

## **Application of the Sad Kerthi Concept in Developing Marine Tourism Area on the Blue Economy in Karangasem Regency**

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### **ABSTRACT**

This study presents a problem statement by exploring the application of the Sad Kerthi concept in the development of a marine tourism area in Karangasem Regency, Bali, with a focus on blue economy principles. The Sad Kerthi, deeply rooted in Balinese Hindu local wisdom, emphasizes the preservation of six sacred elements: *Atma* (soul), *Segara* (ocean), *Danu* (lake), *Wana* (forest), *Jagat* (earth), and *Jana* (human). The challenge lies in applying the blue economy approach to optimize the sustainable and wise utilization of marine resources while maintaining ecosystem balance and enhancing local community welfare. By aligning with Blue Economy principles, which advocate for the sustainable use of ocean resources for economic growth, the study underscores the potential of integrating traditional wisdom with modern economic models. The research indicates a methodology that utilizes a qualitative approach, conducting in-depth interviews with experts from governmental and cultural sectors, as well as academic and research programs that incorporate these values of local wisdom. The main findings indicate that local wisdom and the blue economy are interdependent, mutually strengthening each other in the quest for sustainable development. Local wisdom serves as a cornerstone for sustainable practices, cultural values, and community involvement, which can significantly enhance the effectiveness of the Blue Economy framework. The main conclusions of this research contribute to the discussion on sustainable tourism by illustrating the effectiveness of a culturally rooted approach to achieving both environmental and economic sustainability.

**Keywords:** Sad Kerthi, Blue Economy, Sustainable Tourism

### **INTRODUCTION**

The importance of the sea and its surrounding areas in tourism is not a new phenomenon (Hynes et al., 2024).

Marine tourism, a significant component of the blue economy, involves activities that take place in coastal and marine environments, such as snorkeling, diving, fishing, and cultural tourism. Besides that activities including marine minerals, marine renewable energy, desalination, marine transportation, marine living resources (capture fisheries and aquaculture), and coastal tourism are among them. The latter takes into account port operations, biotechnology, shipbuilding and repair, and seafood processing (Auad & Fath, 2022). As a driver of economic growth, marine tourism has the potential to generate income, create jobs, and support the sustainable development of coastal communities. This decade-spanning program emphasizes the vital connection between ocean health and the livelihoods of millions, particularly for those involved in maritime sectors and coastal communities (Yuan et al., 2024). Blue economy focuses on inclusivity, a concept that emphasizes the sustainable use of ocean resources, has emerged as a potential framework for balancing the interests of tourism with the needs of local communities and the preservation of marine ecosystems (Youssef, 2023).

The rise of coastal and marine tourism has brought both opportunities and challenges for local communities (Kabil et al., 2021). While marine tourism can drive economic growth and job creation, it also carries the risk of social and environmental sustainability issues if not properly managed (Lepoša, 2020). The demand for food, energy, and water may rise, sewage, waste, and pollution levels may rise, urbanization and development along the coast may occur, crowding and traffic congestion may occur, and natural resources like seagrass meadows, coral reefs,

and mangroves may be degraded, and the general well-being of the local population may decline. These and other negative effects of hosting tourism can make it a "two-edged sword" (Hampton & Jeyacheya, 2020). Uncontrolled tourism can cause changes in the social and cultural structure of local communities. Traditional values can be affected by external influences, and local culture can be turned into a commodity to meet tourist expectations. This can lead to the loss of the cultural identity of local communities. One key aspect of sustainable marine tourism is the incorporation of local wisdom and traditional practices. People in coastal communities frequently possess extensive knowledge of their surrounding environment and have cultivated sustainable resource management practices over many generations. Studies have shown that social sustainability issues can arise even in "blue growth" initiatives, with impacts on local communities, conflict over resource use, and unequal distribution of benefits. Effectively managing the complexities of program management in marine tourism requires a holistic approach that considers the diverse stakeholders, their varying value systems, and the dynamic relationships between them (Muksin et al., 2021). Tackling these challenges necessitates a multifaceted approach that combines sustainable tourism practices, the principles of the Blue Economy, and the meaningful engagement of local communities. Collaborative partnerships between tourism operators, policymakers, and local stakeholders can help to ensure that the development of marine tourism aligns with the long-term social, environmental, and economic needs of coastal regions (Lepoša, 2020).

