

# The supporting factors for green economic growth: Transition towards sustainable development and environmental management in South Papua

Samel Watina Ririhena<sup>1</sup>, Alexander Phuk Tjilen<sup>1,\*</sup>, Beatus Tambaip<sup>1</sup>, Pulung Riyanto<sup>2</sup>,  
Inez Cara Alexander Phoek<sup>3</sup>

<sup>1</sup> Public Administration Science, Universitas Musamus, Merauke 99611, Indonesia

<sup>2</sup> Physical Education, Health, and Recreation, Universitas Musamus, Merauke 99611, Indonesia

<sup>3</sup> Management, Saint Theresa College of Economics, Merauke 99611, Indonesia

\* **Corresponding author:** Alexander Phuk Tjilen, [alexander@unmus.ac.id](mailto:alexander@unmus.ac.id)

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**Abstract:** The purpose of this research is to deeply examine the factors that support and hinder green economic growth in South Papua, with a specific focus on increasing awareness and capacity among local communities, developing sustainable infrastructure, and adopting clean technologies. This research utilizes a case study approach to uncover the dynamics and elements supporting the development of green economy in South Papua, particularly in Merauke Regency. Through surveys, in-depth interviews, and document analysis, data were gathered from various stakeholders, including government, communities, and the private sector. Sampling was done using purposive sampling method, ensuring the inclusion of respondents relevant to the research topic to provide a holistic understanding of the factors influencing green economy in the region. The research reveals that in Merauke Regency, the understanding of the concept of green economy among the community is still limited, highlighting the need for broader education and socialization. Factors such as government support, infrastructure availability, and community participation play a key role in driving green economic growth. However, challenges such as resource limitations and differences in perceptions among stakeholders highlight the complexity in implementing green economy. Therefore, holistic and collaborative policy recommendations need to be considered to strengthen support and effectiveness of sustainable development efforts in this region.

**Keywords:** green economy; sustainable development; transition; management of the environment

## 1. Introduction

The shift towards a green economy has become increasingly important in the context of sustainable development and environmental conservation (Khoshnava et al., 2020). With growing concerns about climate change, resource depletion and environmental degradation, there is an urgent need for economies to shift towards more sustainable practices (Dogaru, 2021). This transition not only addresses environmental challenges but also provides opportunities for economic growth and development. The green economy concept involves restructuring economic activities to minimize environmental impacts while maximizing resource efficiency and promoting ecological resilience (Wu et al., 2020). This transition requires identifying and understanding the factors that enable the development of a green economy.

Research on the Supporting Factors for Green Economic Growth offers a significant contribution within the context of South Papua, as the region holds substantial potential for sustainable economic development while considering

environmental protection. Focusing on the transition to a green economic model, this research provides a deeper understanding of the factors supporting this process. Analysis of these factors yields new insights for designing effective policies and practices to support sustainable development and environmental management in the area. Practical implications of this research include identifying new investment opportunities, creating sustainable job opportunities, and enhancing the quality of life for local communities. Furthermore, this research also provides crucial insights for the development of inclusive and sustainable development strategies in South Papua, while still considering the sustainability of the unique ecosystems and biodiversity in the region. Thus, this research makes a significant contribution within the literature on green economic growth and environmental management, with meaningful implications for the overall development of South Papua.

South Papua, a region with extensive natural resource wealth and significant ecological diversity, is at the crossroads of economic development opportunities and environmental conservation challenges. In recent decades, economic growth in these areas has often come at great environmental costs, including deforestation, habitat degradation, and biodiversity decline. Increased global awareness about climate change and sustainability has prompted new thinking about how economic development can go hand in hand with environmental conservation (Ali et al., 2021). The concept of a green economy, which prioritizes economic growth and increased human welfare while minimizing environmental and ecological risks, offers a promising solution for South Papua (Dogaru, 2021). This research is rooted in the urgency to integrate green economic principles in development in South Papua, with the dual aim of strengthening the local economy and protecting natural resources. Although the potential for a green economy in this region is large, there are various obstacles, including lack of access to clean and renewable technologies, inadequate infrastructure, weak institutional capacity, and gaps in knowledge and awareness among communities and stakeholders.

