



A Literature Review on Strategies for Integrating Blue and Green Economies in Eastern Indonesia

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Abstract. This essay offers a thorough analysis of the literature on the subject of regional development banks' (RDBs') contribution to sustainability in Eastern Indonesia by integrating the blue and green economies. RDBs are essential financial intermediaries that can help finance eco-tourism, green agriculture, sustainable fisheries, renewable energy, and other areas of sustainable economic development. The analysis emphasizes the main tactics used by RDBs to support environmental sustainability, such as the financing of green and blue initiatives and the coordinating of bank policies with regional sustainability objectives. Notwithstanding advancements, obstacles including budgetary limitations, institutional restraints, and regulatory hurdles continue to hinder RDBs' ability to effectively spearhead all-encompassing sustainability initiatives. In order to maximize the potential of RDBs, the report ends with some strategic recommendations. These include utilizing global alliances and strengthening legal frameworks to hasten the merging of the blue and green sectors. These observations are meant to serve as a starting point for further study and policy-making regarding RDBs' contributions to sustainable development in emerging markets.

Keywords: Regional Development Bank, Green Economy, East Indonesia, Sustainable.

1 Introduction

Especially in the case of emerging nations, the incorporation of sustainability into economic development has emerged as a critical global issue. Adopting sustainable business models is essential as the effects of climate change and environmental degradation get worse. Accordingly, the ideas of the "green economy" and "blue economy," which seek to strike a balance between environmental preservation and economic growth, have gained popularity. While the green economy concentrates on reducing environmental hazards through investments in clean technologies, sustainable agriculture, and renewable energy, the blue economy emphasizes the sustainable use of ocean resources for economic development, enhanced livelihoods, and the health of ocean ecosystems. These methods are especially applicable to nations such as Indonesia, whose abundant natural resources, especially in the eastern parts of the country, present substantial opportunities for sustainable development [1].

Regional Development Banks (RDBs) are essential to the upholding of these sustainable economic models, especially when it comes to funding programs that coincide with ecological objectives. Because they are regional financial intermediaries, RDBs are in a unique position to recognize and address local developmental needs. Through funding renewable energy projects, encouraging

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sustainable fishing, bolstering ecotourism, and facilitating green agricultural practices, they may play a pivotal role in propelling sustainability. In order to integrate the blue and green economies of Indonesia, Bank Pembangunan Daerah (BPD) is playing a more and bigger role in areas like Sulawesi, Papua, and Nusa Tenggara.

But even while the blue and green economies are becoming more widely acknowledged as engines of sustainable development, little is known about RDBs' potential to make meaningful contributions to these fields. Studies indicate that a number of obstacles, including insufficient funding, insufficient legal protections, and institutional limitations, prevent RDBs from realizing their full potential [2]. Furthermore, a major obstacle to reaching regional sustainability objectives is the absence of a thorough strategy plan for incorporating the blue and green economies into RDB activities. To maximize their contribution to sustainability, it is crucial to critically assess the current tactics used by RDBs and pinpoint areas where advancements might be made. By performing a thorough literature analysis on the role of Regional Development Banks in promoting sustainability through the integration of blue and green economies in Eastern Indonesia, this paper seeks to close this research gap. This study looks at existing research, policy frameworks, and case studies from other nations in an effort to find practical approaches that RDBs might use to promote sustainable development in the area. The literature on how regional development banks integrate blue and green economies to promote sustainability in Eastern Indonesia is thoroughly examined in this study.

2 Research Method

In order to comprehend and evaluate the function of Regional Development Banks (RDB) in promoting the sustainability of the blue and green economies in Eastern Indonesia, this study will primarily employ a literature review technique. Because the study's focus is on examining current tactics and applying the idea of sustainability from the standpoint of financial institutions, literature reviews are deemed relevant.

The study's data were obtained from a variety of secondary sources, such as books and monographs that addressed theories of the green economy, blue economy, and the role of financial institutions in sustainability, as well as international and national scientific journals that address issues pertaining to regional development banking, sustainability, and the green and blue economies. Three primary steps comprised the design of this research: identifying the literature, evaluating and analyzing the literature, and developing and synthesizing a plan.

