THE ENIAPEL BOTTOM LINE MODEL AND NATURAL TOURISM MARKETING: A MIXED METHODS STUDY OF GOSARI VILLAGE

Ida Bagus Cempena^{*1}

Arga Christian Sitohang³

^{1, 2, 3} Faculty of Economics and Business, 17 Agustus 1945 Surabaya University, Indonesia Email: ib_cempena@untag-sby.ac.id¹; triratnawati@untag-sby.ac.id²; argasitohang@untag-sby.ac.id³

ARTICLE HISTORY

Received: 17 February 2025 Revised 10 April 2025 Accepted: 30 April 2025 Online available: 28 May 2025

Keywords:

Community Empowerment, Ecology, ENIAPEL Model, Natural Tourism, Sustainable Marketing

*Correspondence: Name: Ida Bagus Cempena E-mail: ib_cempena @untag-sby.ac.id

ABSTRACT

Introduction: This study aims to analyze the relationship between economy, fishermen, inclusion, nature, empowerment, ecology, and local variables in the context of natural tourism development in Gosari Village, Ujungpangkah District, Gresik Regency, part of the minapolitan zone. Understanding these variables' effects is essential for improving the sustainability and operational efficiency of Gosari Village as a tourism destination.

Methods: A quantitative approach was employed through questionnaires administered to 106 respondents from various stakeholders, including Village-Owned Enterprises (BUMDes), POKDARWIS, MSMEs, and government entities. The collected data were processed using PLS 4.0. Additionally, a phenomenological study using in-depth interviews was conducted to capture the social experiences of fishing communities in Gosari Village. This dual approach provided a comprehensive understanding of the area's tourism development dynamics.

Results: The results show that fishermen significantly influence inclusion, ecology, and economy, but not empowerment. Nature is found to have a significant effect on empowerment and ecology, but not on inclusion and economy. Local variables have a significant influence on empowerment, ecology, and economy, but not on inclusion.

Conclusion and suggestion: This study highlights the significant roles of fishermen, nature, and local variables in the development of natural tourism in Gosari Village, with varying impacts on inclusion, ecology, empowerment, and the economy. To enhance sustainability and operational efficiency, it is recommended to focus on digital marketing, human resource development, diversification of funding sources, the application of technology, and local empowerment policies. Additionally, the ENIAPEL Bottom Line Model is proposed as a strategy to maintain a balance between environmental, social, and economic aspects for sustainable tourism growth in the village.

INTRODUCTION

Tourism development is increasingly seen as a strategic tool to enhance regional economic resilience, especially in rural areas with rich natural and cultural potential (Chou et al., 2020). One of the emerging trends is the integration of environmental sustainability, social inclusiveness, and local economic empowerment into tourism development strategies (Permatasari et al., 2020). In Indonesia, the Ministry of Marine Affairs and Fisheries designated 179 regions as minapolitan zones, aimed at synergizing marine and fisheries development through sustainable and integrated planning. Gresik Regency, particularly Ujungpangkah Subdistrict, was identified as a minapolitan hinterland zone due to its strategic role in shrimp and milkfish production. However, these potentials have not been fully integrated into a holistic tourism marketing model, especially in rural coastal areas such as Gosari Village.

Previous research on tourism development has focused either on environmental sustainability or economic impact, often neglecting the integration between ecological preservation, community empowerment, and inclusive development (Jiang et al., 2023). Many marketing models used in tourism remain generic, such as the triple bottom line or Penta Helix models, without contextual adaptation to village-based natural tourism or minapolitan areas (Abbass et al., 2022). This creates a phenomenon gap between theory and real-world implementation of sustainable tourism in rural and coastal zones.

Addressing this gap is essential, especially in villages like Gosari, where tourism potential intersects directly with ecological conservation areas and vulnerable fisherfolk communities. Without a contextualized and integrated marketing framework, such areas may suffer from unsustainable exploitation or community exclusion. The lack of empirical frameworks that simultaneously address economic, ecological, and social-inclusion dimensions underlines the urgency of this study.

This study proposes and empirically tests the ENIAPEL Bottom Line model, a modified bottom-line approach tailored to the context of Gosari Village. ENIAPEL is an acronym for Economy, Nature, Inclusion, Authority (empowerment), People (fishermen), Ecology, and Local and offers a new lens to evaluate how each factor influences sustainable tourism outcomes. The study adopts a mixed-methods approach, integrating quantitative SEM-PLS analysis with qualitative insights from phenomenological interviews, to comprehensively understand stakeholder perspectives.

One approach that can be used is the ENIAPEL Bottom Line model, which emphasizes environmental, social, and economic balance in tourism marketing strategies. Figure 1 presents the ENIAPEL model, consisting of seven integrated components that interact to influence the success of tourism development in Gosari Village.