In the process of transitioning to a green economy, ensuring a better future for all, where economic prosperity goes hand in hand with environmental prosperity. Research result (Mikhno et al., 2021) explains some of the key driving factors that can help us achieve a green economy, including Public Policy in Government policies that provide incentives to green businesses and reduce polluting businesses can play a big role in promoting a green economy. This could include things like tax breaks for renewable energy companies, carbon pricing mechanisms, and regulations that limit pollution. Fiscal policy can also be used to promote green investment. For example, governments can issue green bonds to finance environmentally friendly projects. Apart from this, new technological innovations are also needed to continue to emerge which can help us reduce our environmental impact. This includes things like renewable energy sources, energy efficient household appliances, and sustainable farming practices (Ali et al., 2021).

One of the specific gaps or problems that hinders green economic growth in South Papua is the limited knowledge and technical capacity of local communities and related stakeholders in implementing and managing sustainable development initiatives. This problem is multidimensional and affects various aspects of the green economy, including natural resource management, the application of clean technology,

and the development and utilization of renewable energy. A lack of in-depth understanding of the long-term benefits of a green economy and sustainable resource management techniques often results in excessive and uncontrolled exploitation of natural resources, which not only harms the environment but also reduces the long-term economic potential of the area. Additionally, there is a lack of supporting infrastructure, such as access to clean technologies and renewable energy sources, which makes the transition to a green economy slower. Sustainable infrastructure development is often hampered by limited funds and investment, both from the government and the private sector, which are not in line with real needs on the ground (Wijesinghe and Thorn, 2021). High dependence on conventional natural resources and fossil energy remains a major challenge, where changing to greener resources requires large initial investments and a significant change in mindset from all stakeholders.

This study aims to address the gap in knowledge and technical capacity of local communities and relevant stakeholders in South Papua in implementing and managing sustainable development initiatives. The main issue faced is the limited understanding of the long-term benefits of green economy and sustainable resource management techniques, leading to excessive exploitation of natural resources. Additionally, inadequate infrastructure, such as access to clean technology and renewable energy, also hinders the transition to a green economy. Dependence on conventional natural resources and fossil fuels remains a significant challenge requiring substantial investment and a shift in mindset from all stakeholders. Through this study, it is hoped that a deeper understanding and effective strategies will be developed to accelerate the transition to a green economy in South Papua.

Awareness and commitment to environmental protection and sustainable economic development need to be significantly increased (Fang et al., 2021). This includes strengthening local capacity through education and training, increasing access to environmentally friendly technologies, and developing policies that support green economic growth. Meanwhile, the potential for transformation towards a green economy in South Papua is very large, especially considering its rich natural resources, gaps in knowledge, technology and infrastructure, as well as policy and investment support, must be addressed with an integrated and collaborative strategy between government, the private sector and the community. local and international institutions.

The novelty of this study lies in its comprehensive analysis of both supporting and hindering factors influencing green economic growth in South Papua, focusing on enhancing awareness and capacity-building among local communities, developing sustainable infrastructure, and adopting clean technologies. By identifying and analyzing knowledge gaps, limitations in accessing eco-friendly technologies and existing infrastructure, as well as policy and funding challenges inhibiting the transition to a green economy, this research aims to provide valuable insights for policymakers, stakeholders, and practitioners. Furthermore, the study intends to explore potential synergies among government, private sector, and civil society actors in promoting green economy as a foundation for sustainable development in the region.

This research hypothesis proposes that the main key to catalyzing South Papua's transition to a green economy lies in systematic efforts to increase local community awareness and capability of the concept of sustainable development. This combines

with strategic initiatives to mobilize substantial investment in sustainable infrastructure and adoption of green technologies. This premise is rooted in the observation that primary barriers to green economy adoption including knowledge gaps, technological limitations and inadequate infrastructure can be addressed through a series of focused interventions. Thus, strengthening public policies, increasing innovative funding mechanisms, and comprehensive education and training programs, are expected to stimulate changes in attitudes and behavior among society and encourage active participation of the private sector in the green economy. It is hoped that this approach will not only create new momentum for inclusive and sustainable economic development but will also strengthen the foundations for more effective and responsible environmental management in the South Papua region, leading to a harmonious synthesis between economic prosperity and ecological well-being.

