Research Article

Development of Sustainability in Accounting - Cognitive and Conceptual Approaches

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Abstract.
The question of continuity has become a worldwide concern, drawing the attention of every government. Economic performance is no longer the only factor used to determine organizational success. Supremacy and competitiveness demand attention to environmental and social activities. The function of accountants has also evolved. Reporting, managing the creation, and maintenance of assessment reports is solely the responsibility of the shareholders. This study aims to examine the continuity of accounting evolution. This study employed a scoping review as its methodology. Research data on sustainable accounting was gathered from various national and international academic papers. The findings indicate that accountants are essential for long-term economic prosperity. Accountants should be able to provide sustainability reports on a level with financial statements. They should be able to assess the quality level of the sustainability report. According to the findings of this study, an accountant is necessary for a healthy economy. The accountants’ capacity to prepare should be able to assess the quality of the report’s continuity. Apart from this, accountants play an important role in setting effective standards for report continuity.

Keywords: sustainability accounting, sustainability reporting, sustainable development

1. Introduction

Environmental issues such as deforestation, pollution and other damage are important in Indonesia. The country has tremendous wealth but faces challenges in sustainably managing natural resources. Here are seven environmental issues that must be considered to keep the earth fit for human habitation: climate change, loss of biodiversity, environmental pollution, water crisis, forest reduction, sustainable resource use and plastic pollution [1].

With the increasing awareness of sustainability, businesses must operate with accountability. This concept can determine how a company relates to its shareholders and stakeholders, which in turn can affect the value of the company both financially and non-financially. Decisions that increase firm value should be aligned with sustainable
development goals by effectively sharing resources such as people, land and equipment. However, accountability innovations may play a role, resulting in incompetence and failure to achieve the desired goals [2].

Sustainability reporting is increasing globally. There are many scientific studies on sustainability accounting, but progress in accounting is developing slowly, and little is known about its success. Therefore, accounting still needs institutional and conceptual changes to replace sustainability accounting in corporate information systems. There is still a need for a sustainable accounting framework to provide stakeholders and shareholders with accurate information on the company’s economic, social and environmental performance. It is an extensive result of the literature generally being a normative perspective [2].

Some countries experience problems disclosing sustainability reporting, namely Turkey, which discloses sustainability reports at 17%, and the United States, such as Mexico at 48.8%, Chile at 17.3%, Colombia at 19.8%, and Peru at 14.2%. % and Indonesia, which discloses sustainability reports, is 9% [3]. In Indonesia, disclosure of sustainability reports is still very small compared to other countries. The following figure shows the situation in Indonesia regarding the disclosure of sustainability reports, namely as follows:

![Figure 1: Amount Sustainability Report Based on NCSR and Listed Companies on the IDX (National Center for Sustainability Reporting).](image)

According to the results of the report above, there is still very little sustainability reporting in Indonesia. In 2019, there were 668 companies, but only 41 companies reported. In 2020, 713 companies reported only 44 companies, and in 2021, out of 766 companies reported 45.
This study is aimed to discuss sustainability accounting. It emerged from the need to ensure that accounting helps society and the environment to survive. Raising awareness led to the creation of sustainable accounting. As a result, this research offers a conceptual development for sustainable accounting. Measuring, identifying, documenting, summarising, reporting, and exposing the worth of financial, social, and environmental items, transactions, or events concurrently with the accounting process is called sustainability accounting or "green accounting." Users making economic and non-economic management decisions are drawn from processes that produce consistent, integrated, relevant financial, social and environmental accounting information [4]. Sustainability accounting considers an organization's social, environmental, and economic aspects [5–8]. It is a field that requires organizations to consider the future [7,9].

There are many benefits from sustainability, whether a good period is short or a good period is long. Making more sustainable decisions is critical because we cannot conserve the environment without it. There is a chance that humanity will run out of resources and burn fossils, that numerous species of large animals will become extinct, and that irreversible damage will occur if the dangerous process continues without modification. Clean water and conditions, the atmosphere is not toxic, growth source power that can be reliable, good water quality and cleanliness, everything benefits from continuity. Sustainability is the key to a better future. People naturally depend on source power for business, activity, and continuity of life. Ignoring continuity can cause it's over source Power nature.