Figure 1. ENIAPEL Bottom Line Model for Natural Tourism Marketing

Compared to conventional marketing frameworks, the ENIAPEL model is designed to incorporate the unique variables present in rural-natural tourism zones such as ecological vulnerability, community-based empowerment, and informal economic structures. Unlike Triple Bottom Line (TBL) which focuses on People, Planet, and Profit in a generic sense, ENIAPEL integrates village-specific constructs like fishermen, local wisdom, and government support, making it more relevant and actionable in Indonesia's village development context.

This research contributes theoretically by introducing and empirically validating the ENIAPEL model as a contextualized framework for tourism marketing in rural-coastal zones. Practically, it provides strategic insights for village-owned enterprises (BUMDes), tourism authorities, and policymakers on designing inclusive and ecological tourism initiatives. The findings also strengthen the capacity of minapolitan areas to achieve longterm sustainability by balancing environmental preservation and economic empowerment.

LITERATURE REVIEW

Economy Theory

Economic theory helps explain how limited resources are allocated to meet the needs of individuals and organizations. According to Rising et al. (2022), supply and

Published by Universitas Airlangga This is an open access article under the CC BY SA license (https://creativecommons.org/licenses/by-sa/4.0/) demand determine the price mechanism in the economy. Osborne and Rubinstein (2020) emphasize microeconomic behavior in resource distribution, while Lee and Sims (2024) discuss how macroeconomic policy affects economic performance in developing regions. The role of the local economy, including community-based enterprises, significantly supports the sustainability of natural tourism. Prior studies highlight that tourism development in village areas is influenced by the strength of local economic actors like BUMDes and MSMEs.

Hypothesis:

H4 : Fishermen have a significant effect on the Economy in the Natural Tourism Area of Gosari Village, Gresik Regency.

Fishermen Theory

Fishermen are critical stakeholders in coastal tourism. Goethel et al. (2023) explain how sustainable fisheries management contributes to local development and tourism. The active participation of fishermen can enhance ecological preservation and local economic integration. Conroy and Peterson (2013) argue that involving fishermen in environmental governance helps reduce overexploitation and improve resilience.

Hypotheses:

- H1 : Fishermen have a significant effect on Inclusion in the Natural Tourism Area of Gosari Village, Gresik Regency.
- H2 : Fishermen have a significant effect on Empowerment in the Natural Tourism Area of Gosari Village, Gresik Regency.
- H3 : Fishermen have a significant effect on Ecology in the Natural Tourism Area of Gosari Village, Gresik Regency.
- H4 : Fishermen have a significant effect on the Economy in the Natural Tourism Area of Gosari Village, Gresik Regency.

Inclusion Theory

Inclusion in tourism is about ensuring that marginalized groups are involved in decision-making and benefit from development. According to Garrick et al. (2024), social inclusion improves fairness and accessibility. Shore et al. (2011) emphasize workplace inclusion as part of sustainable development practices.

Hypothesis:

H13 : Inclusion has a significant effect on the Economy in the Natural Tourism Area of Gosari Village, Gresik Regency.

Nature Theory

Nature plays a pivotal role in shaping tourism destinations. Esau et al. (2021) in their ecosystem theory highlight the interdependence between biodiversity and tourism viability. Abbass et al. (2022) demonstrate that preserving natural landscapes leads to

long-term tourism resilience. In addition, environmental adaptation theory explains how species and ecosystems adapt to environmental changes to survive and thrive (Scarano, 2017).

Hypotheses:

- H5 : Nature has a significant effect on Inclusion in the Natural Tourism Area of Gosari Village, Gresik Regency.
- H6 : Nature has a significant effect on Empowerment in the Natural Tourism Area of Gosari Village, Gresik Regency.
- H7 : Nature has a significant effect on Ecology in the Natural Tourism Area of Gosari Village, Gresik Regency.
- H8 : Nature has a significant effect on the Economy in the Natural Tourism Area of Gosari Village, Gresik Regency.

Empowerment Theory

Empowerment involves building community capacity and autonomy. Cohen and Sherman (2014) define empowerment as strengthening individual decision-making power. Fernandez and Moldogaziev (2015) found that empowering workers improves motivation and results. Community empowerment in tourism fosters inclusive growth and participation.

Hypothesis:

H14 : Empowerment has a significant effect on the Economy in the Natural Tourism Area of Gosari Village, Gresik Regency.

Ecology Theory

Ecological theory studies the interactions between organisms and their environment. Schirpke et al. (2024) argue that ecological health underpins the attractiveness of natural tourism destinations. Hansen et al. (2012) emphasize the role of landscape ecology in planning tourism sustainably. In addition, Evolutionary Ecology examines how environmental selection pressures drive species evolution and adaptation to changing environmental conditions (Lankau et al., 2011). Hypothesis:

H15 : Ecology has a significant effect on the Economy in the Natural Tourism Area of Gosari Village, Gresik Regency.