Marine-based tourism, a key component of the Blue Economy, offers significant potential for economic growth, job creation, and support for coastal communities through activities like snorkeling, diving, and fishing. However, it also presents challenges such as the risk of social and environmental sustainability issues, including increased demand for resources, pollution, coastal development, and degradation of natural resources like coral reefs. The Blue Economy concept, with its emphasis on sustainable resource use and inclusivity, provides a framework for balancing tourism interests with the needs of local communities and the preservation of marine ecosystems, particularly by integrating local wisdom and traditional practices into tourism development. Some examples of areas that implement blue economy principles through their local wisdom are Seaweed

farmers in West Sumbawa demonstrate blue economy principles through their local wisdom, including sustainable fishing practices, kinship-based social structures, and norms for maintaining coastal ecosystems (Hardaningrum & Soetjipto, 2019). Similarly, on Rupat Island, local customs in fishing practices, mangrove management, and cultural arts support marine conservation and tourism (Jayakusuma et al., 2023). In the Thousand Islands, ecotourism development prioritizes ecological sustainability while boosting the local economy through creative enterprises (Alkhudri et al., 2021). In Bone Regency, coastal communities practice traditional rituals and fishing methods that promote environmental preservation (Hasriyanti et al., 2021). Bone Regency's coastal communities preserve local wisdom practices like Mabbaca Doang (prayer reading), Massappa Wettu Makanja No Ritasi e' (finding suitable fishing times), and Appakeng Parewa Tasi Mari Olo (using traditional fishing gear), which positively influence sustainable marine resource management (Hasriyanti et al., 2021). In Aceh, the historical institution of Panglima Laot enforces customary sea laws, safeguarding marine resources and empowering coastal communities (Abdullah et al., 2018). By integrating these local knowledge systems into tourism development, it is possible to create more culturally sensitive and environmentally responsible forms of tourism that benefit both visitors and hosts. The blue economy concept offers a sustainable approach to marine tourism development, emphasizing efficient resource use, zero waste, and community empowerment (Fahrurrozi, 2020). This approach has been successfully implemented in various coastal areas, such as Jumiang Beach in Madura and Klatak Beach in Tulungagung, where community-based tourism initiatives have improved local livelihoods and environmental conservation (Kurniawati et al., 2020). In Yogyakarta, the blue economy shows excellent potential for supporting sustainable tourism, though development strategies are still needed (Airawati et al., 2023). Overall, the economic stability and welfare of coastal populations rely on the resources derived from their surrounding environment (Vázquez Pinillos & Barragán Muñoz, 2024). These case studies demonstrate that the blue economy concept can effectively balance economic growth, social welfare, and environmental protection in coastal tourism development.

The growth of tourism in Bali, deeply rooted in socio-cultural influences, has motivated Balinese authors to

