Profit and Sustainability Perceptions Related to the Implementation of Blue Accounting in the Fishing Industry in Palabuhanratu

Siti Moozanah Universitas Nusa Putra

Nurul Rusdiansyah *Universitas Nusa Putra*

Dania Meida Rosyidah Universitas Nusa Putra

Meutia Riany Universitas Nusa Putra

Abstract: Blue Accounting integrates accounting principles with marine and coastal resource management to support sustainable development goals, focusing on the sea as its ecosystem. This study aims to understand perceptions of profit and sustainability related to the implementation of Blue Accounting in the fishing industry in Palabuhanratu. Additionally, it seeks to shift the common perception that accounting is solely about numbers. The qualitative approach used in this research is the social constructivism framework, often described as interpretivism. The results indicate that fishermen and boat owners have differing views on profit and sustainability concerning Blue Accounting implementation in Palabuhanratu's fishing industry. The study addresses the problem statement by exploring these perceptions. Profit and sustainability are inseparable points in the implementation of Blue Accounting, generating various arguments and assumptions from different stakeholders who observe the level of awareness among port users in Palabuhanratu. This research highlights the importance of integrating sustainability into profit considerations within the fishing industry.

Keywords: Blue Accounting, Profit, Sustainability, Palabuhanratu

1. Introduction

Blue Accounting is an innovative approach that integrates accounting principles with the management of marine and coastal resources, with the primary goal of achieving the Sustainable Development Goals (SDGs). (Loureiro et al., 2023) This approach emphasizes the importance of managing the ocean as an ecosystem that must be sustainably maintained rather than merely as an exploitable economic resource. In this context, Blue Accounting acts as a tool that provides comprehensive and accurate information about the impacts of various economic activities on the marine environment and the well-being of coastal communities. (Dian et al., 2023) The implementation of Blue Accounting aims to shift the focus from traditional accounting approaches that are solely oriented toward financial figures and profits to social accounting that encompasses the social and environmental impacts of economic activities. In the management of marine resources, this means providing clear information on how activities such as fishing, maritime transportation, and other maritime activities affect the health of marine ecosystems and the welfare of coastal communities. One of the main objectives of this research is to understand the relationship between profit perception and sustainability in the implementation of Blue Accounting in the fishing industry in Palabuhanratu. This research is crucial for changing the public perception that typically views accounting merely as a tool for calculating financial profits while also emphasizing the importance of considering sustainability aspects in every economic activity.

This approach allows researchers to gain a deep understanding of the views and perceptions of industry players, including fishermen and boat owners, regarding profit sustainability in the context of implementing Blue Accounting. The research focuses on understanding perceptions of profit and sustainability in the context of Blue Accounting implementation in the fishing industry in Palabuhanratu. The primary objective of this research is to identify how fishing industry players, including fishermen and boat owners, view the aspects of financial profit and environmental sustainability in the application of Blue Accounting. Furthermore, this research also seeks to evaluate their level of awareness and concern about the importance of sustainable marine resource management and how these perceptions can influence business practices and resource management strategies in the area. This research is expected to make a significant contribution to addressing the issues concerning profit and sustainability perceptions related to the implementation of Blue Accounting in the fishing industry in Palabuhanratu. The emphasis on profit and sustainability aspects in the context of Blue Accounting indicates that these two aspects must be considered together in every effort to manage maritime resources. (Amaliah et al., 2024) Overall, Blue Accounting not only offers a more holistic framework for evaluating the economic impact of maritime activities but also promotes transparency and accountability in marine resource management.