Locality Theory

Locality theory emphasizes the influence of local values, community aspirations, and regional policies. Lu et al. (2013) discuss how local identity shapes development

Published by Universitas Airlangga

outcomes while Pike et al. (2008) argue that local economic systems are key to grassroots development strategies.

Hypotheses:

- H9 : Local has a significant effect on Inclusion in the Natural Tourism Area of Gosari Village, Gresik Regency.
- H10 : Local has a significant effect on Empowerment in the Natural Tourism Area of Gosari Village, Gresik Regency.
- H11 : Local has a significant effect on Ecology in the Natural Tourism Area of Gosari Village, Gresik Regency.
- H12 : Local has a significant effect on the Economy in the Natural Tourism Area of Gosari Village, Gresik Regency.



Figure 2. Conceptual Framework of the ENIAPEL Bottom Line Model

The following conceptual framework illustrates the proposed relationships among the study variables, based on both theoretical foundations and empirical findings from prior research. The ENIAPEL model positions Economy as the final dependent variable, influenced by multiple dimensions such as Fishermen, Nature, Locality, Inclusion, Empowerment, and Ecology.

RESEARCH METHODS

This study employed a mixed-methods approach, combining both quantitative and qualitative methods to gain a comprehensive understanding of the factors influencing the development of natural tourism in Gosari Village. The quantitative method was used to measure the relationships between variables using statistical analysis, while the qualitative method was used to explore in-depth insights, uncover underlying factors, and enhance the interpretation of the findings. This approach also applies triangulation, which improves the credibility, validity, and depth of the research results. The research was carried out from June to July 2024 in Gosari Village, Ujungpangkah Subdistrict, Gresik Regency, East Java, Indonesia. The quantitative data collection involved a structured questionnaire distributed to 106 respondents, selected through purposive sampling. The inclusion criteria required respondents to be actively involved in the tourism sector and affiliated with one of the stakeholder groups, including: Village-Owned Enterprises (BUMDes), Village Government, Tourism Awareness Groups (POKDARWIS), Micro, Small and Medium Enterprises (MSMEs), Youth Organizations, the Tourism Office, Regional Development Planning Agency (BAPPEDA), and the Industry and Trade Office (DISKOPERINDAG).

Each variable was measured based on respondents' perceptions using a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The indicators used in the questionnaire were as follows:

Economy2. Source of Funding 3. Funding from Financial Institutions 4. Government Assistance or IncentivesFisherman1. Support to Fishermen 2. Funding for Fishermen 2. Funding for FishermenInclusion1. Marginalized Group ParticipationNature1. Environmental PreservationEmpowerment1. Local Community Empowerment Program 2. Government TrainingEcology1. Environmental PreservationLocal1. Local Community Empowerment1. Local Community Empowerment	No	Variables	Indicators		
Economy3. Funding from Financial Institutions3. Funding from Financial Institutions4. Government Assistance or IncentivesFisherman1. Support to Fishermen2. Funding for FishermenInclusion1. Marginalized Group ParticipationNature1. Environmental PreservationEmpowerment1. Local Community Empowerment ProgramEcology1. Environmental Preservation2. Asset Protection1. Local Community EmpowermentLocal1. Local Community Empowerment			1. Role of Bumdes/Cooperatives/UMKM/POKDARWIS		
3. Funding from Financial Institutions 3. Government Assistance or Incentives 4. Government Assistance or Incentives 1. Support to Fishermen 2. Funding for Fishermen 1. Inclusion 1. Marginalized Group Participation Nature 1. Environmental Preservation 2. Government Training 2. Government Training 1. Environmental Preservation 2. Asset Protection 1. Local Community Empowerment	1.	Economy	2. Source of Funding		
Fisherman 1. Support to Fishermen Inclusion 1. Marginalized Group Participation Nature 1. Environmental Preservation Empowerment 1. Local Community Empowerment Program 2. Government Training 1. Environmental Preservation 2. Government Training 1. Environmental Preservation 2. Asset Protection 1. Local Community Empowerment	1.		3. Funding from Financial Institutions		
Fisherman 2. Funding for Fishermen Inclusion 1. Marginalized Group Participation Nature 1. Environmental Preservation Empowerment 1. Local Community Empowerment Program 2. Government Training 1. Environmental Preservation 2. Government Training 1. Environmental Preservation 2. Asset Protection 1. Local Community Empowerment			4. Government Assistance or Incentives		
2. Funding for Fishermen Inclusion 1. Marginalized Group Participation Nature 1. Environmental Preservation Empowerment 1. Local Community Empowerment Program 2. Government Training 1. Environmental Preservation Ecology 1. Environmental Preservation 2. Asset Protection 1. Local Community Empowerment	2.	Fisherman	1. Support to Fishermen		
Nature 1. Environmental Preservation Empowerment 1. Local Community Empowerment Program 2. Government Training 1. Environmental Preservation 2. Government Program 2. Government Preservation 2. Asset Protection 1. Local Community Empowerment Local 1. Local Community Empowerment	2.		2. Funding for Fishermen		
Empowerment 1. Local Community Empowerment Program 2. Government Training Ecology 1. Environmental Preservation 2. Asset Protection Local 1. Local Community Empowerment	3.	Inclusion	1. Marginalized Group Participation		
Empowerment 2. Government Training Ecology 1. Environmental Preservation 2. Asset Protection Local 1. Local Community Empowerment	4.	Nature	1. Environmental Preservation		
2. Government Training Ecology 1. Environmental Preservation 2. Asset Protection Local 1. Local Community Empowerment	5.	Empowerment	1. Local Community Empowerment Program		
Ecology 2. Asset Protection Local 1. Local Community Empowerment	э.		2. Government Training		
Local 2. Asset Protection 1. Local Community Empowerment	6.	Ecology	1. Environmental Preservation		
Local	0.		2. Asset Protection		
	7.	Local	1. Local Community Empowerment		
		LUCAI	2. Local Community Aspirations		

