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The Role of Environmental Education in Supporting the Blue Economy: A Literature Review

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Abstract: Environmental education serves as a cornerstone for optimizing the blue economy—a sustainable development concept that prioritizes environmental justice and economic advancement for coastal and maritime communities. This study examines the extent to which environmental education can support the blue economy, employing a qualitative research method based on a literature review. The research highlights that integrating environmental education values into blue economy programs is crucial for balancing economic growth with environmental conservation. The economic status of fishing communities across Indonesia's coastal regions remains below the poverty line, partly due to a lack of focus on education; children in these communities often spend their days helping their parents catch fish, while their social interactions are largely confined to fish-trading activities—a situation that frequently leads to school dropouts. In response, the government is striving to align the educational curriculum with the specific circumstances of fishing families through initiatives such as the "Boat Class" (*Kelas Perahu*) program and direct financial assistance via the Smart Indonesia Card (*Kartu Indonesia Pintar*) program. These efforts aim to ensure educational success for these children, enabling them to independently create opportunities to improve their quality of life and economic well-being.

Keywords: Blue Economy; Environmental Education; Sustainable Development.

Introduction

The decline in the quality of natural resources from year to year has caused various damages to the earth's ecosystem. The negative impacts that have occurred to date, especially in very complex marine areas, include the rise of rubbish, especially plastic, which is often found in the open sea. This opinion is in line with Yose et al. (2023) who found that marine plastic pollution is one of the biggest environmental problems globally, with negative impacts on human well-being, but the socio-cultural impacts are still poorly conceptualized and under-researched, such as the impact of unfriendly lifestyles and cultures. The environment has caused damage to this marine ecosystem Lu & Yamazaki, (2023) also stated that the impact of excessively productive economic activities on maritime affairs has also been proven to cause conflict. This is none other than the result of failure in managing natural resources which causes over-exploitation which also has an impact on poverty and changes in social behavior and worsens marine productivity.

Another issue that is quite important to highlight according to Sahri et al., (2020) namely marine conservation governance, especially in Indonesia, where there are still findings of overlapping functions and mandates in 28 Indonesian national regulations and 16 provincial regulations regarding marine spatial planning. For example, even though there are regulations for the protection of marine mammals in Indonesia, the practical actions are still unclear and very weak, thus there are still gaps in protection so marine conservation issues are still not effective in protecting marine mammals in Indonesia.

Razak et al., (2022) also stated that Indonesian policy has encouraged diverse practitioners to

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implement coral reef restoration, but projects are often not coordinated with a wider network of restoration practitioners or scientists, and only 16% of identified projects include a post-installation monitoring framework. Incorporating clear objectives and long-term monitoring programs into the project planning stages, as well as prioritizing knowledge exchange and engagement with the international scientific community, will significantly improve restoration outcomes in Indonesia.

White et al., (2022) also believe that in marine ecosystems, coral reefs are an important habitat for marine biodiversity. Thus, the protection of coral reef ecosystems is very crucial today because it provides various extraordinary ecological and social services for the welfare of all creatures within them. However, it is unfortunate that there is still an increasing threat due to very destructive fishing practices. As a result, long-term solutions are needed to build capacity for marine conservation strategies that produce shared knowledge in a bottom-up approach by connecting all parties, including local communities, government and non-governmental organizations.

Jompa et al., (2023) also found that regulations in Indonesia in determining marine protected areas based on Law No. 23 of 2014 for district and provincial governments, there are still obstacles such as limited allocation of funds and low understanding of personnel in increasing the capacity of apparatus on a local scale, especially these findings in the cases of South Sulawesi Province and Southeast Sulawesi Province, this is also exacerbated by non-participation. local communities in managing marine spatial planning, as a result, the regulations implemented should produce good and strategic management strategies to support increasing human resource capacity, funding and monitoring.