This approach helps create a balance between economic profit and environmental ultimately supporting sustainability, achievement of sustainable development goals. The concept of profit in Blue Accounting introduces a new way of calculating the economic, ecological, and social value of marine resources. The application of this concept is expected to encourage the fishing industry to adopt practices that are not only economically profitable but also ecologically and socially beneficial, thereby ensuring the sustainability of marine resources for future generations. Blue Accounting is an innovative approach that integrates various value aspects derived from marine ecosystems, not only focusing on financial profit but also considering the ecological and social impacts of fishing activities. (Syah et al., 2023) Thus, Blue Accounting offers a more comprehensive framework for evaluating the benefits and costs associated with the use of marine resources. (Dr. Vladimir, 1967) In line with this, Blue Accounting can help create a balance between economic profit environmental and sustainability and support the achievement of sustainable development goals. This raises various arguments and assumptions about the level of awareness and concern of port users in Palabuhanratu regarding the importance of implementing Blue Accounting. Therefore, it demonstrates the importance of this approach in sustainable marine resource management.

In line with the context of this research, Blue Accounting aims to ensure that fishing activities are carried out sustainably to prevent overexploitation and damage to marine ecosystems. Overexploitation not threatens marine biodiversity but also the welfare of coastal communities that depend on marine resources for their livelihoods. (Yonvitner et al., 2016) Therefore, by applying the principles of Blue Accounting, the fishing industry is expected to manage marine resources more responsibly, ensuring that their practices do not harm the environment and continue to provide long-term benefits. Blue Accounting fills a gap in traditional accounting, which typically prioritizes financial aspects in business decision-making. (Almunawwaroh et al., 2018) Traditional accounting tends to ignore the ecological and social costs of business activities, often failing to provide a complete picture of the impacts of those business decisions. The introduction of Blue Accounting is expected to bring a paradigm shift in the way the fishing industry views and makes decisions. One of the main objectives of Blue Accounting is to increase public and organizational awareness of marine ecosystem management. Through this approach, stakeholders are expected to understand better the importance of preserving marine ecosystems and encouraged to adopt more sustainable practices.

Blue Accounting emphasizes several important aspects, including biodiversity preservation, reducing the environmental impact of human activities, and improving the welfare of coastal communities. The existence of Blue Accounting strengthens the position of environmental accounting and becomes increasingly relevant in the current era.

(Umarella, 2022) Environmental accounting is a branch of accounting that focuses on recording and reporting the environmental impacts of business activities. (Intan et al., 2023) The presence of Blue Accounting provides a more specific framework for the fishing industry, which may not have been fully accommodated in the more general concept of environmental accounting. The use of Blue Accounting can also assist in analyzing the blue economy, which focuses on the sustainable use of marine resources to improve human wellbeing. (Ilma, 2015) Through Blue Accounting, the value of the blue economy can be measured more accurately, considering not only financial profits but also the ecological and social benefits generated from good marine resource management.

2. Methods

The qualitative approach method used in this social research the constructivism is framework, often described as interpretivism. (William, 2024) This approach aims to understand social phenomena through the perspectives of the individuals involved, allowing researchers to explore the meanings participants attribute to their experiences and actions. In this study, the researcher acts as a non-participant observer and data collector, maintaining distance as an outsider to preserve objectivity and avoid bias. The data collection methods used include observation, in-depth interviews, and documentation. (Kawasati, 2024) Observations are conducted to directly observe activities and interactions in the field, providing a deeper contextual understanding of the dynamics in the Palabuhanratu fishing industry. In-depth interviews are conducted with various stakeholders, including fishermen, boat owners, and other related parties, to explore their perceptions and views on profit and sustainability in the context of Blue Accounting implementation. Documentation involves collecting relevant data, such as official data, that can support the research findings. The data analysis process in this study follows systematic stages, starting from data reduction and data display to conclusion drawing (Rijali, 2018).

Data reduction is the initial stage in analysis, where data collected from various sources is processed and simplified. This

process involves selecting, focusing, and simplifying raw data so that relevant and meaningful data can be identified. Through this stage, the researcher sorts through abundant data to create more structured and focused information, enabling more effective and efficient management. Data reduction helps the researcher eliminate irrelevant or redundant information, allowing the analysis to focus on the most significant issues. The next stage is data display, where the reduced data is organized and presented in a structured form. Data display can be in the form of tables, diagrams, graphs, or structured narratives, making it easier for the researcher to identify patterns, trends, and relationships between variables. Good data presentation not only clarifies information but also allows for more in-depth and comprehensive analysis. In this research context, organized data presentation helps identify key findings and understand the complex dynamics in the Palabuhanratu fishing industry, as well as how Blue Accounting is implemented.