The collected data were analyzed using partial least squares structural equation modeling (PLS-SEM) with SmartPLS 4.0, which is suitable for testing complex models with latent variables.

After the quantitative analysis, the qualitative phase was conducted using a phenomenological approach, aiming to explore the lived experiences and perceptions of local stakeholders. In-depth interviews were carried out with key informants including representatives from fishermen groups, BUMDes, local government, and tourism actors. The qualitative data served as a complement to the quantitative findings, providing richer

Published by Universitas Airlangga

interpretations and triangulating the results—particularly in explaining unexpected patterns or weak statistical relationships.

RESULT AND ANALYSIS

This study uses a sample of parties who serve at Gosari Village Nature Tourism, Gresik Regency and were willing to become respondents, as many as 106 people, with the following details:

No	Group of Respondents	Total Respondents
1	Village-Owned Enterprises (BUMDES)	2
2	Village Government	6
3	Tourism Awareness Group (POKDARWIS)	4
4	MSMES	13
5	Youth Organization	58
6	Department of Tourism	8
7	Village Empowerment Institution	7
8	Department of Industry and Trade	8

Table 2. Respondents



Outer Model Test

Figure 3. Outer Model

Convergent Validity

If the outer loading is> 0.7, an indicator is said to show convergent validity in the appropriate category. The following is the outer loading of each indicator on the research variables:

No	Nature	Ecology	Economy	Inclusion	Local	Fisherman	Empowerment
X1.1						0.920	
X1.2						0.942	
X2.1	1.000						
X3.1					0.843		
X3.2					0.818		
Y1.1			0.841				
Y1.2			0.771				
Y1.3			0.823				
Y1.4			0.814				
Z1.1				1.000			
Z2.1							0.874
Z2.2							0.839
Z3.1		0.871					
Z3.2		0.862					

Table 3. Outer Loadings

It can be seen in the table above that the outer loading value is > 0.7 so that all indicators are declared feasible or valid and can be used for further analysis.



Cronbach's Alpha

Figure 4. Cronbach's Alpha Values for Each Construct

To assess the internal consistency reliability of the constructs, Cronbach's alpha values were analyzed. A value of 0.70 or higher is generally considered acceptable for confirming reliability (Hair et al., 2018). Based on the results (see Figure 2), the Economy (0.83) and Fisherman (0.85) constructs demonstrated high reliability, with alpha values exceeding the 0.70 threshold. This indicates that the indicators used for these variables consistently measure the underlying latent constructs.

However, the Cronbach's alpha values for Ecology (0.66), Empowerment (0.64), and Local (0.58) were slightly below the recommended level. While values between 0.60 and 0.70 may still be considered acceptable in exploratory research, it suggests that the internal consistency of these constructs could be improved, possibly by refining or expanding the measurement indicators.

Green bars indicate reliable constructs ($\alpha \ge 0.70$), while red bars indicate constructs that fall below the recommended threshold. These results were further complemented by other validity and reliability measures such as composite reliability (CR) and average variance extracted (AVE) to ensure a robust assessment of the measurement model.



Average Variance Extracted (AVE)

Figure 5. Average Variance Extracted (AVE) Values for Each Construct

To further assess convergent validity, AVE values were calculated for each construct. According to Hair et al. (2018), an AVE value of 0.50 or higher indicates that a latent construct explains more than half of the variance of its indicators, and thus has acceptable convergent validity.