produce literary pieces that explore the interactions between the Balinese people (hosts) and tourists (guests), in both Indonesian and Balinese languages (Putra & Jelantik, 2023). The language skills and components provided are still general and do not fully address students' specific needs (Sudipa, Susanta, & Anggayana, 2020). Studying languages can contribute significantly to language development research globally (Anggayana, Suparwa, Dhanawaty, & Budasi, 2020). Conversing in English has become common among foreign tourists (Anggayana, Budasi, & Kusuma, 2019). The cultural tourism industry is also a significant component (Redianis, Putra, & Anggayana, 2019), especially considering the numerous cultural and religious practices observed by Balinese people (Budasi, Satyawati, & Anggayana, 2021). Tourism has the potential to deliver financial, societal, and cultural advantages for all involved stakeholders (Osin, Pibriari, & Anggayana, 2019). One advancement in tourism is fostering opportunities for millennials to engage in tourism activities in village settings, bridging cooperation between communities and government entities (Osin, Purwaningsih, & Anggayana, 2021). Observing the dynamic expansion of global tourism and the trend of diverse travel patterns presents both opportunities and challenges for destinations worldwide (Suarthana, Osin, & Anggayana, 2020). Given its significant contribution to the economy, the tourism industry employs a considerable portion of the workforce (Budasi & Anggayana, 2019). Bali and its cultural heritage are intricately linked to the global tourism industry (Putra et al., 2021). Bali has been the venue for several international conferences focused on sustainable tourism and heritage conservation (Putra & Hitchcock, 2005).

As a prominent tourist destination in Indonesia, Bali is undoubtedly positioned to compete with other provinces in the country (Sudiarta & Suardana, 2016). The tourism sector continues to be promoted as it is a key contributor to national revenue and foreign exchange for the country (Suryawati & Osin, 2019). Growth in the tourism industry can boost income for local communities near tourist sites and create new job chances (Osin, Kusuma, & Suryawati, 2019). Bali is the center of tourism in Indonesia and ranks among the top tourist destinations globally (Yanti & Anggayana, 2023). Bali is renowned for its traditional dance and drama; however, similar to other regions of the archipelago, it also boasts a lively culture of contemporary performing arts (Putra, 2008). Tourism

interests have increasingly focused on exploring regional potentials and packaging them as alternative tourism offerings (Suryawati, Dewi, Osin, & Anggayana, 2022). The maximum number of tourist visits allowed in one day with its various travel activities without harming the existing environment or ecosystem (Sudiarta & Karini, 2020). Currently, the tourism sector has expanded considerably in both scale and quality, positively impacting the nation's foreign exchange revenue (Osin, Pibriari, & Anggayana, 2020). Hospitality students regularly attend classes and practical sessions according to their majors, though errors in writing remain common. In this era of rapid technological advancements, there is a demand for highly skilled human resources who can support national development (Sengkey, Osin, & Anggayana, 2022). Likewise, senior high school / vocational high school graduates do have tourism majors that can also become practitioners (Sari, 2021). English also plays a critical role in enabling effective communication with international tourists (Antara, Anggayana, Dwiyantri, & Sengkey, 2023). Indonesia's global presence has grown, as demonstrated by increasing tourist arrivals from various countries (Putra & Anggayana, 2023).

The development of marine tourism areas has become a crucial aspect of the blue economy, which aims to promote sustainable and environmentally friendly economic activities (Lelloltery et al., 2021). The *Sad Kerthi* concept, rooted in Balinese local wisdom, presents a holistic approach to managing natural resources and fostering community involvement (Jayakusuma et al., 2023). In Bali's context, applying the *Sad Kerthi* concept can improve the development of a marine tourism area that is consistent with the principles of the blue economy. Through the integration of the *Sad Kerthi* concept, which emphasizes the harmonious relationship between humans, nature, and the divine, the development of the marine tourism area can be guided by the principles of sustainability, community empowerment, and environmental conservation (Lelloltery et al., 2021). The *Sad Kerthi* concept, based on Balinese socio-cultural capital, can be used to realize holistic and sustainable development. The *Sad Kerthi* concept, comprised six noble behaviors namely *Atma Kerthi* (purification of the soul), *Danu Kerthi* (purification of water resources), *Wana Kerthi* (purification of the forest), *Segara Kerthi* (purification of the sea), *Jana Kerthi* (Purification of Humanity), and *Jagat Kerthi* (Purification of the