The final stage is conclusion drawing, where the researcher evaluates and interprets the presented findings to produce valid and credible conclusions. Conclusion drawing involves an interpretative process that links findings with relevant theories and literature. The researcher must ensure that the conclusions are based on strong evidence and consistent with the collected data. In this stage, the researcher must also consider the research context and the possibility of intervening variables that may influence the results. Therefore, the conclusions must address the research questions and provide significant new insights. Overall, the data analysis process in systematic this research follows methodological stages, starting from data reduction and data display to conclusion drawing. These stages are designed to ensure that each step in the data analysis is carried out carefully and thoroughly so the research results can provide meaningful contributions to understanding the implementation of Blue Accounting in the Palabuhanratu fishing industry. Thus, this study not only focuses on the technical aspects of data collection and analysis but also the quality of interpretation and the validity of the conclusions drawn.

3. Result

3.1 Profit

Profit from this perspective provides a more comprehensive insight into the various factors influencing profitability in the fishing industry. (Dewi & Tania, 2022) Stakeholder Profit Theory aligns with the fishermen's perspective, where profit is defined as the money earned from their hard work in catching and selling fish. (Alfian & Putra, 2016) Analyzing profit from the fishermen's perspective involves considering factors such as fish stock levels, fishing efforts, and market prices. This model assumes a relationship between fishing efforts, such as the number of boats or the time spent fishing, and the catch, which then impacts the income and profit earned by the fishermen. Thus, integrating Stakeholder Profit Theory provides a comprehensive perspective on how profitability in the fishing industry can be effectively understood and managed. On the other hand, Modern or Neo-Classical Profit Theory is relevant to the ship owners' perspective, which views profit from a broader and more complex standpoint. For ship owners, profit not only includes the revenue from selling fish but also involves allocating that income for various operational and strategic purposes of the company. (Pujiati, 2011) Ship owners are responsible for the entire operational process, from ship maintenance, fuel purchase, and procurement of fishing equipment to paying fishermen's wages. Additionally, ship owners must consider the costs of repairs and upgrades to ensure the ships remain suitable for future fishing activities.

Therefore, the profit perspectives from both the Stakeholder and Neo-Classical theories provide a holistic analytical framework for understanding the dynamics of profitability in the fishing industry. These theories not only help assess economic performance from the viewpoints of various stakeholders but also offer insights into how sustainable and efficient business practices can be applied in this industry. The profit earned from selling fish by ship owners is used to cover all operational costs. After all operational costs are met, the remaining income is allocated as company profit. This profit can be used for various purposes, including reinvestment in the form of ship and equipment repairs, as well as to support future fishing trips. Most of the profit

generated from the fishermen's catch is allocated to cover operational costs and ship maintenance. Informants explained that the income earned is used for various essential needs, such as routine ship maintenance, fuel purchase, and repairing damaged fishing equipment. Furthermore, ship emphasized the importance of allocating funds to meet other financial obligations, such as crew wages. Ship owners recognize that effective and efficient fund management is crucial to ensuring smooth operations and sustainability of the fishing business. They explained that every component of operational costs must be carefully considered to avoid unnecessary expenses and maximize the profit earned. This includes proper budgeting for ship maintenance, ensuring that the ships are always in good condition and ready for operation, and wisely managing fuel and equipment supplies.

Based on observations, researchers noted that the company often had damaged ships and engines, both those that were still being collected and those under repair. This indicates the company's awareness of the importance of gradual maintenance and repair of equipment. This process reflects the company's commitment to maintaining optimal operational facilities. Regular repairs and replacements show that the company understands the importance of well-functioning fishing equipment in supporting fishing operations. Ships and engines in good condition not only increase fishing efficiency but also reduce the risk of more serious damage and higher repair costs in the future. The repair process involves thorough inspections of the ships and engines, identifying damages, and performing necessary repairs or component replacements.