Sustainability is important for studying even if you are not an expert in the knowledge environment. Everyone should know about sustainability because it helps fulfill social responsibility. It's also important to know if the business you support enters continuity in the business model there. The term “sustainability” has been around for less than thirty years. It originally surfaced in the well-known Brundtland Report, "Our Common Future," which several nations created in 1987 for the UN. The phrase “sustainable development,” commonly used, was first used in the commission's report, written by Brundtland [10]. It was essentially brought about by the pressing necessity to investigate and determine how human activity affects the environment. It was an essential requirement that had been there for a few years previously.

The phrase “sustainable development” originally emerged in a 1969 official declaration signed by thirty African nations under the International Union for Conservation of Nature's (IUCN) auspices. The United States Environmental Protection Agency (EPA), founded in the same year, significantly impacted global environmental policy theory and practice. “Economic development that can benefit present and future generations
without harming the earth’s resources or biological organisms” is how the National Environmental Policy Act (NEPA) of 1969 defined sustainable development. [11].

Companies should provide information on pay equity, for example, as workers may be curious whether the CEO earns up to 10 times more than an ordinary worker. The company should provide information about its environmental protection activities because the public wants to know whether the organization discharges hazardous waste into the environment and whether the CEO’s earnings are ten times above average. The company must also disclose non-financial performance. Eventually, the company’s reputation, gender diversity on the board of directors, employee and customer happiness scores, and customer satisfaction levels may all interest investors. The illustrations mentioned above demonstrate how different stakeholders might benefit from sustainable accounting.

Previous studies have discussed sustainability accounting under several titles, such as environmental accounting [12–14], environmental reporting [5,15,16], social accounting [17–19], social and environmental accounting [20–22], corporate reporting on corporate social responsibility [23,24], and non-financial reporting [25–27].

Apart from those mentioned above, previous research has also made an impact on research examining the function of accounting in providing assessments of social and environmental impacts affecting organizations and society [12–14,28]. Furthermore, this research will bring conceptual insights into how sustainability accounting can help organizations address environmental issues. To help shareholders and stakeholders understand and leverage governance, environmental, and social performance in producing long-term value, this study is anticipated to identify the future relevance, scope, and features of sustainability accounting. It can help accountants, regulators, and academics if applied.

This study offers a theoretical basis and practice model for sustainability accounting to assist companies in making sustainable decisions and creating sustainability reporting. Normative guidelines with a pragmatic focus can also help regulators standardize and report well. They can also ensure sustainable development and the accountant’s ability to achieve its endorsement. In addition, the conceptual approach of sustainability accounting can serve as a foundation for accounting research focusing on managing sustainable companies and reporting on sustainable development achievements. This study differs from previous research, combining sustainability accounting with research focusing on social and environmental sustainability. This research is divided into several sections: Section Two reviews the literature, Section Three details the research methods
used, Section Four presents the findings, and Section Five provides conclusions and suggestions for future research.

2. Literature Review

The company’s stakeholder covers only those affected impact companies and their work methods [29]. Stakeholders are the only holders of necessary interests cared about by the company who are the holders of shares [29]. The company is encouraged to obtain profits, satisfy holders of the shares, and move on to growth positively [29]. Furthermore, according to [30], stakeholder theory is a combined theory of interest from various holders who are more interested in something entity, not only the shareholders. [30] divided stakeholder theory into two: normative theory (branch ethical) and empirical management theory (positive theory). The normative branch states that the organization must treat all interests fairly [30]. In terms of the organization’s moral obligation to consider how operation companies influence stakeholders’ interests or not, they can only concentrate on maximizing profit for interest owners [30].

Meanwhile, empirical management theory explains how stakeholders’ interests can influence organizations’ actions [30]. Stakeholder interests are related to the level of control over source power required by the organization. The incumbent’s interest controls the big source power, the more likely the manager will be to overcome the concerns of holder interests. Providing information to stakeholders about the organization’s performance and activities is one of its most important responsibilities. This matter can show how strategic direction, mission, and goals are the same as the expectations of the 11 stakeholders and how the organization’s financial or environmental performance fulfills the needs of stakeholders’ interests [30].

