RESUMO - MEIO AMBIENTE, SUSTENTABILIDADE E DESENVOLVIMENTO

A NEW PROTOTYPE FOR THE BLUE ECONOMY AND THE SEAS THROUGH SUSTAINABILITY 4.4

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Introduction: The Sustainability 4.4 model is aligned with the continuity of social, environmental, corporate, and human resources. Therefore, the Environmental, Social, and Governance (ESG) factors, in which the Social, Environmental and Governance aspects are connected to marine environmental resources. These, in turn, must be able to provide for the perpetuity of waters, lands, forests, and climate, integrating technology and science for ocean management. At the same time, the Blue Amazon (BA) proposes the preservation and excellence in the continuous maintenance of coastal maritime balance, in parallel with the concern for decarbonization and offshore production until 2040. Objective: To discuss the context related to the strategies to be employed in the economic sustainability of the sea, taking into account sustainable practices. Methods: The study used as parameters data contained in the academic database Research Gate in the Sustainability Matrix 4.4 (MS 4.4) or commonly known as the ESG Materiality Matrix; SciELO in Sustainability Indicators Matrix (waste management and sectoral assessments); UFRJ and UTFPR with theses on the use of the GDCI “Goal-Driven Chain of Indicators” and MDPI “The Sustainability Matrix” (technical studies of project management) and Center of Excellence for the Sea (CEMBRA, BRAZIL). For the measurement of Blue Economy (BE) indicators, integrated stakeholder systems were used, arranged in the original form of MS 4.4 (with sixteen commitments from organizations). In the Brazilian

marine coast, bioenvironmental, social, corporate and human resources are encapsulated in the methodology contained in the Catalog of Indicators for the Circular and Sustainable Blue Economy (CIEACS, 2025). Consequently, no checklist was applied to evaluate the studies collected; raw data available in CIEACS were used for subsequent qualitative analyses. Results: It was observed that the use of MS 4.4, despite its benefits, can present implementation challenges, especially in large organizations, as the interpretation of results can be subjective, depending on the chosen metrics and the objects analyzed. Therefore, overcoming these challenges requires a continuous commitment to improving and adapting organizational matrices through the creation of a CIEACS (Center for Integrated Environmental and Social Development). Although sustainability models offer benefits, they can also cause problems due to the absence of Environmental Education. Furthermore, the interpretation of results can be affected by subjectivity, and to overcome these difficulties, a continuous effort to improve and adapt the models in accordance with the Amazon Blue Project (PAA/companies and job creation), focused on economic development metrics for Brazilian seas and oceans, is essential. Conclusions: By highlighting the so-called AA (Amazonian Environmental Management), the Brazilian Navy has a significant responsibility and a unique opportunity to contribute to the 2030 Agenda, concomitant with the Sustainable Development Goals (SDGs). At the same time, Capacity Building and Environmental Education needs to start from the ground up; at the local level, it is necessary to leverage the level of digitalization of blue services, logistics, and security. In conclusion, MS 4.4 has the capacity to significantly influence the marine environment, society, the economy, and human resources, since the Brazilian sea represents strategic realism within the PAA.

Palavras-chave: keywords: blue amazon; environmental education; marine biodiversity.