These various problems in coastal and marine ecosystems have provided a change in thinking regarding sustainable management of marine ecosystems, one of the concepts is the blue economy which aims to improve the quality of the marine and social environment by maintaining environmental and economic boundaries in a balanced and sustainable manner. Rout et al., (2024) also stated that the transition to a blue economy plays an important role in generating multidimensional prosperity with a holistic view where humanity is part of nature so being able to maintain balanced relationships will be the main thing.

Sambodo et al., (2023) also stated that although the blue economy is large and has estimated value, marine use in the Indonesian economy is limited to the conventional sector, with marine capture fisheries, aquaculture and processing fisheries contributing 83 per cent of the total added value. The average contribution of the blue economic sector to Gross Domestic Product (GDP) in the last five years is still low, namely only around 3.6 per cent, mainly due to activities in the fisheries sector. Despite this, the blue economy is growing rapidly – from 2012-2020, the blue economy grew by 10.5 per cent per year, surpassing the national economic growth rate of around 5 per cent. This reflects the continued increase in demand for blue economy products and shows great potential if investments are implemented strategically. This long-term trajectory of the blue economy is in line with Indonesia's Vision 10 2045, where the blue sector's contribution to the economy is estimated to reach 12.45 per cent of the national GDP in 2045.

However, it must also be understood that the implementation of the blue economy will not run optimally if the education sector is not fully understood. For example, there are still many cases of fishermen fishing with conventional, dangerous materials which end up destroying the coral reef ecosystem. Gaebel et al. (2024) also stated that the use of science, scientific information and other knowledge will be an important input in the sustainable environmental management of marine ecosystems which will then produce input in the decision-making process so that it is by the principles of sustainable environmental governance.

Guijarro-Garvi et al. (2022) found that the main key dimensions of human development are closely related to the level of education as capital for socio-economic progress. This finding is in line with the close relationship of educated individuals gaining greater monetary benefits compared to the uneducated. Z. Li et al., (2022) added that it is important to consider the impact of educational investment as a model of economic growth for long-term human capital accumulation. According to him, the more we increase investment in education, the more we will encourage the production of technological advances.

Mahardhika et al., (2024) also found that education and learning are emphasized as the main drivers of sustainable development, so that in this process there is a close relationship between creating action from this knowledge. Feio et al., (2023) also believes that educational practices for sustainable living will revitalize local communities in producing a generation with a global perspective, thereby encouraging transformative pedagogy in promoting sustainable development.

The Development and Education sector is the gateway for the progress of other sectors. For this reason, the role of education is mainly in the development of the blue economy, especially in Indonesia. However, it is very unfortunate that the salaries of education sector workers are still lower than the average salary of employees in Indonesia, which has an impact on other workers becoming less interested in the world of

education. Based on the problems and findings above, the author wants to examine the urgency of the role of education, especially environmental education, in supporting the implementation of the blue economy in Indonesia.

Method

This research uses a qualitative type with a paper review technique adapted to the topic being discussed, namely the blue economy and environmental education. The research stages begin with first, collecting articles on these two topics, second, selecting the most appropriate article findings from 50 pieces, third evaluating the article findings so that there are 23 articles, fourth synthesizing the article findings, fifth providing a conclusion**.**

Result and Discussion

Based on the findings of the article obtained, the following is an explanation that the author has successfully studied, (Luova, 2019) found that the importance of environmental motivation in fostering a constructive approach within environmental education institutions determines the socio-cultural factors involved in institutional configuration when implementing various environmental development programs. Consequently, environmental education policies will be more successful in supporting the implementation of environmental education particularly for the children of coastal fisher folk.

Other research indicates that the children of fishermen face educational challenges, particularly a lack of interest stemming from insufficient motivation or encouragement from their parents. In their daily lives, these children often prefer playing by the sea or accompanying their parents to earn a living, as well as engaging in social interaction by selling the catch to the local community (Zerlinda & Alam, 2025).