Setyaningrum (2011) [31] stated that companies are expected to pay attention to various interest holders, especially related social and environmental information: the issue of the environment involves the interests of various groups in society. It can bother the quality of life, and the globalization era has pushed traded products to be environmentally friendly. Investors who invest capital tend to choose companies that develop environmental programs and policies, and NGOs and environmentalists have become louder in criticizing companies that do not pay attention to the environment. One of the ways that the company can guard its connection with the stakeholders’ interests is by carrying out environmental disclosure. With existing disclosure, it is expected that the company can fulfill the need for stakeholder information interests and increase their interest in the company. Additionally, they can be used to get support from
the stakeholders’ interests and divert stakeholders’ attention to less desired activities [30].

ISO Standards 26000, the International Organization for Standardization, is setting the international standard for insufficient answers for social companies [32]. It offers the following criteria for identifying interest holders: Stakeholders have legal obligations towards the organization, decisions made by the organization may positively or negatively impact them, and they will also likely express their concerns and participate in the organization’s activities [32]. Under this standard, stakeholders often include customers, employees, investors, suppliers, boards of directors, community members, and government agencies. The system in which an organization puts the interests of these stakeholders first is called stakeholder capitalism. Internal and external stakeholder interests are two categories of stakeholder interests.

![Figure 2: Stakeholder Interests.](image)

2.1. Sustainability concept

There are three pillars of sustainability, and the triple bottom line is the idea from a sustainability point of view. The first is environmental sustainability. All over the environment, the earth is saved in a system balanced by temporary sources of power, and nature within is consumed by humans at the rate they can fill in alone. A sustainable environment focuses on conserving diversity without ruling out economic and social progress. Foundation sustainability environments are preserving water, saving energy, reducing waste, using possible packaging, recycling, limiting or removing plastic, using sustainable transport, using return paper and protecting flora and fauna.
Second, economic sustainability. Community people worldwide can maintain their independence and have access to sources for their power needs, financial and otherwise, to fulfill their needs. We can continue to have the global human community independently access the material and financial resources they need to satisfy their requirements. Secure livelihoods are part of a stable economic system and activities that are accessible to all. When an enterprise is established, a structure is created to calculate costs and revenues. Self-reliance in an economic context refers to an organization’s capacity for profitability.

Third, social sustainability. Sustainability is also linked to universal human rights, and basic needs can be achieved by all people having access to sufficient resources to keep their families and communities healthy and safe. The only rights leaders of healthy communities are accountable for our personal, work, and cultural rights. Berdasarkan definisi umum, ada tiga dimensi kontinuitas utama. Every dimension focuses on a distinct subset, like:

<table>
<thead>
<tr>
<th>Environment</th>
<th>Economy</th>
<th>Social</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>Accountability/Transparency</td>
<td>Community Investment</td>
</tr>
<tr>
<td>Greenhouse gases</td>
<td>Corporate governance</td>
<td>Working conditions</td>
</tr>
<tr>
<td>Emissions</td>
<td>Values</td>
<td>Human rights and fair trade</td>
</tr>
<tr>
<td>Hazardous waste</td>
<td>Transparency</td>
<td>Public policy</td>
</tr>
<tr>
<td>Recycling packaging</td>
<td>Financial performance</td>
<td>Difference</td>
</tr>
</tbody>
</table>

Source: [4]

2.2. Sustainability reporting standards

Standards are one of the most effective methods of obtaining comparable, consistent and reliable information. However, standards are based on target users, such as capital markets and the public. Good standards enable significant future innovation. One of the problems with sustainability-related disclosures is that historically, there have been no clear user descriptions or consistent use cases for all jurisdictions. Source: Standards for sustainability reporting [33]. Several bodies or institutions in Indonesia and internationally prepare standards for sustainability reports. The first is the GRI (Global Reporting Initiative). This body provides the standard which is the pioneer and most widely used. Approaches were made to various stakeholders, including businesses, investors, policymakers, civil society, labor organizations, and experts, to promote the use of GRI. GRI is a modular system consisting of three standards, including the following: GRI Universal Standards is a standard that applies to the entire organization.
Consists of three components: GRI material topics (2021), GRI Foundation (2021), and GRI 2: general disclosures (2021). The Sector Standards for GRI Concentrate on enhancing the organization’s reporting quality, consistency, and completeness across all 35 areas. In light of this, each business chooses relevant topic standards for reporting.