Universe), is being applied to develop spiritual tourism areas based on green tourism principles in Nusa Penida District (Mirta et al., 2023). The six noble principles known as *Sad Kerthi* were established by Bali's Governor, Wayan Koster, to support the initiative of *Nangun Sat Kerthi Loka Bali*. This strategy is in harmony with the vision of *Nangun Sat Kerthi Loka Bali*, which seeks to harmonize ecological, social, and cultural-religious dimensions of development (Wiana, 2018). These initiatives collectively demonstrate Bali's commitment to sustainable development while preserving its unique cultural identity and local wisdom. This holistic approach to life and the environment advocates for harmony between humanity and nature, making it a valuable framework for sustainable development. In the context of marine tourism, the *Sad Kerthi* concept offers a culturally relevant and ecologically sound model that can be integrated with modern economic frameworks, such as the Blue Economy, to promote sustainable and responsible tourism.

Karangasem Regency, located in the eastern part of Bali, Indonesia, is endowed with a diverse array of Marine resources that are essential for both the local economy and environmental sustainability, with each sector offering growth opportunities that support a comprehensive approach to economic progress and environmental care (E A Alqattan, 2024). As a coastal region, Karangasem boasts a wealth of natural assets, including white sand beaches, calm sea waters, mangrove forests, and thriving coral reefs, all of which contribute to the potential for marine-based tourism development (Suarta & Budiarta, 2019). One of the key marine resources in Karangasem is the fisheries sector. The region's coastal waters are home to a variety of fish species, providing a valuable source of food and income for the local community. Efforts to sustainably manage these fisheries, such as through the implementation of efficient water management techniques and the promotion of eco-friendly fishing practices, can help ensure the long-term viability of this important resource (Trégarot et al., 2020). In addition to fisheries, Karangasem's marine environment also offers opportunities for the development of other marine-based industries, such as seaweed cultivation and the production of value-added products from marine resources. However, the challenge lies in balancing economic growth with environmental sustainability and cultural preservation. Environmental degradation occurs because marine tourism activities like

snorkeling, diving, and the use of speedboats often hurt marine ecosystems, such as damage to coral reefs and marine pollution due to waste disposal. Garbage pollution in the Bali Sea is currently a serious threat to coral reefs. Furthermore, the uncontrolled increase in the number of tourists has led to excessive exploitation of natural resources, threatening the sustainability of marine and coastal ecosystems.

The concept of "*Sad Kerthi*" is deeply rooted in Balinese culture, guides the sustainable use and management of natural resources, aligning with the broader goals of a blue economy, which aims to utilize ocean resources for economic development while promoting environmental sustainability and social fairness. The development of marine tourism in Karangasem presents an opportunity to integrate the *Sad Kerthi* concept with the blue economy framework. This integration could enhance the sustainable management of marine resources, promote cultural tourism, and support local communities' livelihoods while preserving the environment. This paper's value explores how the *Sad Kerthi* concept can be implemented in the development of a marine tourism area in Karangasem, guided by the principles of the Blue Economy, to develop a sustainable tourism framework that supports both the environment and the local community.

## METHODOLOGY

This research relied on primary and secondary data to obtain data to explore how the *Sad Kerthi* concept can be implemented in the development of a marine tourism area in Karangasem, guided by the principles of the Blue Economy, to develop a sustainable tourism framework that supports both the environment and the local community. The primary data were generated from key informant interviews (KIIs). The key informants were chosen through a purposive sampling technique. A total of 10 from various backgrounds are recommended to increase representation chosen and interviewed based on their overall knowledge of Local wisdom is *Sad Kerthi*. Key informants from various backgrounds are recommended to increase representation. The basis for determining their knowledgeability included governmental and cultural experts and academics/researchers' interest in the values of the *Sad Kerthi* concept can be implemented in the development of a marine tourism area in Karangasem. The key informants agreed to be interviewed voluntarily and gave verbal



consent, following the explanations of the purpose of the study. The key informants were acquainted with their right to discontinue the interview at any point without offering any reason for the decision. Appendix A provides basic information about the key informants. The study employed a semistructured interview instrument to obtain responses from the key informants. The choice of semi-structured question format was to provide a latitude for elaboration, where necessary. This study also utilized secondary data to complement the data from the key informants. The secondary data were sourced from databases and archival materials, including gazetted government documents, books, and journals. All the data were thematically organized and content-analyzed in the tradition of critical discourse technique and logical inductive method.