This contrasts with findings from a study by Eriyanti et al. (2020) conducted among traditional fishing communities in Padang; that community aspired for their children to access higher education, believing that economic improvement would positively impact the quality of their children's schooling. However, experts have revealed that the fishing sector accounts for 25% of the national poverty rate (Natalia, 2024; Hilmi et al., 2025). Amidst these conditions, the government is striving to break the cycle of poverty affecting fishing communities by providing direct educational assistance to their children through the *Kartu Indonesia Pintar* (KIP—Smart Indonesia Card) program, aiming to improve the quality of life for the Indonesian people (Liza, E. et al., 2021).

Implementation of Education for Fishermen's Children

In response to these issues, the Indonesian government is actively initiating and implementing educational policies for coastal communities to address challenges regarding their future.

As part of government efforts to support their future—specifically to prevent children of fisherfolk from dropping out of school—the government has actively developed a school curriculum tailored to students' circumstances. Zerlinda & Alam, (2025) note that the Indonesian government has implemented the *Kurikulum Merdeka* (Independent Curriculum) as the national curriculum. This curriculum adopts an approach aimed at fostering meaningful and practical learning, prioritizing flexibility for teachers and educational institutions to design instruction that aligns with students' specific needs and contexts. This approach aligns with the "Boat Class" (*Kelas Perahu*) program implemented for the children of fisherfolk in Indonesia's coastal areas. See Figure 1: Learning activities of fishermen's children.



Figure 1. Study activities of fishermen's children, (Yusuf Ahmad/ yayasan BaKTI; (Rukmini, 2019)

Rukmini, (2019) reported that the Education Office took a proactive step by introducing the "Boat Class" innovation in Pangkep Regency during the 2016/2017 academic year; this initiative employs a self-directed learning system utilizing student worksheets. Boat class Innovation Model compiled from the opinions of experts in (Wiryanto, 2022), as Table 1.

Based on the expert views mentioned above, the "boat class" program represents a significant breakthrough in reducing school dropout rates. Through a self-study system utilizing tailored student worksheets—designed for use while children accompany their families out to sea—the program equips coastal youth with knowledge regarding marine environmental conservation and opens up better economic opportunities for the future of fishing families.

The *Kurikulum Merdeka* (Independent Curriculum) integrates environmental values so that

students not only understand theoretical concepts regarding the environment but also develop attitudes and take concrete actions to protect and preserve it (Sahban et al., 2024). Regarding Education, According to (Román et al., 2022) added that environmental education has a noble goal of fostering meaningful relationships with the global and local environment through creative natural experiences. It is emphasized here that direct natural experience will be more effective in providing more effective learning relationships. (Nxumalo, 2018) also stated that for environmental education practices to be more relationally realized, they must always be given practices that depict conditions of environmental damage authentically so that they will effectively directly experience these experiences which form environmental awareness of world conditions.

Table 1. The Boat Class Innovation Model

Dimension	Innovation Model
Initiative	This innovation proposes an educational transformation that shifts learning from the classroom to a fishing boat in the middle of the ocean (Kusnadi, 2017).
Objective	The innovation provides basic education and curbs high dropout rates. (Sari, 2019).
Implementation	The innovation is considered successful, with the criterion for success being its contribution to improving the quality of education in the region (Febriyanti & Torro, 2021).
Benefits	This innovation has provided benefits by delivering basic education services through "boat classes" to residents of primary and junior high school age (7–15 years old) (Said & Torro, 2020).
Impact	This boat class innovation has received various innovation awards at both national and international levels (Sari, 2019)
Dissemination	Other regions can adopt this innovation by replicating the innovation model (Darwin, 2019 / SindoNews Daerah.com).