Second, SASB (Sustainability Accounting Standards Board). This body has SASB standards, which connect investors and businesses on the impact of sustainability on finance. Companies everywhere can recognize, handle, and present investors with relevant sustainability data per SASB guidelines. SASB standards are designed to help companies make economic and industry-specific choices. SASB was developed using data-driven methods and market evidence. The most pertinent environmental, social, and governance (ESG) issue areas for financial performance are chosen by SASB, which is accessible to 77 industries. The Foundation for Value Reporting manages the SASB standards. Depending on business needs, these standards can be used separately or in conjunction with the Integrated Delivery Framework.

International Organization for Standardization comes in third. This organization offers ISO 26000, which offers guidelines and instructions on how companies and organizations can conduct themselves socially responsibly. It assists companies and groups in putting ideals into practice and identifying global best practices for social responsibility. ISO 26000 was created to help organizations support sustainable development beyond basic compliance and encourage common development in social responsibility.

Fourth is the Indonesian Financial Services Authority (OJK). To implement sustainable finance for financial services institutions, issuers, and public businesses, this institution released Regulation 51 of 2017. According to this legislation, public enterprises and listed financial services institutions (FSIs) must incorporate sustainable finance principles into their operations. Implementation began on January 1, 2019, and Commercial Banks were followed by other sectors in the following years, 2024, 2025, etc. (article 3). The Sustainable Finance Action Plan needs to be well-crafted and executed, with the outcomes shared with shareholders and consistently backed by financial service organizations.

Moreover, several organizations provide standards for sustainability reports. The Global Reporting Initiative (GRI) is prioritized. A neutral international organization that generates standard sustainability reports that help clarify the impacts of a company’s operations. The International Integrated Reporting Council is the second. The IIRC intends to standardize non-financial data to comprehend the organization’s overall strategy concerning its present and future financial state. The Sustainability Accounting Standards Board (SASB) comes in third. SASB, an independent US-based organization,
provides complete industry-based standards. The foundation of these standards is corporate governance and the acknowledgment and disclosure of social and environmental repercussions.

2.3. How do you choose a standard to use?

If government regulations mandate SRs, the first thing to do is determine which frameworks comply with those requirements and/or whether the government has its delivery format. Some disclosure frameworks may be more advantageous than others if the business is in a certain industry sector. Consider the goal: for what kind of disclosure is the standard intended to be used? The Greenhouse Gas Protocol serves as one illustration of greenhouse gas emissions.

3. Research Methods

Scope reviews are a method used in research. A scoping review is utilized to find pertinent material on a given topic using various research techniques [34]. The issue that will be raised is the future direction of sustainability accounting at a conceptual level, and the data used in the research are reviews of national journal articles and international journals with the Keywords sustainability accounting, sustainability reporting and sustainable development. A scoping review utilizes multiple sources of similar research articles to find answers to questions related to the research topic. Subsequently, a conclusion was drawn after articles were located and literature was chosen, mapped, gathered, and organized.

4. Results and Discussion

The discussion was divided into four categories based on the scoping review: the rationale behind implementing sustainability accounting, its components, its framework, the role of accountants in sustainability reporting, and conceptually, the future directions of sustainability accounting.

4.1. Motivation to implement sustainability accounting

Sustainability accounting is practiced for four basic reasons. Greenwashing comes first. This idea refers to a scenario in which a business spends a lot of effort and resources
portraying itself as a welcoming atmosphere, even though it is not. Businesses can deceive the public into believing that their policy objectives favor environmentally and socially sustainable products using various strategies. [35,36]. They create the illusion that organizations are doing more to protect the environment than they do. To reduce greenwashing, sustainability accounting, also known as sustainability reporting, ensures that organizations do what they say they do to protect the environment. Sustainability accounting also allows organizations to report on their actions to protect the environment. Secondly, mimicry and industrial pressure. Mimicry and industry demands are also driving sustainability accounting. Almost every business is experiencing a shift towards sustainability around the world. Some sectors, such as sustainable banking, sustainable marketing, and sustainable development, have started considering sustainability in their practices. Each industry is copying the other to fend off criticism that it’s a problem. Consequently, there is increasing pressure on the accounting discipline and profession to understand how social and environmental factors impact business performance and to integrate pertinent social and environmental elements into all accounting aspects.