The aim of this research is to examine in depth the factors that support and hinder green economic growth in South Papua, with a particular focus on increasing awareness and capacity of local communities, sustainable infrastructure development, and the adoption of clean technology. Through a comprehensive analytical approach, this research aims to identify and analyze knowledge gaps, limited access to environmentally friendly technologies and existing infrastructure, as well as challenges in policy and funding that hinder the transition to a green economy. This research also intends to explore the potential for synergy between government, the private sector and civil society in promoting the green economy as a foundation for sustainable development.

## **2. Literature review**

Green economy is a concept that has gained significant attention in recent years due to its potential to address both environmental sustainability and economic development (Zhang et al., 2022). Numerous studies have explored various aspects of the green economy, focusing on its principles, benefits, challenges, and implementation strategies (Adamowicz, 2022). Scholars have highlighted the importance of transitioning towards a green economy to achieve sustainable development goals, emphasizing the need to decouple economic growth from environmental degradation. Key themes within the literature include the promotion of renewable energy sources, sustainable agriculture practices, resource efficiency, waste management, and green technologies. Additionally, researchers have examined the role of government policies, regulations, and incentives in facilitating the transition to a green economy, as well as the involvement of stakeholders such as businesses, communities, and non-governmental organizations. Despite the growing interest in the green economy, scholars have also identified challenges (Zhang et al., 2022), including the high initial costs of green technologies, limited access to financing, and the need for capacity building and awareness-raising among various stakeholders.

Over the past decades, the concept of sustainable development has received considerable attention, reflecting a growing acknowledgment of the necessity to harmonize economic growth, social equity, and environmental preservation. Literature on sustainable development spans various disciplines such as economics, environmental science, sociology, and political science, focusing on defining the

concept, delineating its principles and objectives, and devising strategies for its realization (Ametepey et al., 2023). Scholars stress the integration of economic, social, and environmental considerations into decision-making processes at local, national, and global levels (Hariram et al., 2023). Moreover, the literature underscores the interconnectedness of sustainability challenges, including climate change, biodiversity loss, poverty, and inequality, necessitating comprehensive approaches. Researchers also analyze the roles of institutions, governance mechanisms, and policy frameworks in fostering sustainable development, alongside the significance of stakeholder engagement and participation. Despite strides in advancing sustainable development objectives, obstacles persist, encompassing resource limitations, political resistance, and diverging interests among stakeholders (Head, 2022).

The concept of transition is central across multiple disciplines such as economics, environmental science, sociology, and political science (Lidskog et al., 2022). Transition literature spans diverse contexts, from technological shifts to societal and economic transformations, addressing dynamics, drivers, barriers, and effective management strategies (Chipangamate and Nwaila, 2023). Emphasizing sustainable, resilient, and inclusive transition pathways, scholars recognize the interconnectedness of social, economic, and environmental systems. Governance structures, stakeholder engagement, and participatory approaches play crucial roles in shaping transition trajectories (Revez et al., 2022). Additionally, the notion of just transition underscores the importance of fairness, particularly for marginalized communities and vulnerable groups. Despite offering opportunities for positive change, transitions pose challenges like resistance, path dependency, and uncertainty about future outcomes.

Environmental management encompasses diverse disciplines and methods aimed at conserving, safeguarding, and sustainably utilizing natural resources and ecosystems (Aftab et al., 2022). Literature extensively examines policy frameworks, regulations, and strategies for conservation and mitigation, emphasizing integrated and ecosystem-based approaches that recognize the interconnectedness of ecological processes and human activities (Aftab and Veneziani, 2024). Key areas of focus include biodiversity conservation, land and water resource management, pollution control, and climate change adaptation (Mondal and Palit, 2022). Stakeholders, including governments, businesses, communities, and civil society, play pivotal roles in shaping environmental outcomes through collaboration and advocacy. Incorporating indigenous knowledge and traditional practices alongside capacity building and education enhances environmental awareness and stewardship (Gurung and Thapa, 2023). Despite progress, persistent challenges such as institutional fragmentation, resource limitations, and emerging environmental threats necessitate holistic and adaptive approaches that balance environmental conservation with socio-economic development goals, ensuring the long-term sustainability of natural resources and ecosystems.