Research by Zulkarnain et al., (2025) has demonstrated the existence of sustainability-oriented educational practices for the children of fisherfolk through empowerment programs covering fishing techniques, fishery product processing, and small business management—all aimed at diversifying livelihoods and enhancing the economic resilience of fishing communities. Furthermore, it is crucial for these children to understand global issues; as J, Grace & Jose, 2025). explain, the fisheries sector is vital to global food security. Consequently, community-based action plays a significant role in addressing global environmental issues (Chen et al., 2020)

On the other hand, (Kosta et al., 2022) found that it is important for environmental educators to focus more on development in overcoming various environmental problems caused by human activities rather than basic knowledge about the natural environment. (Li et al., 2024) found that students' environmental attitudes can be improved by continuing environmental education to the college level. Thus, the initial basis of learning that an individual receives will determine the quality of education in the future at the university. As a result, education here becomes a key strategy for achieving sustainable development and improving the quality of life of citizens.

Maurer & Bogner, (2019) stated that the family is the most important source of knowledge from environmental education for the next generation. As a result, improving environmental education can also be done by the family, which is then followed by schools, media and socialization. (Q. Wang et al., 2022) found that the implementation of environmental regulations as a culture in schools is proven to provide benefits in monitoring pro-environmental behavior for the achievement of environmental education. (Geng & Huang, 2022) found that building cooperative coordination between higher education and the environment will further improve joint development with conducive governance that establishes reciprocal interactions, ultimately advancing environmental education broadly.

Matos et al., (2022) found that the role of educators in encouraging innovative approaches such as interacting with nature wisely in environmental education materials designed will deepen individuals' interest in playing an active role in supporting biodiversity. Thus, environmental education seeks to explore nature in the open and convey skills and knowledge in protecting and restoring the environment. Vantieghem et al., (2023) found that it is important for teaching staff to have teaching competency skills in the form of confidence and efficacy in developing inclusive environmental education which will ultimately create quality conditions for their students.

Environmental education programs are important in this era due to increasing environmental damage which is also marked by the discovery that the younger generation no longer cares about the environment. As a result, the challenge of increasing environmental awareness must become a priority responsibility in caring for the global and local environment. If it is linked to the blue economy, increasing awareness of marine conditions must be a real, ongoing action for the sustainability of the marine ecosystem. This is in line with the opinion of Fermepin et al., (2024) who also added that marine primary productivity is an important driver for the functioning of marine ecosystems,

provides the basis for biodiversity and related economic productivity, and is the main component of ocean carbon sinks. However, this region is underrepresented in global marine protected areas and is largely overlooked in assessments of global priorities for marine conservation. Ardoin et al. (2020) adds that conservation strategies are a component of environmental education aimed at creating synergy and facilitating interaction among scientists, decision-makers, community members, and other stakeholders.

The Role of Environmental Education in Supporting Blue Economy Policies

Education serves as a cornerstone of the blue economy by equipping coastal communities—particularly fishers—with the skills and awareness needed to utilize marine resources sustainably; furthermore, it enables these communities to engage constructively in addressing environmental issues through eco-friendly practices. This approach aims to balance economic growth with efforts to conserve the environment and its ecosystems.

Therefore, this research supports the blue economy program and highlights the importance of environmental education, aligning with the blue economy policy promoted by the Ministry of Marine Affairs and Fisheries (KKP) and implemented by Sakti Wahyu Trenggono (2023)—serving as the Minister of Marine Affairs and Fisheries under President Prabowo's administration (2024–2029). This policy aligns with the Sustainable Development Goals (SDGs). The blue economy policy encompasses: a) the expansion of marine conservation areas; b) quota-based measurable fishing (PIT); c) the development of sustainable marine, coastal, and inland aquaculture; d) the supervision and control of coastal areas; and e) marine plastic waste cleanup through fisherfolk participation initiatives (Rahim et al., 2024). Meanwhile, The effective integration of environmental education values into the blue economy program is achieved through environment-based learning and action; the details are presented in Table 2.