3.2 Sustainability

After conducting observations, the researchers found that the company had implemented the program from PPN Palabuhanratu regarding the Measured Fishery Program (PIT) and had used sustainable fishing gear such as Hand Line and FADs. However, the lack of efforts to enhance sustainability in the Palabuhanratu fishing industry includes education about sustainability principles, particularly related to understanding the marine ecosystem and the need to maintain balance in resource utilization. Researchers found that the theory of Sustainable Fisheries

Management is relevant to the observations made. In this context, it is evident that there is a lack of initiative from the company or ship owners to disseminate knowledge about sustainability, especially in terms of educating fishermen. (Lackey, 1978) This lack of initiative creates an imbalance in knowledge about sustainability among key actors in the fishing industry. The insufficient dissemination of knowledge about sustainability among fishermen can hinder efforts to achieve sustainability in the fishing industry. When knowledge about sustainability is not evenly distributed, it becomes difficult to implement sustainable practices in daily operations at sea. Consequently, there is a possibility of unsustainable fishing practices, such as overfishing or catching fish that have not reached biological maturity. To achieve sustainability, a strong understanding of the marine ecosystem and sustainability principles is needed among all parties involved in the fishing industry. (Oceanpanel.org, Without adequate initiatives to spread knowledge about sustainability, efforts to achieve sustainability in the fishing industry will be hampered, and the balance of the marine ecosystem will be challenging to achieve.

Furthermore, the uneven knowledge about sustainability can create disparities in the implementation of sustainable policies and practices among fishing companies. (Anwar, 2022) This disparity could lead to some companies being more advanced in applying sustainable practices, while fishing companies in Palabuhanratu may lack the concern or sufficient knowledge to do so. This can result in which impacts inequality, the environment and the well-being of fishermen in various regions. To address this lack of initiative, comprehensive efforts are needed to raise awareness and knowledge about sustainability in the Palabuhanratu fishing industry. This can be achieved through educational programs organized by the government, related agencies, or the fishing companies themselves. These programs should cover various aspects of sustainability, including understanding the marine ecosystem, principles of fisheries resource management, and sustainable practices in fishing and resource management. (Rahman et al., 2024) Additionally, collaboration between all parties involved in the fishing industry, including the

government, companies, fishermen, and nongovernmental organizations, is crucial to ensure the effectiveness of sustainability education efforts. Through this collaboration, knowledge and awareness about sustainability can be widely spread and more evenly implemented throughout the fishing industry, which in turn will contribute to the preservation of marine resources and the well-being of fishermen.

3.3 Implementation of Blue Accounting

PPN Palabuhanratu has adopted a program similar to the concept of Blue Accounting, which they call Blue Economics. One specific initiative in this program is the Measured Fishery Program (PIT), aimed at better managing fish resources and ensuring the sustainability of the marine environment. This program is claimed to have been well implemented by PPN Palabuhanratu, with education provided to related companies that are expected to apply PIT principles. However, field observations show that significant challenges remain in implementing this program. Some fishermen are still known to throw trash into the sea despite the implementation of measured fishing. This indicates that the program's implementation is still not optimal and requires more intensive efforts to achieve the desired results. PPN Palabuhanratu has initiated efforts to separate organic and non-organic waste and manage used oil waste separately. Additionally, the "Clean Friday" program regularly held by PPN Palabuhanratu demonstrates its commitment to maintaining the cleanliness of the surrounding environment. Implementing ISO 14001 is also strategic step to ensure that their environmental management system complies with international standards. These efforts align with the Sustainable Development Goals (SDGs) 14, "Life Below Water," which aims to conserve and sustainably use marine, ocean, and fishery resources.

