

# THE STARS OF PUBLIC UNIVERSITY: AN ANALYSIS OF SUSTAINABILITY PERFORMANCE

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#### **Abstract**

The reason of this research is to analyze the sustained performance of Tadulako University based on the STARS system. The design of this study uses case study research to develop the implementation of sustainability accounting at Tadulako University (UNTAD). The research analysis used the STARS system (Sustainability Tracking, Assessment & Rating System) method. This research was conducted by the analyzing content analysis method on UNTAD official website data and published UNTAD reports. The results showed that the university's disclosure ratio in the field of education was very strong good. The university has disclosed some important information regarding the structure of the university's curriculum, policies regarding scholarships, student welfare, and the focus of research policy carried out. Based on the analysis of the STARS System, universities in the future can improve their sustainable performance, especially in the fields of operations and planning, and administration.

**Keywords:** Assessment; Sustainability Accounting; Sustainability Performance; Sustainability Tracking; Rating System

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#### INTRODUCTION

Sustainability accounting is currently important to be applied not only to a company but also to non-business organizations, especially in higher education institutions (public universities). The concept of sustainability accounting was created in the early 1990s and developed to give a contribution to the sustainability reporting guidelines in 2002. The concept of sustainability accounting was originally a tool or method which used by the company's management that can help companies become more sustainable (Kurniawan & Wahyuni, 2019). The meaning of the word "sustainable" is a transformation process in the company's accounting system, namely from a company from "traditional accounting" (focusing on financial information) to a more comprehensive accounting not only on economic information but also on social and environmental information. This form of transformation will certainly have an impact on changes in every business activity of a company or organization. For example, activities in management decision-making that initially focused on the financial aspects of the company are now more comprehensive, which in addition not only realize the financial aspects but also ensure the look at social aspects and environmental impacts.

The application of sustainability accounting brings many benefits to both businesses and non-businesses organizations. One of them is to make the organization not only focus on the financial perspective but also the social paradigm and its impact on the surrounding environment (Domingues et al., 2017) raised research on sustainability reporting disclosure





practices in public institutions. Their research explained that the implementation of sustainability reporting disclosures has an impact on the organization's internal business processes and affects the role of the organization's stakeholders. The results of the study indicate that the disclosure of the concept of sustainability reporting will add value to the organization, namely, in addition to having a good impact on the activities of the social and environmental community, it also has an impact on the organization's good connection with its partners, the organization's good connection with the community and the sustainability of the organization's use of the surrounding environment. Kaur and Lodhia revealed that the role of stakeholders in sustainable reporting can provide social and environmental information, development of strategic plans and indicators of sustainability, process of measuring sustainable performance, and preparation of sustainability reports (Kaur & Lodhia, 2018).

Other researchers were also conducted by (Adams et al., 2014) on measuring the sustainability performance of public sector organizations. They clarified that measuring supportability execution in open segment organizations centers on viewpoints of maintainability, natural duty and social obligation. Another study by (Adams, 2013) created a supportability announcing concept for colleges, and this work has suggestions for college approach within the setting of the usage of the supportability concept. Investigate in Indonesia on the concept of maintainability bookkeeping in non-business organizations, especially state universities, has also been carried out by Kurniawan and Wahyuni. Kurniawan and Wahyuni explained the opportunities for implementing the concept of sustainability accounting in non-business organizations in Indonesia, especially in higher education institutions (Kurniawan & Wahyuni, 2019). According to previous research, higher education should be a pioneer in implementing sustainability accounting disclosures. Standards or guidelines currently exist for the application of sustainability accounting concepts to businesses and non-business organizations. This standard is known as the Sustainability Accounting Standard Board (SASB). The contribution of this standard makes organizations motivated to commit to implementing the concept of sustainability accounting in their organizations. Therefore, this standard is useful to promote the implementation of sustainability accounting.

Public universities have a pivotal part to play in advancing the concept of maintainability to the social community. As stated by Moore, that public universities have an obligation to promote the concept of sustainability to the academic community and implement the concept of sustainability into university activities (Moore, 2005). At this level, there is the Sustainability Tracking, Assessment & Rating System<sup>TM</sup> (STARS) is a transparent self-reporting system for universities to measure their sustainability performance. From the several studies above, this study is also motivated to explore the implementation of sustainability accounting from Tadulako University (UNTAD) in Central Sulawesi, Indonesia.