Table 2. Framework The Role of Environmental Education in Supporting the Blue Economy Program

Environmental education values instilled	Sustainability Efforts	Support the Blue Economy Program
Biodiversity protection (Duquesne et al., 2026) Marine ecosystem conservation (recovery from degradation) (Foster et al., 2025)	Marine ecotourism can be developed to improve fishermen's livelihoods (Forje et al., 2021)	Expansion of Marine Conservation Areas
Impact of ecosystem damage (Martin et al., 2026)	Balancing economic and ecological aspects in fisheries resource management (Poltak et al., 2024)	Measured Fishing
Pro-environmental behavior (Tian & Liu, 2022)	Protecting vegetated marine ecosystems—such as seagrass beds, kelp forests, mangrove forests, and salt marshes—and implementing monitoring and regulatory enforcement for fishing activities (Lotze, 2021) Improving the quality of human resources through education (Wulan et al., 2024) Preventing the extinction of marine species (Marsh et al., 2026) and the degradation of coastal areas (Iqbal, 2020) Managing the fisheries sector sustainably to ensure food security and economic balance (Ahmed et al., 2024) Utilizing innovative technology (mobile applications) (Hungevu et al., 2025) and eco-friendly fishing gear (Chaliluddin et al., 2021) Adhering to quota-based, measurable fishing policies to address overfishing (Amarullah & Sumardi, 2018)	
Sustainable use of marine resources (Muin & Rakuasa, 2023)	It can increase productivity and product quality (Costa et al., 2026). Able to develop marine products (Retnaningsih et al., 2025) Participation in shrimp farming development Policy (Hilmi et al., 2025)	Development of Marine Aquaculture
Policies for preventing damage to coastal areas (Toledo et al., 2025)	It can strengthen the sustainability of the marine economy by maintaining the resilience of marine areas (Y. Wang et al., 2025) Oversight under Law No. 11 of 2020 regarding business activities utilizing coastal and marine waters (Shahnaz & Syaprillah, 2022)	Coastal Area Supervision and Control

Environmental education values instilled	Sustainability Efforts	Support the Blue Economy Program
	Development of an Ecosystem Service Value (ESV) assessment system (H. Li et al., 2024) Environmental impact evaluation employs the coastline utilization degree index (ICUD) to measure the extent to which human activities (such as settlements, industry, or tourism) affect the ecology and physical characteristics of coastal areas (Sui et al., 2020)	
Fisherfolk participation in various activities (Handoko, 2023)	Able to participate in decision-making regarding resources as well as coastal and marine spaces in their territory (Wilke, 2023) Habitat Restoration and Protection (Marsh et al., 2026) Coastal communities can participate in marine cleanup and initiatives to improve fishermen's economic well-being through the Marine Poverty Level (MPL) and Fishing for Litter (FFL) programs. (Forleo & Romagnoli, 2023) Support Sustainable Seafood Products (Kittinger et al., 2021) Beach and coastal cleanup of plastic waste (Purba et al., 2023) Waste management based on the '3R' principles (Reduce, Reuse, and Recycle) (Pandiyarajan et al., 2022) Coral reef restoration projects (Razak et al., 2022) Coastal community activities as an economically and ecologically viable solution (Pei et al., 2025)	Participatory Program

Environmental education plays a crucial role in shaping human resources capable of protecting the environment and utilizing natural resources wisely—thereby preserving resource availability—while fostering the skills and creativity needed to support the economy through value creation for fishers and the opening of new sector opportunities to strengthen the blue economy. The explanation can be summarized in Figure 2.