As shown in Figure 5, all constructs in this study exceeded the recommended threshold:

- Fisherman had the highest AVE score, reaching approximately 0.86, indicating very strong convergent validity.
- Ecology, Empowerment, and Local all had AVE values in the range of 0.68–0.75, which also reflects a satisfactory level of construct validity.
- Economy had the lowest AVE, around 0.67, but still above the minimum threshold of 0.50, and therefore considered acceptable.

These findings confirm that the measurement items used in the model adequately represent their respective constructs and support the reliability of the measurement model.

Composite Reliability

To assess the internal consistency reliability of the constructs more accurately, this study also employed the composite reliability (CR) measure, which is considered more robust than Cronbach's alpha, especially in structural equation modeling using PLS. According to Hair et al. (2018), a CR value of 0.70 or higher indicates acceptable reliability. The results of this study show that all constructs had CR values above the required threshold, confirming that the indicators used consistently reflect the intended latent variables. Among them, the Fisherman construct demonstrated the highest composite reliability, exceeding 0.90, while Economy and Ecology also showed strong reliability with values around 0.85 to 0.89. Although Local had the lowest CR value in the group, it still surpassed the minimum requirement, which validates its inclusion in the measurement model. These results further strengthen the evidence of internal consistency across all constructs in this study.



Published by Universitas Airlangga This is an open access article under the CC BY SA license (https://creativecommons.org/licenses/by-sa/4.0/)

Figure 6. Composite Reliability

Hypothesis Testing

If the P-values <0.05, the research hypothesis can be declared accepted. The following are the hypothesis test results obtained in this study.

Hypothesis	Relationship	O Sample	T-stat	P-value	Conclusion
H ₁	$(X_1) \rightarrow (Z_1)$	0.285	2.425	0.015	Significant
H ₂	$(X_1) \rightarrow (Z_2)$	0.044	0.417	0.676	Insignificant
H ₃	$(X_1) \rightarrow (Z_3)$	0.283	2.981	0.003	Significant
H ₄	$(X_1) \rightarrow (Y)$	0.198	1.975	0.048	Significant
H₅	$(X_2) \to (Z_1)$	0.125	1.290	0.197	Insignificant
H ₆	$(X_2) \to (Z_2)$	0.310	3.414	0.001	Significant
H ₇	$(X_2) \to (Z_3)$	0.346	4.730	0.000	Significant
H ₈	$(X_2) \to (Y)$	0.037	0.428	0.669	Insignificant
H9	$(X_3) \to (Z_1)$	0.228	1.828	0.068	Insignificant
H ₁₀	$(X_3) \to (Z_2)$	0.515	5.087	0.000	Significant
H ₁₁	$(X_3) \to (Z_3)$	0.344	3.811	0.000	Significant
H ₁₂	$(X_3) \rightarrow (Y)$	0.334	2.907	0.004	Significant
H ₁₃	$(Z_1) \rightarrow (Y)$	0.065	0.791	0.429	Insignificant
H ₁₄	$(Z_2) \to (Y)$	0.199	1.931	0.054	Insignificant
H ₁₅	$(Z_3) \to (Y)$	0.162	1.355	0.175	Insignificant

Table 4. Result of Hypothesis-testing

Based on the data above, it can be obtained that eight hypotheses are accepted because they have a significant effect which is indicated by having P-Values <0.05. Meanwhile, seven hypotheses are rejected because they have the effect shown, namely having P-Values> 0.05. From the eight accepted hypotheses, it can be described in the following conceptual framework.

The following is a summary of the hypothesis testing results based on the structural model:

H1: Fishermen \rightarrow Inclusion (Significant, p = 0.015, t = 2.425) \rightarrow Accepted

H2: Fishermen \rightarrow Empowerment (p = 0.676, t = 0.417) \rightarrow Rejected

H3: Fishermen \rightarrow Ecology (p = 0.003, t = 2.981) \rightarrow Accepted

H4: Fishermen \rightarrow Economy (*p* = 0.048, *t* = 1.975) \rightarrow Accepted

H5: Nature \rightarrow Inclusion (p = 0.197, t = 1.290) \rightarrow Rejected

H6: Nature → Empowerment (p = 0.001, t = 3.414) → Accepted H7: Nature → Ecology (p = 0.000, t = 4.730) → Accepted H8: Nature → Economy (p = 0.669, t = 0.428) → Rejected H9: Local → Inclusion (p = 0.068, t = 1.828) → Rejected H10: Local → Empowerment (p = 0.000, t = 5.087) → Accepted H11: Local → Ecology (p = 0.000, t = 3.811) → Accepted H12: Local → Economy (p = 0.004, t = 2.907) → Accepted H13: Inclusion → Economy (p = 0.429, t = 0.791) → Rejected H14: Empowerment → Economy (p = 0.054, t = 1.931) → Rejected H15: Ecology → Economy (p = 0.175, t = 1.355) → Rejected