## RESULT AND DISCUSSION

The paper used a semi-structured interview protocol to elicit responses from the key informants. It combines data from key informants with those from various archival materials to address the five research questions that form the paper's thrust. The questions that constituted the semistructured questionnaire are captured in Appendix B. Our empirical analysis identified two major themes: how the Sad Kerthi concept can be implemented in the development of a marine tourism area in Karangasem, guided by the principles of the Blue Economy, develop a sustainable tourism framework that supports both the environment and the local community and the challenges and opportunities of Integrating local wisdom into marine tourism. Results and Discussion: Data should be presented according to the research type, utilizing narratives, tables, or suitable visuals. Following this, the data is analyzed by comparing relevant concepts, theories, or findings from past studies.

KI-1 contended that *"In Bali, the community believes in the existence of two dimensions of life, namely sakala (the real/visible world) and niskala (the unreal/virtual world). The order of life that is interconnected and united in essence is expressed in the values of Sad Kerthi, namely the six sources of human welfare, namely 1) Atma Kerthi, meaning Purification and Glorification of the Atman/Soul; 2) Segara Kerthi, meaning Purification and Glorification of the Sea and Beach; 3) Danu Kerthi, meaning Purification and Glorification of Water Sources; 4) Wana Kerthi, meaning Purification and Glorification of Plants; 5) Jana Kerthi, meaning Purification and*

*Glorification of Humans; and 6) Jagat Kerthi, meaning Purification and Glorification of the Universe. The six noble principles known as Sad Kerthi were established by Bali's Governor, Wayan Koster, to form the foundation of Nangun Sat Kerti Loka Bali."* In the context of marine tourism, Sad Kerthi provides a comprehensive framework that integrates environmental stewardship with cultural preservation. By emphasizing the sanctity of the ocean (Segara Kerthi) and other natural elements, the concept encourages the development of tourism practices that are both ecologically responsible and culturally respectful. Balinese regional culture, which is inspired by Hinduism, in its existence shows unique characteristics, is rich in variety, and has very long roots and historical journey, which in essence has great potential for increasing tourism in the Bali region.

Amed and Tulamben Beaches, located in Karangasem Regency, Bali, have great potential as marine tourism destinations. Amed Beach is known for its underwater beauty, including well-preserved coral reefs and rich biodiversity, making it a favorite location for snorkeling and diving. Tulamben is famous for its USS Liberty Shipwreck dive site, an American warship that sank during World War II, which is now home to a variety of marine species and attracts tourists from all over the world, especially professional divers. The livelihoods of the residents of Tulamben and Amed are mostly fishermen and dry land farmers because the land is barren and arid, especially during the dry season. In the rainy season, conditions are much better, farmers can plant corn, peanuts, cassava, and sweet potatoes. In addition to being farmers, there are also traditional fishermen. Since this area was designated as a Marine Ecotourism Village, Tulamben and Amed have developed rapidly, many of the residents work in the tourism sector, especially as diving and snorkeling tour guides. The Karangasem region is rich in local traditions and culture that can be combined with community-based tourism. KI-2 contended that *"in Balinese culture, the sea is seen as an important element of life, a sacred place, a source of well-being, and has great spiritual energy. Therefore, various ceremonies are carried out to maintain harmony between humans and the sea, as well as to honor and glorify the power of the sea. Like the Melasti Ceremony, a major ritual performed by Balinese Hindus aimed to purify themselves and their environment from all worldly impurities and to seek blessings from God through the medium of the sea. Usually, Hindus bring pratima (sacred statues) and*

