by companies separately, so that it shows the extent to which these companies contribute to environmental protection, and of course the higher levels of environmental spending are not necessarily related to the essence of environmental performance.
3. Work on the interpretation of sustainable development through three dimensions, economic, environmental and social, where the basis of this concept represents a set of assets, which help the process of sustainable development and can be divided into physical capital, social capital, natural capital, fixed capital and knowledge capital.
4. Separation between environmental expenditures and operational costs in general, when distributed to operations, products or budgets by companies, as they assist in capital budget decisions during the accounting period.
5. Maintain productivity and at the same time reduce the environmental damage associated with the production process, or in other words for any given level of production, the goal is to minimize damage to the environment. This requires the existence of sufficient indicators, and linking them with economic indicators in order to disclose the link between economic activity and environmental activity in the environmental reports issued by companies.

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