The theory of Community-Based Natural Resource Management (CBNRM) is highly relevant to the researchers' exploration in the Palabuhanratu fishing industry, where its implementation shows variations in fishermen's behavior regarding waste disposal. (Setiyono, 2016) Some fishermen dispose of waste directly into the sea, while others bring the waste back to land for more responsible disposal. There are

also those who admit that waste is often discarded directly into the sea while at sea. This waste disposal behavior reflects a lack of awareness and education about the negative impacts of waste on the marine ecosystem. Waste, especially plastic, has a significantly damaging effect on marine life. Interviews with ship owners revealed that waste management on board remains a challenge. One informant explained that although there has not yet been a formal education program from the company to the fishermen, internal communication efforts have been made to increase fishermen's awareness of the importance of maintaining the cleanliness of the sea. The company claims to have made efforts to educate fishermen about proper waste management to avoid disposing of the However, waste into sea. implementation is not always optimally monitored. This illustrates inconsistencies in waste management among fishermen. The practice of directly disposing of waste into the sea is still quite common, primarily due to a and facilities awareness of environmental impacts. This underscores the need for more intensive education and adequate infrastructure for waste management in the fishing sector. Increased attention to marine pollution issues makes it crucial for fishing companies and the government to work together to provide effective solutions. (Setiyono, 2016) Education about the negative impacts of waste on the marine ecosystem and the provision of easily accessible waste disposal facilities on board can help change fishermen's behavior.

4. Conclusion

The theoretical approach to profit in the fishing industry provides deep insights into the factors influencing profitability from both fishermen's and ship owners' perspectives. Stakeholder Profit Theory, relevant to the fishermen's viewpoint, emphasizes that profit results from the hard work of catching and selling fish. Through this framework, factors such as fish stock levels, the intensity of fishing efforts, and market prices significantly influence the profit obtained. This theory also highlights a direct relationship between fishing efforts and catch, which subsequently determines the fishermen's income and profit. Conversely, Modern or Neo-Classical Profit Theory is more relevant for ship

owners who view profit from a broader operational and strategic perspective. For ship owners, profit not only comes from the sale of fish but also includes the allocation of revenue for various operational needs such as ship maintenance, fuel purchase, equipment repair, and payment of fishermen's wages. After covering all operational costs, the remaining revenue is used as company profit, which can be allocated for reinvestment or funding future fishing trips. Field observations reveal that companies in the fishing industry recognize the importance of regular maintenance and repair of fishing equipment to maintain operational efficiency and sustainability. Ships machinery in prime condition not only enhance fishing efficiency but also reduce the risk of serious damage and higher repair costs in the future. This repair process reflects the companies' commitment to maintaining optimal operational facilities, which is essential for supporting the sustainability of the fishing business.

Within the context of sustainability, Sustainable Fisheries Management theory emphasizes the importance of education and knowledge about sustainability principles among fishermen and ship owners. A lack of initiative in spreading this knowledge can hinder efforts to achieve sustainability in the fishing industry. An imbalance of knowledge about sustainability among industry players can create gaps in the implementation of sustainable policies and practices, negatively impacting marine ecosystems and fishermen's welfare. PPN Palabuhanratu has adopted the concept of Blue Accounting through the Measured Fish Catch (PIT) program to manage fish resources and ensure the preservation of the marine environment. Although this initiative has been implemented, significant challenges remain in its application, such as the behavior of fishermen who still dispose of waste into the sea. The implementation of ISO 14001 demonstrates strategic steps taken to ensure that their environmental management system meets international standards, aligning with the Sustainable Development Goals (SDGs) 14, namely "Life Below Water."

Community-Based Natural Resource Management (CBNRM) theory is relevant in the context of fishermen's behavior regarding waste disposal at sea. A lack of awareness and education about the negative impacts of waste on marine ecosystems results in irresponsible waste disposal behavior. Efforts to address this issue require more intensive education and adequate infrastructure for waste management in the fishing sector. Education about the negative impacts of waste on marine ecosystems and providing easily accessible waste disposal facilities on ships can help fishermen's behavior. change Overall, integrating profit and sustainability theories in the fishing industry provides a comprehensive view of how profitability can be effectively understood and managed. Intensive and collaborative efforts between the government, companies, fishermen, and non-governmental organizations are crucial to ensuring the sustainability of the fishing industry.

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