Thirdly, legislative pressure. An additional source of motivation is legislative pressure. Laws that force organizations to comply with certain sustainability disclosures and reporting standards pressures can create legislative pressure [37]. In some countries, sustainability reporting is supported by legislation by securities and exchange commissions, such as in the UK, USA, China and India. In many other countries, the relevance of sustainability information changes over time, making it difficult to ascertain which information is relevant to investors at any given moment. When a climate is present, e.g., a crisis, environmental disclosures can greatly assist decision-making; however, they are less beneficial in the context of stability. As a result, enforcing mandatory regulations can lead to sustainability reporting and the exposure of information useless to investors. Fourth, gaining legitimacy by putting pressure on holders. Pressure from interest holders and validity serve as another reason for continuity of accountability. Due to stakeholder concerns, organizations are forced to convert from traditional accounting to continuity accounting. Organizations can validate their legitimacy in the eyes of the public and the environment by transitioning from conventional accounting to continuity accounting. Thanks to holders’ interest in continuity accounting, accounting and sustainable development may be more closely aligned [38]. This will ensure that social, economic, and environmental factors are considered in sustainability accounting.
4.2. Sustainability accounting aspects

There are several aspects of sustainability accounting, among others: Confession identification influences the negative activity of business companies on the environment in accounting practice. Identify, search, and examine problems in the field of accounting conventions that are contradictory to environmental and social criteria and provide solutions. Consider gathering suggestions for enhancing the atmosphere in traditional accounting practice. Creation of new accounting system formats, both financial and non-financial, and a decision-management-friendly environment that supports system control. Determine the costs and income from various environmental improvement programs if the corporation is more concerned with the environment and society. Creation of exams, work forms, and internal and external reporting organizations.

4.3. Sustainability accounting framework

As part of the accounting reporting package, financial (economic), social, environmental, and accounting information are combined so that stakeholders can use them to assess and make decisions about economic investment, management, etc. The goal is for stakeholders, including management, shareholders, creditors, customers, consumers, employees, governments, and the general public, to be able to view and thoroughly assess the financial position and business performance, risks, growth prospects, and profit performance and sustainability of the company before making economic and non-economic decisions.

However, to move in this direction, major obstacles remain in successfully integrating sustainability into organizational processes. Being able to define “sustainable development” is the first step toward solving one of the biggest problems in the subject of sustainability accounting. The Brundtland Report defines “sustainable development” as “development that meets present needs without compromising the ability of future generations to meet their own needs. The seventeen Sustainability Development Goals (SDGs) elements make up the manifestation of sustainable development in practice.

The 2022 Report states that Indonesia has accomplished 69.16% of the SDG objectives. This achievement increased compared to 2015, when the score was still 65.03% [40]. However, Indonesia will continue to be classified as a “red” country or as facing significant difficulties until 2022 regarding addressing issues like hunger, health, urban sustainability, protecting land and marine ecosystems, peace, justice and institutions, and international cooperation. According to United Nations estimates, Indonesia's SDG
accomplishments in 2022 will place it 82nd out of 163 countries. As can be seen from the table, Indonesia is now ranked fifth in Southeast Asia.

President Joko Widodo released a new Presidential Regulation (Perpres) in September 2022 to boost performance in reaching the SDGs concerning this criterion. “With the enactment of Presidential Regulation No. 111 of 2022 on the Implementation of Achieving the Sustainable Development Goals, it is expected that the National Sustainable Development Goals in 2024 can be achieved more quickly and more purposefully,” stated the Coordinating Ministry for Maritime Affairs and Investment in a press release on Monday, June 26, 2022 [41].

Regarding nations’ advancement toward the Sustainable Development Goals (SDGs) of the United Nations (UN), the US is rated 41st, surpassing both Bulgaria and Cuba. Political historian Kathleen Frydl said on September 15 that racism and a passion for “American exceptionalism” were “the inevitable result of two problems” that led to the ranking. More reports reveal the “ills” plaguing America today, such as the escalation of gun violence and the unprecedented effects of the pandemic.