Previous studies provide comprehensive insights into the concepts of green economy, sustainable development, transition, and environmental management (Zhironkin and Cehlár, 2022). They emphasize the importance of addressing environmental sustainability alongside economic development, highlighting the need for integrated approaches to achieve sustainable outcomes (Raihan et al., 2022). Key findings include the promotion of renewable energy sources, sustainable agriculture

practices, and resource efficiency in transitioning towards a green economy (Zhao et al., 2022). Additionally, scholars emphasize the interconnectedness of various sustainability challenges and the importance of holistic approaches in addressing them. Regarding environmental management, the literature underscores the adoption of integrated and ecosystem-based approaches, stakeholder collaboration, and capacity building to address conservation and mitigation challenges effectively. Despite progress, challenges such as institutional fragmentation and resource constraints persist, highlighting the need for adaptive and holistic approaches to environmental management.

### **3. Materials and methods**

This research uses a case study approach to explore the dynamics and elements that support green economic development in the region. Through in-depth analysis of the factors involved, such as government policy, community participation, infrastructure, and technological innovation, this research aims to provide a better understanding of how South Papua can drive the transition towards a more sustainable and environmentally friendly economic model. This research was carried out in the period October-November 2023 in Merauke Regency.

To collect the data needed in this research, a data collection instrument is used first, a survey will be conducted to obtain data from respondents regarding their understanding and perception of the green economy concept, as well as factors that influence the implementation and growth of the green economy in South Papua. This survey will involve various parties, including government stakeholders, business people and the general public. In addition, in-depth interviews will be conducted with key stakeholders, such as government officials, local community members, and representatives from the private sector, to gain more in-depth and contextual insight into issues related to green economic growth in the area. Next, document analysis will be carried out to collect information about existing policies and programs, as well as initiatives that have been carried out by the government and other parties to support the green economy in South Papua.

Sampling in this research was carried out using a purposive sampling method, where samples were chosen deliberately based on certain criteria that were in accordance with the research objectives. In this context, the respondents selected deliberately were those who were considered to have knowledge, experience or positions relevant to the research topic, namely green economic growth in South Papua. This includes government officials related to environmental and development policy, local community leaders, business people involved in green economic practices, and the general public who have a deep understanding of environmental and sustainable development issues. By using a purposive sampling method, it is hoped that the selected sample can provide rich and representative insight into the factors that support green economic growth in the region.

### **4. Results and discussion**

The findings show that the majority of respondents have limited understanding of the green economy concept. To support these findings, field questions include Do

you have an understanding of green economic practices carried out in this region? Regarding the need for further education and outreach, questions include whether you believe that further education and outreach on green economy concepts will benefit society. Furthermore, to identify government support as a key factor, questions include Do you believe that the government provides sufficient support for the development of the green economy in the region? Regarding infrastructure and green technology, the question is: Is green technology easily accessible to the people here? When exploring challenges such as lack of resources and regulatory uncertainty, field questions include Do you experience difficulties in accessing resources to support green economy practices? Meanwhile, to measure awareness of the importance of sustainable development, questions include how often you participate in activities or programs aimed at increasing awareness about sustainable development.

Based on the findings revealed in **Table 1**, the majority of respondents apparently have a limited understanding of the concept of a green economy. Therefore, a need for further education and outreach regarding this concept at the local level was identified. Government support is recognized as a key factor in implementing a green economy, while the availability of environmentally friendly infrastructure and access to green technology also supports it. Key challenges faced include a lack of resources and regulatory uncertainty, despite widespread recognition of the importance of sustainable development.

**Table 1.** Perception of the concept, factors influencing the implementation and growth of the green economy in Merauke Regency.