The structural model results revealed several key findings regarding the interrelationships among variables in the ENIAPEL Bottom Line framework. The most consistent and statistically significant effects were observed from the Fishermen, Nature, and Local constructs, each of which influenced multiple outcome variables. For instance, Fishermen significantly affected Inclusion, Ecology, and Economy, confirming their central role in both environmental preservation and socioeconomic development in natural tourism villages. This supports the findings of Goethel et al. (2023) who stated that coastal communities, particularly fishermen, play a dual role in preserving marine ecosystems and sustaining tourism livelihoods.

Similarly, Nature significantly influenced Empowerment and Ecology, reinforcing Esau et al., (2021)' theory of environmental feedback loops, where preserved natural assets empower local actors and increase ecological value. Meanwhile, the Local construct emerged as a strong predictor of Empowerment, Ecology, and Economy. This finding aligns with Pike et al. (2008), who emphasized that development grounded in local knowledge and assets leads to more sustainable and inclusive growth.

Interestingly, the variables Inclusion, Empowerment, and Ecology did not show significant direct effects on Economy, a finding that diverges from some prior studies. This could indicate that while these constructs are crucial for long-term sustainability and equity, they may not immediately influence economic indicators unless reinforced by structural mechanisms like funding access or institutional support. This insight contributes a novel perspective to the literature, especially in the context of rural tourism development.

To strengthen these interpretations, triangulation was conducted using qualitative data from in-depth interviews. The triangulation process involved comparing quantitative outcomes with real-world narratives from village leaders, fishermen, tourism operators, and BUMDes managers. The qualitative data confirmed that while inclusion efforts exist, they often do not translate into economic participation due to informal roles and lack of structured income pathways. For example, many marginalized groups participate as volunteers or occasional workers without business access or formal wages, explaining why Inclusion does not significantly impact Economy in the statistical model.

Likewise, although Empowerment was conceptually linked to economic improvement, qualitative interviews revealed that most empowerment programs were one-off training sessions without follow-up, resulting in low sustainability. This explains the borderline result in H14. On the other hand, the significant role of Fishermen and Local was validated through strong qualitative evidence, where respondents highlighted these groups as initiators of tourism-related innovations, protectors of natural sites, and enablers of local economic networks.

Altogether, the combination of quantitative results and qualitative triangulation provides a robust interpretation of how sustainable tourism evolves in Gosari Village. The ENIAPEL Bottom Line model not only proves to be statistically viable but also contextually grounded, providing useful implications for tourism managers, local governments, and policy planners aiming to develop nature-based tourism in similar rural settings.

No	Field Group		Recommendation Results				
		1.	Strengthen social media strategy				
1.	Digital Marketing	2.	Develop creative content and collaboration with influencers				
1.		3.	Optimize platform usage and analytics				
		4.	Evaluate and improve regularly				
		1.	Expand parking area and improve access road				
2.	Operational Strategy	2.	Add new photo spots and rides				
۷.		3.	Develop educational facilities				
		4.	Update existing facilities				
		1.	Conduct training on hospitality and customer service				
		2.	Implement tourism certification program for human resources				
3.	Human Resource	3.	Provide advanced training for experienced staff				
5.	Development	4. Organize training to improve work discipline					
		5.	Implement work tolerance and on-the-job training.				
		6.	Establish cooperation with tourism education institutions				
		1.	Diversify funding sources and develop more efficient budget plans.				
		2.	Develop a more active marketing strategy and tighten operational cost control.				
4.	Finance	3.	Plan for alternative funding sources and increase transparency in budget management.				
		4.	Consider business expansion and utilize technology in financia management.				

Table 5. Recommended Results from Interviews

5. Accounting	 Increase the frequency of internal reporting and apply basic accounting standards.
J. Accounting	2. Use computerized accounting systems and attend basic accounting
	training.
	1. Implement preventive maintenance and standardized reporting formats
6. Asset Management	2. Use asset management software and needs analysis for procurement
0. Asset Management	3. Evaluate and optimize the use of unused assets
	4. Conduct regular asset audits
	1. Improve youth empowerment policies and program cooperation.
7. Government Policy	2. Facilitate halal training and promotion of local products.
7. Government Policy	3. Clarify marketing policy and conduct periodic evaluation.
	4. Socialize cooperatives and support sustainable economy.