Tadulako University is one of the universities in Eastern Indonesia that is committed to the principle of sustainability. Previous studies have also been conducted at one of the universities in Bali which is also in Eastern Indonesia using a different assessment method from STARTS. The STARS framework can speak to any institution of higher instruction, from community colleges to inquire about colleges, and incorporates long-term supportability objectives for





teach that are as of now tall achievers, and the primary steps that can be taken for teach committed to supportability. Therefore, this study aimed to analyze the application of sustainability accounting at Tadulako University using the STARS system.

This research provides a point of view that the measurement of sustainability performance can be carried out on non-business organizations. The contribution of this research is the analysis of sustainability performance based on the STARS system at Tadulako University. These results can provide an overview related to sustainability accounting from Tadulako University that has been implemented and also illustrate that sustainability performance concept should be applied to all non-business organizations, especially in the academic sphere as a basic driver in society. This research also contributes to increase and strengthen the perspective related to sustainability performance in the context of social and environmental accounting.

# LITERATURE REVIEW

## The Implementation of Sustainability Performance in Public University

The concept of sustainability accounting is an extension of the financial accounting framework (Sigma Project, 2003). This view certainly reinforces that the concept of sustainability accounting is a derivative of the concept of financial accounting. In 2005, the Ministry of Environment of the Japanese Government released guidelines on sustainability accounting which are used to actualize the sustainability accounting concept. This concept was made in accordance with the government's point of view. This guide is very helpful for organizational leaders in identifying and measuring social costs associated with organizational activities. Meanwhile, the previous research has compiled a guideline on implementing the sustainability accounting concept in the scope of activities of the education sector organization (Lozano, 2006). Lozano found a method of assessing the ability of educational institutions to carry out the concept of sustainability. This method is known as the Graphical Assessment of Sustainability in Universities (GASU). The GASU methodology was also used by Kurniawan and Wahyuni to assess the potential introduction of the sustainability accounting concept in public universities.

The usage of the sustainability accounting concept in non-business organizations, especially in higher education institution, is emphatically affected by the part of organizational partners (Kaur & Lodhia, 2018). The part of organizational partners is emphatically connected with the quality of usage of sustainability accounting inside the organization (Adams, 2013) found a concept on how to improve the sustainability performance of a university and focused on integrating the concept of sustainability (economic performance, social performance, and environmental performance) in the university activities.

Kettunen revealed that the public sector and the private sector are the target of higher education output. Therefore, sustainability accounting implementation between all stakeholders is very necessary (Kettunen, 2015). Kouatli revealed that university social responsibility is one of the strategic aspects of the universities that must target the welfare and involvement of all stakeholders (Kouatli, 2019). This can be done to empower and oversee an all-encompassing





see of financial, social, natural, and scholastic information. In addition, it can also act as a liaison between companies and the needs of local communities and the global environment by creating activities and projects of shared value with the aim of accomplishing tall maintainability.

Discussing the issue of sustainability, the Sustainability Accounting Standards Board (SASB) has initiated a conceptual framework based on five dimensions of sustainability (which of course cannot be separated from the interests of stakeholders in it). The five dimensions include environmental, social, human resources, business models, and innovation, as well as leadership and governance (Kusumawardani et al., 2018). Plungpongpan et al. explains that the University Social Responsibilities (USR) element is a component that is required to ensure quality. The USR concept has contributed to being competitive and helping to produce better and more socially responsible graduates (Plungpongpan et al., 2016).

The USR concept is essentially an ethical guideline that can affect the quality of performance in the higher education association. Communities include students, administrators, faculty, and managers responsible for the education, awareness, employment, and environmental impact of the university through interactive dialogue with the community to bring about sustainable human development of university staff. Based on a sustainable approach, USR is a strategy aimed at reducing the ecological impact of institutions through rational use of resources and educating the entire university community on the ethics of sustainability (Sari & Hadiprajitno, 2013).

Universities accept social obligations in different exercises such as education, research and management. In education, the university joins social, moral and natural issues into its educational programs to reply to social goals emerging from the United Nations Decade of Education for economic improvement and the standards of capable management instruction. In inquire about, by exchanging information to society and; in management, through the selection of great governance hones and responsibility, and usually connected to the improvement of great governance rules, social and environmental detailing hones, and a more prominent part of outside partners in college governance (Larrán et al., 2017).