A rigorous search of the literature will be carried out using a variety of scientific databases, including Google Scholar. "Blue economy finance", "Green economy finance", "Development banks and environmental sustainability", and "Regional Development Banks and sustainability" are some of the search terms that were utilized. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) procedure will be adhered to during this process to guarantee that the literature gathered is thorough and pertinent. The inclusion criteria encompass both classic studies pertinent to the research issue and works published over the recent ten years (2015–2024).

After the literature has been located, each article and report that has been chosen will be thoroughly examined by the study. One aspect of the literature examination is the policy context (a). The ways in which RDBs and other comparable financial institutions support the sustainability of the blue and green economies; (b) Sustainability metrics. identifying metrics (c) financing options for green and blue economy initiatives funded by RDBs, such as energy efficiency, carbon emission reduction, and fisheries resource management. examining the financial tools that RDBs have put in place to assist sustainable initiatives in the domains of the green economy (green agriculture, renewable energy), blue economy (fisheries, marine, ecotourism), and (d) international case studies. contrasting the finest methods used by regional development banks in various nations to promote the green and blue economies.

3 Results and Discussion

Finding studies, academic papers, and policy reports about the role of Regional Development Banks (RDB) in advancing sustainability and blue and green economy integration strategies in Eastern Indonesia was the first step in this research project. More than 35 related studies were found in the Google Scholar database after the literature was screened using the aforementioned criteria. Seven articles were chosen as primary materials from these literatures since they directly relate to the subject of this study. The articles shed light on the limitations that RDBs in Eastern Indonesia confront as well as their contribution to sustainable financing, as displayed in Table 1.

Table 1. Distribution of the Chosen Research by Primary Subjects

No	Primary Subjects	Count of Articles
1	RDB's Place in Sustainable Finance	3
2	Green Economy	2
3	Blue Economy	2

Following identification, a review and analysis of a chosen body of literature was carried out to gain a deeper understanding of the problems and contributions that RDBs have encountered in promoting sustainability. Numerous significant findings emerged from the investigation, which were then categorized into two primary areas: (a) the role that RDBs play in financing green and blue economy projects, and (b) the institutional, financial, and regulatory obstacles that restrict their involvement.

3.1 The Financing of Green and Blue Economy Projects by RDB

Finance for the Green Economy. Encouragement of Sustainable Agriculture and Renewable Energy. According to [3], RDB is crucial to the funding of renewable energy and sustainable agriculture initiatives. Since banks are primarily concerned with regional development, they frequently serve as middlemen in the capital access process for small and medium-sized businesses operating in the organic agriculture

and clean energy sectors, which include biogas and solar power. This strategy accelerates the shift to a green economy by assisting rural places in lowering their reliance on non-green energy sources.

Pay attention to the blue economy. Finance for Sustainable Marine Projects. According to research by [4], RDB also promotes the growth of the blue economy, with an emphasis on the sustainable use of marine resources. The promotion of coastal ecotourism, sustainable fisheries management, and coral reef conservation are a few of the projects that RDB funds. RDB boosts fishermen's ability to participate in a more sustainable global market by facilitating the development of ecologically friendly fishing technologies through lending schemes and cooperation with local governments. Global Cooperation within the Blue Economy. The RDB also facilitates international collaboration in the blue economy, claim [5].

3.2 Institutional, Financial, and Regulatory Difficulties

Regulatory Obstacles. Bank Policy Gaps for the Blue and Green Economy. Study of [3] and [4] both stress how insufficient the regulatory environment is to promote the green and blue economy. Uncoordinated monetary and fiscal policies are a problem for RDBs, particularly when it comes to incentives for sustainable projects. This disparity restricts RDBs' capacity to make use of financial resources and encourage investments pertinent to green projects. It is challenging to implement investments in green and blue projects because of unstable laws, particularly at the regional level. Reliance on local governments and little financial resources. According to [6], government-owned RDBs have substantial financial difficulties. Large-scale initiatives in the green and blue sectors are difficult for RDBs to finance because of their reliance on local resources and financial assistance from local governments.