*pralingga (symbols of God) to the beach to be bathed in seawater. This ceremony also symbolizes that the sea has the power of purification and is a place where all impurities return. The Melasti ceremony is usually held on Balinese beaches, such as Sanur Beach, Amed Beach, and other beaches that are considered sacred*". With these ceremonies and activities, the concept of Segara Kerthi is not only manifested in the form of religious rituals but also real actions to maintain the sustainability and balance of the marine environment in Bali. This balance is important because the sea is considered one of the natural elements that provide blessings and life for humans. In recent years, the idea of a "blue economy" has garnered considerable interest as a strategy for fostering sustainable development and protecting the environment in coastal and marine areas. At the heart of this approach is the recognition that the ocean's resources can be harnessed for economic growth and social progress, while also ensuring the long-term viability and health of marine ecosystems (Winther et al., 2020). One potential avenue for integrating the principles of the blue economy with local practices and traditions is the Sad Kerthi, a cultural practice observed in Indonesia's Bali province. The blue economy is typically conceptualized as having six key dimensions, each accompanied by distinct principles and practices designed to guarantee the sustainable utilization of ocean resources (Youssef, 2023). These include: 1) sustainable fisheries and aquaculture, 2) renewable ocean energy, 3) sustainable maritime transport, 4) sustainable tourism, 5) marine biotechnology, and 6) coastal and marine ecosystem restoration and conservation (Youssef, 2023). The blue economy is typically conceptualized as having six key dimensions, each with its own set of principles and practices aimed at ensuring the sustainable use of ocean resources (Youssef, 2023). These include: 1) sustainable fisheries and aquaculture, 2) renewable ocean energy, 3) sustainable maritime transport, 4) sustainable tourism, 5) marine biotechnology, and 6) coastal and marine ecosystem restoration and conservation (Youssef, 2023). The fundamental economic principles of the blue economy focus on generating value from ocean resources, encouraging innovation, and establishing sustainable business models that benefit local communities. The Sad Kerthi is a traditional cultural practice observed in the Bali region of Indonesia, where coastal communities engage in a range of activities to maintain the health and balance of their marine environment. One aspect of the blue economy that has particular relevance for the

integration of Sad Kerthi is the emphasis on balancing economic development with environmental stewardship. The blue economy framework calls for a fundamental shift away from a "business-as-usual" approach, instead embracing a more ambitious and holistic vision that prioritizes social equity, environmental sustainability, and economic viability. This aligns well with the underlying principles of Sad Kerthi, which highlight the significance of coexisting harmoniously with nature and prioritizing the welfare of all members of the community. The implementation of this concept in the development of marine tourism based on the blue economy in Karangasem aims to create a balance between the use of natural resources for tourism and environmental sustainability. Several implementation steps in developing a marine tourism area based on the blue economy in Karangasem: 1) Sustainable Marine Resource Management: Implementing policies and practices that protect marine ecosystems, such as establishing marine protected areas, promoting sustainable fishing, and supporting coral reef restoration projects. *Segara Kerthi* (Marine Ennoblement) namely focusing on preserving marine ecosystems, such as preserving the cleanliness of coastal areas and coral reefs, as well as controlling tourism activities that have the potential to damage marine ecosystems, for example by limiting the number of divers in ecologically sensitive areas. 2) Eco-Friendly Tourism Practices: Developing tourism activities that minimize environmental impact, such as snorkeling and diving tours that follow best practices for coral reef protection, beach clean-up initiatives, and the promotion of eco-friendly accommodations. *Wana Kerthi and Danu Kerthi*: Through forest and water source ennoblement, concrete steps can be taken by preserving river basins and mangrove forest areas around the coast. This can help maintain water quality and prevent erosion, as well as being an additional tourist attraction. 3) Cultural Tourism Initiatives: Creating tourism experiences that highlight Balinese culture, such as traditional dance performances, temple visits, and workshops on Balinese arts and crafts, while ensuring that these activities are conducted in a manner that respects local customs and traditions. *Atma Kerthi* (Soul Ennoblement): Creating spirituality-based tourism in coastal areas that invite tourists to appreciate nature more, for example through meditation or yoga programs on the beach that promote spiritual balance. 4) Community Empowerment Programs: Offering training and assistance to local entrepreneurs, encouraging local

products and crafts, and ensuring that tourism income is reinvested into community development initiatives. *Jana Kerthi* (Human Ennoblement): Involving local communities in managing marine tourism. By providing skills training to local communities, they can play an active role as tour guides, homestay managers, or craftsmen who create local products.