<b>Discussion aspects</b>	<b>Findings</b>
Understanding the Green Economy Concept	The majority of respondents have limited understanding of the green economy concept. There is a need for further education and outreach regarding this concept at the local level.
Factors Influencing Implementation	Government support is a key factor in implementing a green economy.
Green Economy	The availability of environmentally friendly infrastructure and access to green technology also supports this. Community participation in environmental programs is also considered important.
Recognized Challenges	Lack of resources and regulatory uncertainty are the main challenges. Awareness of the importance of sustainable development is widely recognized.

During interviews with government officials, the main focus was on identifying policies and regulations that support green economic growth (Abid et al., 2023). Questions include, have there been any specific policies that have been implemented to support green economic development in this region? and What are the main challenges in implementing environmental policies, and what efforts have been made to overcome them? When talking to local community members, the main focus was on the level of community participation in green economy initiatives as well as their perceptions and expectations of green economic development in their area. The question asked, how often do people participate in activities or programs aimed at supporting the green economy? and what are the community’s hopes for the development of the green economy in this region? When interacting with private sector representatives, the main focus was on the role of the private sector in driving

innovation and sustainable investment, as well as collaboration between the private sector, government and society in green economy projects. The question asked, how does the private sector contribute to the development of green economic technologies or practices? and are there examples of collaboration between the private sector and government/community in supporting green economy projects? Here are the findings obtained from interactions with stakeholders. These findings provide deep insights into the perspectives and needs of the various parties involved. The **Table 2** below summarizes the discussion results and feedback received from the stakeholders.

**Table 2.** Findings with stakeholders.

Stakeholders	Interview theme	Key findings
Government officials	Policies and Regulations	Identify policies and regulations that support green economic growth. Challenges in implementing environmental policies and efforts to overcome them.
Local Community Members	Society participation	Level of community participation in green economy initiatives. Community perceptions and expectations regarding green economic development in their region.
Private Sector Representative	Innovation and Collaboration	The role of the private sector in encouraging innovation and sustainable investment. Collaboration between the private sector, government and society in green economy projects.

In this research, stakeholders involved included government officials, local community members, and private sector representatives. Interviews with government officials aimed to identify policies and regulations that support green economic growth, while highlighting challenges in their implementation and efforts to overcome these obstacles. Next, local community members were interviewed to evaluate their level of participation in green economy initiatives and to explore their perceptions and expectations for green economic development in their area. Interviews with private sector representatives aim to highlight their role in driving innovation and sustainable investment, as well as to explore collaboration between the private sector, government and society in green economy projects.

To analyze and generate information about these documents, the first step is to access the documents from legitimate sources, such as the official websites of local governments or related organizations. After that, the documents are thoroughly analyzed to extract relevant information according to the research objectives, such as policies, programs or initiatives that support green economic development in the region. For example, from the Regional Medium Term Development Plan (RPJMD), information about the government’s commitment to sustainable development and planned concrete efforts can be found. From the Regional Spatial Planning (RTRW), information about environmentally friendly land and area management can be extracted. From environmental policies, strategies and measures to protect and maintain the environment can be identified. Furthermore, government programs such as the Tree Planting Program, Environmental Education Program, and Waste Management Program provide insight into the concrete efforts being made to promote green economic practices. NGO or organizational initiatives, such as the Local Farmers Empowerment Program, provide an overview of the role of the non-government sector in supporting green economic development. Meanwhile, community self-help such as the Campaign to Reduce Plastic Use or the



Environmentally Friendly Infrastructure Development Program reflect active community participation in efforts to protect the environment and support green economic practices. By analyzing these various documents, comprehensive information can be generated to understand the dynamics and elements that support green economic development in the region.

From **Table 3** it can be seen that the government has adopted various policies that are relevant to sustainable development and environmental protection in South Papua, such as the Regional Medium Term Development Plan (RPJMD), Regional Spatial Planning (RTRW), and Environmental Policy. Apart from that, the government also implements various programs, such as the Tree Planting Program, Environmental Education Program, and Waste Management Program, to support green economic practices in the region. In addition, NGOs and non-governmental organizations are also involved in initiating programs such as the Local Farmers Empowerment Program and Plastic Use Reduction Campaign, as well as the development of environmentally friendly infrastructure, as additional efforts to advance the sustainable development agenda in South Papua.