Operational Efficiency and Institutional Challenges. In terms of operational effectiveness, RDBs in Indonesia also confront institutional obstacles, according to [7]. Their research indicates that many RDBs in Indonesia are still not entirely efficient in allocating their resources to sustainability projects, according to the Malmquist Productivity Index and DEA (Data Envelopment Analysis) techniques. RDBs tend to be more conservative in financing due to their limited ability to handle complicated projects, especially those involving high technology like renewable energy and marine. This prevents them from participating in high-risk but long-term effect green and blue initiatives. Insufficient Human Resources and Adequate Technology Support. Further challenges facing RDBs include the issue of human resources with little training in sustainable finance and limited access to contemporary technology, as noted in the study conducted by [3].

3.3 Development of Synthesis and Strategy

PESTEL Analysis of Indonesia's Blue Economy Policy [4] demonstrates how political, economic, social, technological, environmental, and legal aspects all affect Indonesia's blue economy policies. It is imperative that the government encourage the blue economy. RDB can take advantage of collaborations with local governments to finance initiatives related to coastal ecosystem preservation, local community

empowerment, and maritime infrastructure projects. Possibilities to enhance funding for ecotourism and sustainable fishing. Pay attention to environmental initiatives including managing marine garbage, reducing the impact of climate change, and protecting coral reefs.

Bank Specific Factors and RDB Efficiency in Indonesia [3]: This study demonstrates how internal factors including bank size, the amount of non-performing loans (NPLs), capital structure, and governance affect RDB efficiency in Indonesia. This efficiency needs to be raised in order to help the green and blue economy sector. By enhancing digital technology in operations, streamlining governance, and strengthening credit risk management when funding green and blue economy initiatives, RDB can increase its efficiency. This study, Government Ownership and Competitive Advantage of RDBs [6], demonstrates how government ownership can give RDBs an advantage over their competitors.

Increased productivity and efficiency can be attained by technical innovation and modernization, according to the Malmquist Productivity Index, the DEA method, and the Efficiency and Productivity of RDB in Indonesia [7]. Integrated financial technology can be used to streamline RDB processes, particularly when funding green energy projects and protecting the environment in coastal and inland regions. The Blue Economy Cooperation in the blue economy between developed and Indonesian nations can serve as a paradigm for RDB when creating cross-border cooperation initiatives [5]. Sweden possesses expertise in sustainable marine management, which might be implemented via collaborative project funding.

The study "Green Finance and CO2 Emission Reduction" [8] emphasizes the value of governance effectiveness and green finance in promoting investments in renewable energy and lowering carbon emissions. In order to meet emission reduction targets, RDB can help finance renewable energy projects in Eastern Indonesia, such as wind or solar power plants. RDB is equipped to create green finance solutions especially for projects involving renewable energy. Furthermore, it's critical to improve governance in environmental risk management. Innovation and Green Finance [9] is a study that highlights how innovation contributes to the development of green technology and how green finance is essential to hastening its adoption.

4 Conclusion

RDB Development Strategy Synthesis for the Blue and Green Sectors. The first tactic is cooperation and partnership. To finance initiatives related to the blue and green economies, RDB must establish partnerships with international organizations, the corporate sector, and the government. Innovation in financial products is the second tactic. creation of green financial instruments for renewable energy and marine conservation projects, such as green bonds or green credits. The third tactic is advancing digitization and technology. Using financial technology to promote financial inclusion in the maritime and rural sectors will increase operational efficiency. The fourth tactic is getting access to foreign financing. boosting sustainable investment in regions with significant blue economy potential through the use of green finance and international cooperation.

To enhance the function of Regional Development Banks (RDBs) in promoting sustainability in the blue and green economies of East Indonesia, a thorough and strategic methodology is required. Insights from various studies highlight that RDBs have considerable potential to promote sustainable economic growth by capitalizing on their distinctive position in regional financial networks. Through partnerships with governmental agencies, international stakeholders, and the private sector, RDBs can channel funds into key areas such as marine conservation, renewable energy, and environmental stewardship.

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