Sari and Hadiprajitno revealed that operationally the implementation of higher education social responsibility can be done in several ways, including by making sustainability efforts in every university activity (Sari & Hadiprajitno, 2013). For example, by using recycled paper in every publication and work, recycling all paper, board, plastic and glass in the office, use of public transportation facilities and cars together, use of local resources, if possible, development of small and medium enterprises (SMEs), development of underdeveloped villages, both in terms of technology and management, and the scholarships to students, and the use of e-mail as a means of community communication academics. The implementation of a "green campus" through planting green trees around the campus, implementing a smoking-free area in the campus environment, and making the campus environment a clean and healthy environment.





## The Concept of Sustainability Tracking, Assessment & Rating System (STARS)

The Sustainability Tracking, Assessment & Rating System™ is a transparent self-reporting framework for colleges and universities to measure their sustainability performance. The STARS system was created by AASHE (The Association for the Advancement of Sustainability in Higher Education). STARS is outlined to incorporate and assess all educate of higher instruction, from community colleges to investigate colleges. This includes long-term sustainability goals for already high-performing institutions and a starting point for evaluating institutions taking first steps towards sustainability. This system is designed for:

- Give a system for understanding supportability in all areas of higher education;
- Permitting for important comparisons over time and over educate employing a common set of measures created with wide cooperation from the worldwide campus maintainability community;
- Creating incentives for continuous improvement towards sustainability;
- Encouraging the sharing of data on higher education supportability hones and execution;
- Building a more grounded and more assorted campus maintainability community.

By taking part in STARS, public universities can gain points towards a STARS Bronze, Silver, Gold, or Platinum Rank, or gain a STARS Reporter title. Each seal represents significant maintainability leadership.

#### **METHODS**

This research is a case study research, research like this has also been conducted by (Kaur & Lodhia, 2018). The research design carried out is an assessment of the sustainability performance of Tadulako University by analyzing sustainability accounting at Tadulako University. The assessment method used in this study is using STARS system which developed by AASHE. The research data collection method was conducted by observation and document analysis.

This research was conducted at Tadulako University, Palu with a focus on measuring the university's sustainability performance and the possibility of implementing sustainability accounting in universities. The reason why this research was carried out at the Tadulako University in Palu, namely first, researchers have access to collected data related to the accounting system currently applied. Second, availability of guidelines that can measure the sustainability performance of the organization according to the circumstances and characteristics of the university. Third, Tadulako University is expected to have a good support capacity in implementing the concept of sustainability. Fourth, analysts have a tall commitment and inspiration to advance the execution of the concept of maintainability in college exercises. This is because universities play an important role in the development of sustainable accounting practices.





This study also made observations. This is done to be able to review the university's activities in the social and environmental fields. The observation method is used to strengthen the findings of the data obtained and to monitor various university activities in the social and environmental fields (sustainability practice). This observation method also refers to the research of (Petcharat & Mula, 2012) which uses qualitative research in approaching data analysis. Data collection method with document analysis is done by content analysis method to find the required information from the available documents. The documents which used are the university's annual report, guidelines and regulations on university policies in the social and environmental fields, related reports published on the university's website, and other supporting documents.

The assessment in this study uses STARS system because:

- 1) The STARS system can provide a clear framework for understanding sustainability performance, especially in higher education institutions.
- 2) The comes about of execution estimation can be compared with a few supportability exhibitions from other instructive organizations.
- 3) Give input and proposals for the advancement of the organization's supportability execution within the future.

#### **RESULT & DISCUSSION**

As explained above, STARS system is a sustainability assessment system for universities. STARS is a system to assist universities in measuring or assessing the sustainability performance of higher education institutions. This is done to provide a stimulus for universities to support, implement, and contribute to the sustainability development goals. In STARS system, the criteria that are considered in the assessment of university sustainability include academic (AC), Engagement (EN), Operations (OP), Planning and administration (PA), and innovation and leadership (IN). The extent to which continuous efforts have been carried out by a university can of course be seen from the scores obtained from the total scores on each of the assessed criteria. In the academic criteria, the sustainability indicators described are the educational process and the teaching process carried out at the university.