**Table 3.** Analysis results of policy documents, programs and initiatives to support the green economy in South Papua.

Document type	Description
Government policy	Regional Medium Term Development Plan (RPJMD)
	Regional Spatial Planning (RTRW)
	Environmental Policy
Government Program	Tree Planting Program
	Environmental Education Program
	Waste Management Program
NGO/Organization Initiative	Local Farmer Empowerment Program
Nongovernmental	Plastic Use Reduction Campaign
	Environmentally Friendly Infrastructure Development Program

## 5. Discussion

The community showed limited understanding of the concept of a green economy, revealing that they had little knowledge of what a green economy actually means and how the concept can be applied in the local context, especially in Merauke Regency. Some members of the public even expressed uncertainty or confusion regarding the term, indicating an urgent need for clearer explanations and deeper understanding of aspects of the green economy. This limited understanding highlights the importance of further education and outreach at the local level (Tambaip et al. 2023). The community emphasizes the need for broader and more targeted educational programs and outreach campaigns about the green economy concept, which are specifically designed to reach the wider community, including community leaders, business people and the general public. They believe that by increasing awareness and understanding of the benefits of a green economy, society will become more open to the adoption of sustainable practices and green technologies (Ali et al., 2021). Therefore, education

and outreach efforts must be prepared systematically and comprehensively, by utilizing various available media and communication platforms, such as seminars, workshops, social media campaigns, and direct training (Mulholland et al., 2017). In doing so, it is hoped that public awareness of the importance of the green economy will increase, strengthen support for the implementation of sustainable practices, and ultimately, accelerate overall green economic growth in the region.

The results of research on the factors influencing the implementation of a green economy highlight several key aspects. First, government support is identified as a central element in driving the transition towards a green economy (Nilsson and Nykvist, 2016). The presence of supportive policies, incentives and clear regulations from the government is an important foundation for the development of green economic practices in the region. Furthermore, the availability of environmentally friendly infrastructure is also recognized as an important factor (Tan and Solangi, 2023). Infrastructure such as sustainable public transportation, efficient waste management systems, and renewable energy are elements that support the implementation of a green economy by providing a physical foundation for these practices. In addition, access to green technology is a crucial factor in facilitating the transition to a more sustainable economy (Soto, 2024). Advances in green technologies, such as renewable energy, waste management, and energy efficiency, can accelerate the adoption of green economic practices at the local level. Finally, community participation in environmental programs was also found to be an important factor. Through active community participation in environmental initiatives, awareness of the need to protect the environment and implement sustainable practices can be increased, which in turn will support the implementation of a broader and more sustainable green economy in Merauke Regency.

The research results found that there is a strong awareness of the importance of sustainable development. This is reflected in the responses of the majority of respondents who showed awareness of the importance of protecting the environment and paying attention to economic, social and environmental aspects in regional development. However, the process towards sustainable development is not without obstacles. Challenges faced, such as lack of resources and regulatory uncertainty, were also recognized as significant obstacles. Lack of resources, both in terms of financial and human resources, is an obstacle in implementing sustainable development programs (Kodua et al., 2022). Meanwhile, uncertainty in regulations often makes businesses and governments hesitant to take concrete steps to encourage sustainable development. Therefore, although awareness of the importance of sustainable development already exists, further efforts are needed to overcome these challenges so that Merauke Regency can progress towards sustainable and environmentally friendly development effectively.

In a deeper analysis of the research results, it is clear that there are complex dynamics and differences in perceptions between various groups of respondents regarding the concept and implementation of the green economy. Government groups of respondents, for example, may have a greater focus on policies and regulations that support green economic growth, while local community groups may be more concerned with the direct impact of environmental programs on their daily lives. This shows the need for a comprehensive approach that considers the perspectives of

various parties in designing effective policies and programs. By understanding these differences in perception, policy recommendations can be formulated in a more targeted manner, taking into account the needs and priorities of various stakeholder groups (Li et al., 2017). For example, integrating participatory approaches in the planning and implementation of environmental programs to ensure support from local communities, while also developing financial incentives for businesses that innovate green economic practices.