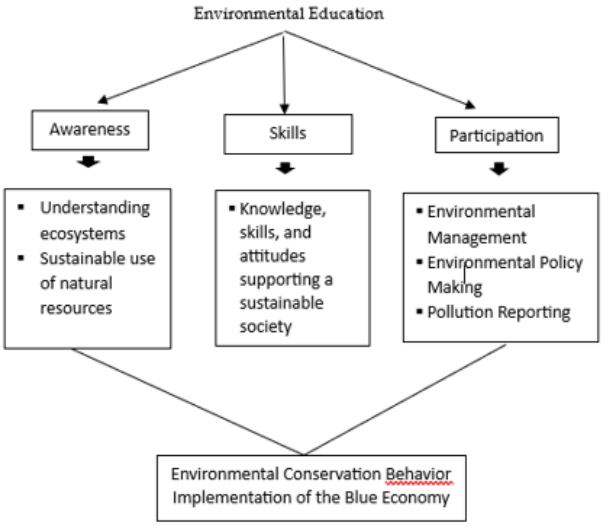


Figure 2. Environmental Education Supports the Blue Economy

However, economic recovery may not be achieved if coastal communities or fishers lack concern for marine environmental degradation. Research findings (Omeyer et al., 2022) also found2 that another marine problem is that there are still high levels of marine plastic pollution. Thus, the urgency of maximizing knowledge and understanding of the sustainability of marine ecosystems becomes paramount. Glaser et al., (2015) also stated that there is a need to develop marine and coastal policies that include national, regional and local stakeholder policies. This is because there are still few findings on coastal management communication between the government and stakeholders below the sub-district level or even among local stakeholders themselves. As a result, local government action needs to be further devolved to the island level, and individual local institutions need to be strengthened to reduce the island population's vulnerability to external and internal constraints and to increase capabilities in dealing with local opportunities. For this, village heads/subdistrict heads of islands that are administratively clustered but physically isolated from each other (on different islands or mainland) need to receive more attention.

Sosnowski et al., (2020) also 1 stated that there is a need for strict supervision in the discovery of illegal coral reef harvesting, as is the case in Indonesia and Fiji. The negative impacts of the live coral trade pose a significant risk to species that are simultaneously struggling due to increasing global temperatures and pollution. For this reason, strategic intervention is needed to prevent this crime script from continuing to develop and one of the efforts is to continue campaigning for the blue economy concept.

Fabinyi et al., (2021) argue that the blue economy has a concept of ocean governance that globally supports

the economic potential of the oceans in an environmentally friendly manner and improves the welfare of fishermen around the area so that this term must be viewed broadly so that it is not only a program based on environmental policy only.(Prasetyo et al., 2023) also found that the blue economy must be understood as describing a holistic approach that has a sustainable circular economic process, such as emphasizing new uses of water resources.

Harris & Thompson, (2023) also argue that three factors influence the development of the blue economy; first, techno-industrial processes, second, social and cultural processes, and third, physical environmental processes in marine biodiversity. As a result, policymakers must carefully pay attention to these factors for the transformative improvement of marine areas fairly and sustainably.

Jattak et al., (2023) found the importance of the efforts made by coastal countries in transitioning traditional socio-economic activities into sustainable activities by implementing the blue economy to overcome the problems that often arise in the coastal and marine environment.

Jentoft & Chuenpagdee, (2022) found that the future we want can be realized with the growth of the blue economy. To create this, strong and fair institutions are needed towards sustainable development by improving facilities and mechanisms for marginalized communities .Berita Disdik Jabar, (2023) also stated that currently increasing interest in the blue economy has created environmental policies that support the protection of fisheries and marine ecosystems.

Kabil et al., (2022) added that efforts to develop coastal tourism through a blue economy perspective have proven successful in increasing the efficiency of tourism centers with high economic income in the southern region of Egypt's Red Sea region. Midlen, (2023) also states that the blue economy represents a new development paradigm, which is promoted through multilateral institutional collaboration so this concept represents a form of global governance.

Ministry of National Developmet Planning/ Bappenas of Indonesia Indriyani et al., (2021) added that the principles of the blue economy are in harmony and harmony with the achievement of the vision of Indonesia 2045 which is built on 4 pillars, namely 1) human development, 2) mastery of science and technology, 3) equitable development and 4) strengthening national resilience along with governance.

Human development is crucial, as humans are the primary agents in environmental conservation—a key factor in balancing economic growth. The right solution lies in guiding human behavior toward the wise use of natural resources. Experts emphasize that environmental education plays a vital role in transforming behavior, imparting environmental management skills, and fostering participation in building a harmonious relationship between nature and individuals or communities; this ultimately shapes them into global citizens poised for a future with improved economic conditions (Zuhriyah, 2025).