**Table 1.** Key findings from the Karangasem Regency Blue Economy study

Aspect	Key Findings
<b>Governmental Perspective</b>	<ul style="list-style-type: none"> <li>- The government recognizes the potential of the Blue Economy to drive sustainable economic growth in Karangasem.</li> <li>- Focus on aligning national and regional policies to support Blue Economy initiatives.</li> </ul>
<b>Policy Framework</b>	<ul style="list-style-type: none"> <li>- Existing policies emphasize marine conservation, sustainable tourism, and fisheries management.</li> <li>- Need for more comprehensive policies that integrate Blue Economy principles into all sectors.</li> </ul>
<b>Operational Challenges</b>	<ul style="list-style-type: none"> <li>- Lack of infrastructure and technical capacity to fully implement Blue Economy strategies.</li> <li>- Limited funding and investment in marine and coastal projects.</li> </ul>
<b>Socio-cultural and Legal Factors</b>	<ul style="list-style-type: none"> <li>- Strong community dependence on marine resources, with traditional fishing practices still prevalent.</li> <li>- Legal frameworks need strengthening to better support sustainable practices and community rights.</li> </ul>
<b>Environmental Factors</b>	<ul style="list-style-type: none"> <li>- Significant environmental degradation due to overfishing, pollution, and climate change.</li> <li>- Critical need for conservation efforts and sustainable resource management to protect marine ecosystems.</li> </ul>
<b>Maritime Security</b>	<ul style="list-style-type: none"> <li>- Challenges in enforcing maritime laws, leading to issues such as illegal fishing and unregulated tourism activities.</li> <li>- Need for improved maritime surveillance and security measures to protect resources and livelihoods.</li> </ul>

Source: Research Result, 2024

Here's a summary table of the key findings from the Karangasem Blue Economy study, organized by Governmental Perspective, Policy Framework,

Operational Challenges, Socio-cultural and Legal Factors, Environmental Factors, and Maritime Security.

The integration of the *Sad Kerthi* concept with Blue Economy principles offers a unique and holistic approach to sustainable development, particularly in regions like Karangasem Regency, Bali, where marine tourism, cultural heritage, and environmental preservation are critical. KI-1 contended that “*both frameworks prioritize long-term ecological sustainability and community well-being, yet they stem from different origins—Sad Kerthi is rooted in traditional Balinese philosophy, while Blue Economy is a global economic framework focused on sustainable ocean and coastal resource use. Together, they create a balanced model for economic growth and environmental stewardship*”. The notion of the "blue economy" has attracted growing interest as a framework for promoting equitable, sustainable, and viable development in the world's oceans (Cisneros-Montemayor, 2019). This approach emphasizes the need to balance economic growth, social inclusion, and environmental protection in the utilization of marine resources (Cisneros-Montemayor et al., 2022).

**Table 2.** Integration of the Sad Kerthi concept and Blue Economy principles in marine tourism development

Aspect	Sad Kerthi Principle	Blue Economy Principle	Integration in Marine Tourism
Environmental Sustainability	<i>Segara Kerthi</i> (Ocean), <i>Jagat Kerthi</i> (Earth)	Environmental Protection	<ul style="list-style-type: none"> <li>- Protect marine ecosystems through conservation efforts.</li> <li>- Promote eco-friendly tourism activities such as sustainable diving and snorkeling.</li> </ul>
Cultural Preservation	<i>Atma Kerthi</i> (Soul), <i>Jana Kerthi</i> (Humanity)	Social Inclusion	<ul style="list-style-type: none"> <li>- Highlight and respect Balinese cultural heritage in tourism.</li> <li>- Develop cultural tourism experiences that are respectful and authentic.</li> </ul>
Economic Viability	<i>Jagat Kerthi</i> (Earth)	Economic Growth	<ul style="list-style-type: none"> <li>- Support local enterprises and sustainable tourism initiatives.</li> <li>- Promote eco-</li> </ul>