The research results show that interviews with government officials in South Papua provide in-depth insights regarding policies and regulations that have an important role in supporting green economic growth. Identify existing policies including environmental regulations, tax incentives, and subsidy programs aimed at encouraging green economic practices in the region (Liberalesso et al., 2020). However, the findings also highlight obstacles in implementing these policies, such as limited resources, lack of public awareness, and administrative obstacles. Government officials explained in detail the efforts that have been made to overcome these challenges. This includes strategic steps such as increasing outreach and education to the public regarding the benefits of the green economy, increasing budget allocations to support environmental programs, and improving administrative procedures to speed up the processing of permits and approvals related to the green economy. In addition, government officials also described collaborative initiatives with the private sector and NGOs in designing and implementing environmentally sustainable programs. Thus, the results of interviews with government officials provide a more in-depth picture of the role of policies and regulations in supporting green economic growth in South Papua, as well as concrete efforts made to increase the effectiveness of their implementation.

From the perspective of local community members, it highlights a number of factors that influence community participation in green economy initiatives in the South Papua region. Findings indicate that levels of community participation vary depending on a number of factors, including level of environmental awareness, access to resources, and involvement in community development programs. For example, communities who have a better understanding of the importance of environmental conservation tend to be more active in supporting green economy initiatives, while those who face limited access to resources may face barriers to participation (Pan et al., 2018). In terms of perceptions and expectations regarding green economic development, it shows that the majority of local communities welcome efforts to encourage sustainable and environmentally friendly economic growth. They believe that green economic development can bring long-term benefits to communities, such as the creation of local jobs, increased economic prosperity, and preservation of the natural environment that is important for their survival. In addition, people's hopes for green economic development also involve aspirations for better access to basic infrastructure and services, as well as the creation of a cleaner and healthier environment for future generations (Adamowicz, 2022). In this way, local community members provide a more in-depth picture of how sustainable development efforts, especially in the context of a green economy, are accepted and expected by local communities in Merauke Regency. This information is very valuable in designing development policies and programs that are oriented to the needs and aspirations of

local communities and strengthen their participation in sustainable development efforts.

Representatives from the private sector emphasized their key role in driving innovation and sustainable investment. They explain how the private sector can be a driving force in introducing new technologies, environmentally friendly business practices, and directing investment in projects that are economically, socially and environmentally sustainable (Horváth and Szabó, 2019). Further highlighting the importance of collaboration between the private sector, government and society in supporting green economic growth. Representatives from the private sector expressed their experience in collaborating with relevant parties, including joint efforts in identifying needs and opportunities at the local level, as well as designing joint strategies and projects to improve green economic practices. Private sector representatives highlighted the positive results that have been achieved through this collaboration, such as increased operational efficiency, better access to markets and resources, and the creation of added value for local communities through capacity development and economic empowerment programs.

The results of the document analysis reveal that the Merauke Regency Regional Medium Term Development Plan (RPJMD), Regional Spatial Planning (RTRW), and Environmental Policy are key policy instruments that provide a strong foundation for green economic growth in South Papua. The RPJMD provides strategic direction in sustainable economic development at the local level, by including targets and performance indicators related to environmental protection and green economic development. Meanwhile, RTRW is the basis for regional spatial planning that takes into account environmental sustainability and sustainable use of natural resources. Environmental Policy, both national and regional, shows the government's commitment to dealing with environmental issues holistically, including promoting green economic practices and sustainable management of natural resources (Post and Altman, 2017). The adoption of these policies indicates the government's seriousness in advancing sustainable development and preserving the environment in South Papua.