Regarding the university's relationship with students, and the university's relationship with outsiders, in this case the community, it is explained in the engagement criteria. Meanwhile, the operations criteria describe the sustainability indicators in terms of university operations. In planning and administration criteria, describe related indicators related to university planning and administration. Furthermore, the innovation and leadership sub-criteria explains the sustainability indicators in terms of innovation and public leadership that have been carried out by the university. The following table relates to the total disclosure value in the STARS system: **Table 1** 





**Table 1: Total Disclosure Based on the STARS System** 

Variable	Total
Academics	61
Engagement	41
Operations	64
Planning and Administration	32

Source: Data Analysis (2021)

# Identification of UNTAD's Sustainability Performance Based on Stars System

In this study, researchers tried to analyze the sustainability performance of Tadulako University through the STARS system described above. Some of the criteria mentioned above will be divided into several sub-criteria that show indicators of the sustainability performance of Tadulako University. The analysis of this research is based on reports and documents published by the university on their official website https://untad.ac.id/.

The reports and documents referred to are the annual reports of faculties, universities, and related reports and documents. Thus, the information contained in the sources of these data, whether it exists is done with a checklist, in accordance with the sustainability performance indicators described previously referring to the existing criteria in the STARS system. If the criteria and indicators in university are available in the reports and documents, of course, scores will be given according to the method.

The following table describes the results of the disclosures made by Tadulako University and the ratios obtained, as follows: **Table 2**, **Table 3** 

Table 2: Tadulako University's Total Disclosure

Variable	Total
Academics	57
Engagement	40
Operations	31
Planning and Administration	8

Source: AASHE (2017); Data Analysis (2021)

Table 3: Tadulako University's Ratio Disclosure

Variable	Ratio
Academics	0,93
Engagement	0,98
Operations	0,48
Planning and Administration	0,25

Source: AASHE (2017); Data Analysis (2021)



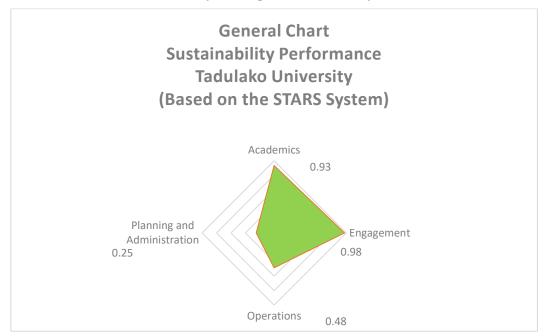


Based on the STARS System analysis, Tadulako University got a score of 0.93. This shows that the university's disclosure ratio in the field of education is exceptionally solid.

The University has disclosed some important information regarding the structure of the university curriculum, policies regarding scholarships, student welfare, and the focus of research carried out.

These results also confirm the theory that public universities have excellent sustainability performance in the field of education. This is also supported by the business core of a public university which is indeed focused on the field of education. **Figure 1** 

Figure 1: The Results of the Analysis of the Sustainability Performance of Tadulako University through the STARS System



Source: AASHE (2017); Data Analysis (2021)

Based on the analysis of the STARS System, Tadulako University within the future can progress its maintainability execution, especially in the fields of operations and planning and administration. Universities should disclose more specific information regarding university operational activities, for example related to waste, water use, and other environmental aspects. The university has had a strong performance in the field of engagement and has disclosed complete information regarding the services provided to students, increasing human resource capabilities, and building a good campus life.





#### **CONCLUSION**

The results of the sustainability performance measurement showed that Tadulako University has exceptionally great maintainability execution within the scholastic (AC) and Engagement (EN) criteria. These results can of course be used as a basis to illustrate that Tadulako University has implemented a good sustainability accounting concept.

From the results of the STARS System analysis, Tadulako University in the future can improve its sustainability performance, especially in the fields of operations and planning and administration. Universities should disclose more specific information regarding university operational activities, for example related to waste, water use, and other environmental aspects.

The university has had a good performance in the field of engagement and has disclosed complete information regarding the services provided to students, increasing human resource capabilities, and building a good campus life.

Through the description of the results of this study, the researchers suggest that in the future the university leadership can further improve the performance of the university. Through this performance improvement, of course, it can show the commitment of the university leadership to participate in supporting university activities based on the concept of university sustainability.

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