The ranking is based on how far a country has achieved the UN Sustainable Development Goals. The 17 points are meant to symbolize societal progress, including tangible achievements like “clean water and sanitation” and “zero hunger”, as well as less obvious goals like “quality education” and “responsible consumption and production”. The UN website explains the 2030 Agenda for Sustainable Development, which has been accepted for implementation by all UN member states. Scandinavian nations are top-ranked in the UN rating for 2022, with Finland in first position and Denmark, Sweden,
and Norway in the top four. The first non-European country to make the list is Japan, which narrowly comes in at number twenty [42].

4.4. The Role of accountants in sustainability reporting

Accountants do more than create reports; they play many different functions. To support sustainable growth, accountants uphold the company’s commitment to upholding its values. They are known as “value keepers”. Accountants are important in strengthening institutions that improve people’s lives. Accountants can support sustainable economic growth by maintaining quality report finances and reporting on corporate sustainability. Accountants contribute to building governance and planning for company sustainability. To achieve sustainable development objectives, the accountant’s

   Conceptually speaking, sustainability accounting can assist businesses in identifying and evaluating social and environmental problems. Organizations can devote vital resources to promoting continuous sustainability for the benefit of society and the environment with the help of sustainability accounting, which can offer a reporting structure. Understanding sustainability accounting is the first step towards establishing sustainability accounting standards.

4.5. Future directions for sustainability accounting at a conceptual level

This study has several highlights for sustainability accounting implementation. First, consider the governance and societal concerns that sustainability accounting raises. Social and governance challenges include pay disparity, ethical diversity among employees, customer happiness, female participation on boards, quality of human resources, and community acceptance, which demand more attention from organizations. Second, examining the necessity of developing new reporting and accounting guidelines for sustainability. It is vital to assess the viability of introducing new sustainability accounting and reporting standards to decide which approach is more appropriate for handling expenses, conflicts of interest, political economy difficulties, and state issues. Examining the limits of sustainability accounting comes in third. The main areas of limitation are governance, social, and environmental concerns. As a result, the accounting industry must comprehend the constraints of sustainability. Future research should look at other limitations related to sustainability accounting. Fifth, develop sustainability performance indicators that are relevant to stakeholders. To develop key performance indicators in
sustainability reporting, several indicators are being pursued that are more relevant to stakeholders [43]. Future studies should determine the key performance most relevant and important to stakeholders based on specific criteria.

Over the past 20 years, the accounting industry has seen numerous significant developments. However, sustainability accounting is still relatively new in certain nations. More organizations starting to consider environmental and social aspects in their operations will accelerate the development of sustainability accounting in many countries. When viewed through the accounting lens, the sustainability accounting framework views accounting as a tool for fostering long-lasting relationships with the company’s internal and external stakeholders and an information process that supports management in decision-making. However, in the terrain of accounting research, the sustainability accounting paradigm can act as a benchmark. Potential study topics include the future direction of sustainability accounting research and the advancement of accounting in the fields of science, politics, law, practicality, data processing, ethics, society, and institutional issues.

5. Conclusion

This paper addresses sustainability accounting in light of positive and normative accounting theories. As a normative remedy, a conceptual framework is suggested. Furthermore, this study is cognitive, highlighting normative and practice-related tendencies and evaluating the advancement of accounting as a science from the perspective of normative and positive accounting theories. This article concludes, theoretically, that sustainability accounting can help firms identify and evaluate social and environmental challenges. This study provides the conceptual advancement of sustainability accounting. The contribution of accounting to sustainable development is known as sustainability accounting. In many nations, sustainability accounting is becoming more and more significant. According to this research, accountants are necessary for sustainable economic growth. Accountants should be able to make sustainability reports equivalent to financial reports. They must also be able to assess the quality of sustainability reports. Besides that, accountants also provide standards useful in preparing sustainability reports.

The author’s subjectivity concerning sustainable accounting is a limitation of this article. The three primary boundaries to advancing sustainability accounting—technical, practical, and methodological—require conceptualization. More thorough test findings
can be obtained by conducting interviews with academics, practitioners, and managers of businesses that have adopted sustainability accounting in future studies.

References