Meanwhile, it is crucial for fishing communities to shift their perspective and support—as well as allow time for—their children's education. This enables these children to gain knowledge and understanding, improve their behavior, and acquire skills, all while remaining actively involved in addressing their families' needs. Improving children's education serves as a means of implementing the blue economy program, aiming to prepare a young generation that is skilled, innovative, and conscious of environmental sustainability. This aligns with the view of Marwiyah S & Fitria, (2022) that education for sustainable development—grounded in blue economy principles—encompasses the entire process of shaping the knowledge, skills, values, and attitudes that support individuals, higher education institutions, and communities in fostering equitable mindsets, economic security, and ecological sustainability.

Thus, based on the findings of the expert opinion above, the implementation of the blue economy is in line with environmental education. This is because environmental education is the initial basis for developing the follow-up to the blue economy. Environmental education becomes a strengthening pillar in the establishment of a blue economy. This blue economy concept combines several sectors such as renewable energy, fisheries, tourism, water transportation, waste management and climate change disaster mitigation processes, the final aim of which is to support improving the quality of welfare of communities around marine areas with economic growth without damaging the marine ecosystem. For this reason, the environmental education strategy carried out at the beginning before the blue economy will become a link in the follow-up to the future development of the blue economy. In the implementation of the blue economy, there are always problems, for example, fishing using fish bombs, the substance of which is dangerous, will damage coral reef ecosystems and pollute waters. If this is traced, it is caused by many fishermen who do not know about the dangers posed, so with environmental education at the start they should be able to guide with information that is right on target. So, education must be truly implemented if you want to maximize the implementation of the blue economy.

Education is a key center in the index of developing quality and superior human resources. In particular,

environmental education is illustrated here as a link for all environmental-based government programs to be efficient in their implementation phase. Then, if it is linked to the blue economy, it is very important. So, environmental education which is the foundation will directly maximize support for the blue economy. The government must continue to strengthen and develop this environmental education improvement to further support sustainability in the implementation of the blue economy for the progress of Indonesia in the eyes of the international community.

Conclusion

Education is the main root of maximizing the blue economy, especially in developing countries like Indonesia where education is still low. For this reason, environmental education is the starting point in building a strong foundation to support the maximum realization of a blue economy with equitable improvement in the quality of life of maritime communities. However, it is also necessary to understand in detail the risks and opportunities that will always occur in the implementation of the blue economy in Indonesia, where the pros and cons will always occur in its development and implementation. The government's role must be observant and responsive in dealing with these conditions in real-time according to real-time field conditions and in addition to the increasingly rapid pace of demographics in Indonesia. Strategic collaboration and increasing the development of water and maritime competencies between all related parties will further complete this blue economy implementation program optimally so that Indonesia can compete with other countries and provide quality and competitive marine resources.

This is in line with the concept of Vision Indonesia 2045 which continues to strive and strive to provide superior human resources with efforts to improve general education, vocational education, entrepreneurship and increase character development so that it increasingly supports the increase in the active role of the entire community in the development of knowledge and technology which is supported by development. quality education for all audiences.

The role of environmental education is that it is a means of connecting balance that encourages a person to reflect critically on the subjects and values they study. If it is linked to the blue economy, it is clear that environmental education is the initial basic key to effectively developing BE. If the individual already has the basic keys, of course, it will not be difficult in the learning process to carry out because they already know it informatively. For this reason, optimizing the concept of environmental education in the context of the goals of the blue economy will increasingly support positive encouragement, especially in the current era where technological progress is increasingly rapid and complex so that individuals are not easily induced to carry out negative actions that will damage the marine environment. Especially the ecological conditions in Indonesia, which is an archipelagic country, are closely related to maritime activities, as a result, the government must continue to pay attention to the important role of environmental education as the initial basis for optimizing the blue economy so that it can be passed on to future generations of young people.

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