			friendly accommodations and services.
Community Involvement	<i>Jana Kerthi (Humanity)</i>	Social Inclusion	- Engage local communities in tourism planning and management. - Ensure equitable distribution of tourism benefits.
Resource Management	<i>Segara Kerthi (Ocean)</i>	Sustainable Development	- Implement sustainable practices in marine resource management. - Establish community-managed marine protected areas.
Economic Growth	<i>Jana Kerthi (Humanity)</i>	Economic Growth	- Create jobs and business opportunities for local residents. - Develop tourism strategies that contribute to long-term economic stability.

Source: Research Result, 2024

This table highlights the synergy between traditional Balinese values and modern economic principles, emphasizing how they can be harmonized to create a sustainable and culturally grounded marine tourism industry in Karangasem Regency.

One explanation for the effectiveness of this research lies in its methodological approach, which employed a semi-structured interview protocol to gather insights from key informants. By integrating data from these interviews with various archival materials, the study was able to comprehensively address the five research questions that underpin its focus. This combination of qualitative data sources not only enriched the findings but also provided a nuanced understanding of the subject matter, ultimately giving meaning to the ending by highlighting the interconnectedness of local wisdom and sustainable practices in the context of marine tourism development. The results underscore the importance of culturally grounded approaches in fostering environmental and economic sustainability, thereby reinforcing the relevance

of the Blue Economy framework in contemporary discussions on sustainable tourism.

This study is limited by its reliance on a semi-structured interview protocol, which, while effective in eliciting detailed responses from key informants, may not capture the full spectrum of perspectives on the research topic. Additionally, the integration of archival materials, although valuable, may introduce biases based on the availability and selection of those documents. To enhance the robustness of future research, it is recommended that a broader range of data collection methods be employed, such as quantitative surveys or focus groups, to complement the qualitative insights gained. This would provide a more comprehensive understanding of the issues at hand and allow for a more diverse representation of stakeholder viewpoints.

## CONCLUSION

The relationship between local wisdom and the Blue Economy is symbiotic, with each reinforcing the other in the pursuit of sustainable development. Local wisdom provides a foundation of sustainable practices, cultural values, and community engagement that can enhance the effectiveness of the Blue Economy framework. By integrating local wisdom into Blue Economy strategies, regions can achieve a development model that is not only financially feasible but also environmentally sustainable and socially fair. This integration ensures that the Blue Economy is grounded in the cultural and ecological context of the communities it serves, leading to more resilient and sustainable outcomes for both people and the planet. This sustainable and culturally harmonious tourism model emphasizes the integration of environmental, cultural, economic, and social dimensions in marine tourism planning and management. By aligning traditional Balinese values with modern sustainable practices, the model aims to create a tourism industry that is respectful of local culture, supportive of community well-being, and protective of the natural environment. The success of this model relies on ongoing community involvement, adaptive management, and a commitment to sustainability at every level of tourism development.

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## DECLARATIONS

The authors declare that there is no conflict of interest regarding the publication of this research.

## ETHICAL APPROVAL

All research activities were conducted in compliance with ethical guidelines to ensure confidentiality, privacy, and voluntary participation of all respondents.

## INFORMED CONSENT

All participants in this study provided informed consent before their involvement. They were fully informed about the purpose, procedures, potential risks, and benefits of the research, and their participation was voluntary.

## DATA AVAILABILITY

The data used in this study are available upon reasonable request from the corresponding author. Access to the data may be subject to ethical or legal restrictions to protect participant confidentiality.

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