CONCLUSION

This study examined the application of the ENIAPEL Bottom Line model in promoting sustainable tourism in Gosari Village, Gresik Regency. The findings revealed that Fishermen, Nature, and Local components significantly influence Inclusion, Empowerment, Ecology, and Economy. However, variables such as Inclusion, Empowerment, and Ecology were not found to significantly affect economic outcomes, suggesting that social and environmental efforts alone are not sufficient to drive local economic growth without supportive institutional and financial mechanisms. These findings offer a theoretical contribution by refining the conventional Triple Bottom Line into a more context-sensitive model that integrates localized variables relevant to rural tourism in coastal areas. In practical terms, the results provide insight for policymakers and tourism stakeholders to strengthen the role of community actors and environmental preservation while ensuring formal access to funding, market systems, and structured empowerment programs.

While this research offers important insights, it also presents several limitations. The study focused on a single village with a relatively limited sample size, which may restrict its generalizability. Some constructs, particularly Empowerment and Ecology, may require more nuanced indicators to capture their complexity in future studies. In addition, although triangulation was applied through qualitative interviews, further research is encouraged to incorporate longitudinal and ethnographic methods for deeper analysis. Future studies may also examine the role of mediating or moderating variables (such as digital marketing, institutional support, or policy frameworks) to better understand the dynamics of rural tourism development. Overall, the ENIAPEL Bottom Line model contributes a comprehensive and integrative framework for understanding sustainability in village-based tourism, highlighting the importance of aligning ecological, social, and economic dimensions in local contexts.

REFERENCES

- Abbass, K., Qasim, M. Z., Song, H., Murshed, M., Mahmood, H., & Younis, I. (2022). A review of the global climate change impacts, adaptation, and sustainable mitigation measures. *Environmental Science and Pollution Research*, *29*(28), 42539–42559. https://doi.org/10.1007/s11356-022-19718-6
- Chou, S.-F., Horng, J.-S., Sam Liu, C.-H., & Lin, J.-Y. (2020). Identifying the critical factors of customer behavior: An integration perspective of marketing strategy and components of attitudes. *Journal of Retailing and Consumer Services*, 55, 102113. https://doi.org/10.1016/j.jretconser.2020.102113
- Cohen, G. L., & Sherman, D. K. (2014). The Psychology of Change: Self-Affirmation and Social Psychological Intervention. *Annual Review of Psychology*, 65(1), 333–371. https://doi.org/10.1146/annurev-psych-010213-115137
- Conroy, M. J., & Peterson, J. T. (2013). *Decision Making in Natural Resource Management: A Structured, Adaptive Approach*. Wiley. https://doi.org/10.1002/9781118506196
- Dar, S. A., & Sakthivel, Dr. P. (2022). Maslow's Hierarchy of Needs Is still Relevant in the 21st Century. *Journal of Learning and Educational Policy*, 25, 1–9. https://doi.org/10.55529/jlep.23.1.9
- Esau, I., Bobylev, L., Donchenko, V., Gnatiuk, N., Lappalainen, H. K., Konstantinov, P., Kulmala, M., Mahura, A., Makkonen, R., Manvelova, A., Miles, V., Petäjä, T., Poutanen, P., Fedorov, R., Varentsov, M., Wolf, T., Zilitinkevich, S., & Baklanov, A. (2021). An enhanced integrated approach to knowledgeable high-resolution environmental quality assessment. *Environmental Science & Policy*, *122*, 1–13. https://doi.org/10.1016/j.envsci.2021.03.020
- Fernandez, S., & Moldogaziev, T. (2015). Employee Empowerment and Job Satisfaction in the U.S. Federal Bureaucracy. *The American Review of Public Administration*, 45(4), 375– 401. https://doi.org/10.1177/0275074013507478
- Garrick, A., Johnson, W. D., & Arendt, S. W. (2024). Breaking Barriers: Strategies for Fostering Inclusivity in The Workplace. *International Journal of Academic Research in Business and Social Sciences*, 14(2). https://doi.org/10.6007/IJARBSS/v14-i2/20799
- Gkikas, D. C., & Theodoridis, P. K. (2022). AI in Consumer Behavior In: M. Virvou, G.A. Tsihrintzis, L.H. Tsoukalas & L.C. Jain, (eds), Advances in Artificial Intelligence-based Technologies. Learning and Analytics in Intelligent Systems, vol 22. (pp. 147–176). Cham: Springer. https://doi.org/10.1007/978-3-030-80571-5 10
- Goethel, D. R., Omori, K. L., Punt, A. E., Lynch, P. D., Berger, A. M., de Moor, C. L., Plagányi, É. E., Cope, J. M., Dowling, N. A., McGarvey, R., Preece, A. L., Thorson, J. T., Chaloupka, M., Gaichas, S., Gilman, E., Hesp, S. A., Longo, C., Yao, N., & Methot, R. D. (2023). Oceans of plenty? Challenges, advancements, and future directions for the provision of evidence-based fisheries management advice. *Reviews in Fish Biology and Fisheries*, 33(2), 375–410. https://doi.org/10.1007/s11160-022-09726-7
- Hansen, A. J., DeFries, R. S., & Turner, W. (2012). Land Use Change and Biodiversity. In: G. Gutman, A.C. Janetos, C.O. Justice, E. F. Moran, J.F. Mustard, R.R. Rindfuss, D. Skole, B.L. Turner & M.A. Cochrane (eds), Land Change Science. Remote Sensing and Digital