Government programs, in the form of the Tree Planting Program, have a significant impact in facilitating green economic practices and increasing environmental awareness (de Oliveira et al., 2013). Through this program, the government helps to strengthen the availability of forests and green land, which not only contributes to climate change mitigation, but also improves air quality and reduces the risk of natural disasters. The Environmental Education Program aims to increase public understanding and awareness of the importance of the environment (Poppe et al., 2018). By holding campaigns, workshops and other educational activities, the government can provide knowledge and skills to the public about environmentally friendly practices that can be applied in everyday life. Meanwhile, the Waste Management Program plays an important role in encouraging green economic practices by increasing efficiency in waste management. Through this program, the government works together with the community and the private sector to introduce environmentally friendly waste management technologies, such as recycling, composting and organic waste processing, which not only reduce environmental pollution but also create new opportunities in the local economy. Thus, these three programs are concrete steps for the government to realize the principles of a green

economy in South Papua, which aims not only to improve people's welfare but also to preserve the environment for future generations.

From the NGO Initiative/Non-Governmental Organization, the research results highlight the crucial role of the Local Farmer Empowerment Program. Through this program, NGOs and non-governmental organizations play a role in increasing the capacity of local farmers in implementing sustainable agricultural practices, such as the use of organic fertilizer and environmentally friendly pest control techniques (Bouzarjomehri and Javani, 2020). Apart from that, this program also supports diversification of agricultural businesses and market access for local farmers, which in turn can increase the income and food security of local communities. Meanwhile, the Plastic Use Reduction Campaign also plays an important role in supporting the sustainable development agenda. Through this campaign, NGOs and local communities are trying to raise awareness of the dangers of plastic pollution and encourage a reduction in the use of single-use plastics. This effort involves educating the public about the use of environmentally friendly alternatives, promoting movements to reduce plastic waste, and supporting public policies that regulate the use of plastic. Thus, this initiative not only contributes to environmental preservation, but also creates new economic opportunities, such as developing environmentally friendly products, as well as strengthening awareness of shared responsibility in preserving the environment in South Papua.

The research findings underscore the imperative need for concerted efforts to enhance public understanding and awareness of the green economy concept and its benefits in South Papua. A systematic and comprehensive approach to education and awareness campaigns targeting various community groups, including leaders, businesses, and the general populace, is crucial for fostering openness towards sustainable practices and green technologies. Moreover, the government's pivotal role in driving the transition towards a green economy through supportive policies, incentives, and clear regulations cannot be overstated. Concrete steps are required to bolster the sustainability of environmental policies and sustainable development, including investment in eco-friendly infrastructure, collaboration with the private sector and NGOs, and encouragement of community participation in environmental programs. While the research provides valuable insights, there remains a need for future studies to employ diverse research methods, involve a broader range of stakeholders, and focus on evaluating the effectiveness and impact of green economic initiatives in diverse contexts, ultimately paving the way for more comprehensive and applicable strategies for sustainable development.

## **6. Conclusion**

Based on the findings in this research, several conclusions can be drawn that provide a more in-depth picture of the implementation of the green economy in Merauke Regency. The level of public understanding of the green economy concept is still limited. The majority of respondents indicated a lack of knowledge about this concept and how it can be applied in the local context. This indicates the need for further efforts in education and outreach to increase public understanding of aspects of the green economy. Factors influencing the implementation of a green economy can

be identified. Government support, environmentally friendly infrastructure, access to green technology, and community participation are key elements that contribute to the success of green economic practices in the region. However, challenges such as limited resources and regulatory uncertainty are also obstacles that need to be overcome. Differences in perceptions between various stakeholder groups highlight the complexity of designing effective policies and programs. A collaborative approach that considers the perspectives of various parties can be a solution to overcome these differences and formulate a more holistic strategy in encouraging green economic growth. The role of the private sector, NGOs and local communities is very important in supporting sustainable development in Merauke Regency. The initiatives of these groups have made a positive contribution to strengthening green economic practices and increasing awareness of sustainability at the local level. Thus, policy recommendations resulting from this research must consider these findings to strengthen support and increase the effectiveness of efforts towards a more sustainable green economy in Merauke Regency. Policy recommendations to support green economic growth in Merauke Regency include increasing educational and outreach efforts to enhance public understanding of the green economy concept, as well as enhancing government support for the development of environmentally friendly infrastructure and access to green technology. Additionally, close collaboration between the private sector, NGOs, and local communities is needed to design and implement sustainable programs that support green economic practices in the region.

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