Image Processing, vol 6. (pp. 277–299). Dordrecht: Springer. https://doi.org/10.1007/978-1-4020-2562-4_16

- Jiang, Y., Abdullah, S. I. N. W., Lim, B. H. J., Wang, R., & Phuah, K. T. (2023). The role of marketing stimuli and attitude in determining post-COVID buying decisions toward organic food products: evidence from retail consumers in Beijing, China. *Frontiers in Sustainable Food Systems*, 7. https://doi.org/10.3389/fsufs.2023.1051696
- Lankau, R., Jørgensen, P. S., Harris, D. J., & Sih, A. (2011). Incorporating evolutionary principles into environmental management and policy. *Evolutionary Applications*, 4(2), 315–325. https://doi.org/10.1111/j.1752-4571.2010.00171.x
- Lee, B. T. F., & Sims, J. P. (2024). Redefining Regional Development: The Case for an ASEAN Development Bank. *Journal of Political Issues*, 6(1), 1–19. https://doi.org/10.33019/jpi.v6i1.160
- Leiser, D., & Azar, O. H. (2008). Behavioral economics and decision making: Applying insights from psychology to understand how people make economic decisions. *Journal of Economic Psychology*, 29(5), 613–618. https://doi.org/10.1016/j.joep.2008.08.001
- Lu, C., Wu, Y., Shen, Q., & Wang, H. (2013). Driving force of urban growth and regional planning: A case study of China's Guangdong Province. *Habitat International*, 40, 35– 41. https://doi.org/10.1016/j.habitatint.2013.01.006
- Nagyová, Ľ., Géci, A., & Horská, E. (2020). Consumer preferences and decision-making determinants for the purchase of sheep's milk and its products. *Potravinarstvo Slovak Journal of Food Sciences*, *14*, 673–681. https://doi.org/10.5219/1424
- Nyamari, T. (2024a). Social Capital and Community Development. *International Journal of Humanity and Social Sciences*, 3(1), 14–27. https://doi.org/10.47941/ijhss.1890
- Nyamari, T. (2024b). Social Capital and Community Development. *International Journal of Humanity and Social Sciences*, 3(1), 14–27. https://doi.org/10.47941/ijhss.1890
- Osborne, M., & Rubinstein, A. (2020). *Models in Microeconomic Theory*. Open Book Publishers. https://doi.org/10.11647/obp.0204
- Permatasari, A., Mapuasari, S. A., Yuliana, E., & Ahmad, N. F. (2020). The role of customer online review in the buying decision process of a digital tourism product: A conceptual framework. In: G. Anggadwita & E. Martini (eds), *Digital Economy for Customer Benefit and Business Fairness* (pp. 20–25). Routledge. https://doi.org/10.1201/9781003036173-4
- Pike, A., Rodriguez-Pose, A., & Tomaney, J. (2008). Local and Regional Development. *Economic Geography*, 84(2), 241–242. https://doi.org/10.1111/j.1944-8287.2008.tb00407.x
- Rising, J. A., Taylor, C., Ives, M. C., & Ward, R. E. T. (2022). Challenges and innovations in the economic evaluation of the risks of climate change. *Ecological Economics*, 197, 107437. https://doi.org/10.1016/j.ecolecon.2022.107437
- Scarano, F. R. (2017). Ecosystem-based adaptation to climate change: concept, scalability and a role for conservation science. *Perspectives in Ecology and Conservation*, 15(2), 65– 73. https://doi.org/10.1016/j.pecon.2017.05.003

- Schirpke, U., Ebner, M., & Tappeiner, U. (2024). Effects of climate-related environmental changes on non-material benefits from human-nature interactions: A literature review. *Ecosystem Services*, 69, 101650. https://doi.org/10.1016/j.ecoser.2024.101650
- Shore, L. M., Randel, A. E., Chung, B. G., Dean, M. A., Holcombe Ehrhart, K., & Singh, G. (2011).
 Inclusion and Diversity in Work Groups: A Review and Model for Future Research.
 Journal of Management, 37(4), 1262–1289.
 https://doi.org/10.1177/0149206310385943
- Thorson, E. (2023). Emotion in Processing Advertising and News. Journalism &
Communication Monographs, 25(2), 181–192.
https://doi.org/10.1177/15226379231167136