

## RESEARCH ARTICLE



# Sustainable Development of Tagalag Fishing Village as Ecotourism Zone of Valenzuela City, Philippines

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## Abstract

Tagalag, an urban barangay in Valenzuela, has been providing fish supplies to its city since the 1980s. The barangay was established after a massive flood, and in 2016, it was declared a city eco-tourism zone. The Sustainable Development Goals (SDGs) prioritize economic growth, social inclusion, and sustainable development, encompassing objectives pertaining to the tourism sector. The application of the Sustainable Development Goals (SDGs) to the tourism sector has been undertaken by the World Tourism Organization (UNWTO), with the aim of advocating for the implementation of sustainable, equitable, and environmentally friendly practices within the tourism industry. Sustainable tourism encompasses the comprehensive evaluation of its societal, ecological, and economic consequences while simultaneously addressing the requirements of both tourists and local communities, safeguarding natural resources, and mitigating adverse environmental effects. Under the SDG #6 Clean Water and Sanitation this goal is making sure about the Tagalag fishing village has an availability of clean water and good sanitation by all and how this can be sustained in the Tagalag community which the researchers do some recommended plan for the community Tagalag Fishing Village is dedicated to sustainable fishing practices and marine life habitat restoration, implementing scientifically based management programs and regulatory agencies. The village prioritizes water resource conservation and surface runoff reduction but could benefit from enhancing infrastructure and promoting sustainable development. The village's economic growth is exemplary, with policies promoting economic growth, job opportunities, entrepreneurial endeavors, and indigenous culture preservation. However, there is room for improvement in sanitation and clean water.

Keyword: economic growth, ecotourism, fishing, sustainable development

## 1. Introduction

Fishing communities have a variety of resources, excellent natural settings, and distinctive cultures that might make them desirable to meet the health, cultural, and environmental needs of people. Tagalag is one of those places that provide fish supply to its city or municipality. Tagalag, also known as Taga- Ilog, is an administrative division in northern Metro Manila, Philippines.

The history behind this barangay is when a massive flood occurred in the 1980s, the area—which had previously been a sizable flowing field—was completely removed from the map. Eventually, residents of Tagalag's border chose to establish their own barrio, which was recognized on January 25, 1960. It is an urban barangay in the city of Valenzuela and is famous for fish products such as tilapia and bangus, as well as desserts such as halaya and garbanzos. The barangay was also declared as a city eco-tourism zone in 2016.

As indicated by the data that we collected on the Valenzuela government's official website, Barangay Tagalag is geographically surrounded by water. The local government of Valenzuela City came up with an effort to reestablish the barangay's fishing tradition in order to maximize the benefits of their untapped resources. The researcher has devoted their knowledge to learning this kind of topic, sustaining eco-tourism zone since it will help not only the locals but the country to have more convenient places to go to, and will make a big impact in terms of the community income northern part of the National Capital Region (NCR) is known for its bustling urban centers and diverse attractions that cater to tourists and locals alike. But amidst the concrete jungle, finding natural spots can be both a challenge and a gratifying accomplishment. Fortunately, the Tagalag Fishing Village in Valenzuela City offers an escape from the city buzz, where one can enjoy a range of aquatic adventures in a family-friendly setting without leaving the NCR.

The park and its aquatic attractions also offer an immersive eco-tourism experience that rivals other rural destinations. Nestled in Valenzuela City, the Tagalag Fishing Village is a nature-centered spot inaugurated on February 15, 2020. The tourism spot is the brainchild of the administration of former Mayor Rex Gatchalian.'personal communication' (2022) Like many of Valenzuela's innovations, the fishing spot has been recognized by the Galing Pook Awards for providing livelihood to the residents of Barangay Tagalag, which is the eco-tourism zone of the city. With a 1,300-meter fenced boardwalk, the fishing haven provides multiple aquatic and eco-related experiences, making it a must-visit destination.

The village's natural resources are exclusive for fisheries both for leisure and consumption, with fish populations that go beyond the famous tilapia and bangus (milkfish). Hito (catfishes) and other aquatic species can also be found in abundance, thanks to the bodies of water that surround the area. Beyond fishing, the Tagalag Fishing Village also boasts of a growing number of conveniences that elevates its popularity for both angler enthusiasts and tourists. Several restaurants satisfy seafood cravings, and one of the most frequented restaurants in Valenzuela City, "Kamayan sa Palapat," holds its competitive spot by providing extraordinary service along with exceptional ambiance and friendly staff to boot. The top-tier service and delicious food are complemented by the cozy cottages that provide a perfect respite for visitors to sit back, relax, and enjoy the stay.

Fishing villages and oceans offer various resources and include excellent natural environments and unique cultures that can make such villages attractive spaces to meet the health, culture, and environmental needs of individuals. [1] However, as society has developed and the environment has changed, the catch, which is the major source of income in fishing villages, has declined significantly worldwide, making it difficult to address regional economic issues [2]. Fishing villages that have lost their ability to survive are gradually facing extinction, and there are real problems linked to the survival of fishing communities. As a result, most coastal communities, which rely on fishing as a primary industry, are seeking various solutions to the environmental changes occurring as a result of the fishing crisis, integration with global markets, and climate change. According to [3] Rural areas, in a similar manner to fishing villages, are incorporating tourism into regional development in an attempt to solve the crisis of agriculture, which has lost the ability to support entire villages. As a result, tourism has come to be recognized as a representative means of revitalizing rural areas, and interest in rural tourism has recently steadily increased. Community-based tourism (CBT) in rural areas can improve the quality of life of residents in those areas. It also increases respect for local cultures and maintains biodiversity. In the same vein as the Sustainable Development Goals (SDGs), the United Nations' global goal is to preserve and promote local culture [4]. Tourism has revitalised rural places, thus fishing villages should be discussed as a way to revitalise. The links between fishing villages and tourism are actively being sought as part of a strategy to address the serious problems caused by the loss of income, which mainly comes from fishing, as well as the outflow of young people due to urbanization. [5] Through these projects, the government has tried to improve tourism conditions in fishing villages. However, according to [6], most fishing village tourism projects, are planned to improve the basic local livelihoods, so infrastructure continues to be built that is irrelevant to the project's purpose, which is to emphasize the specialization of fishing villages the name suggests, fishing is one of the main activities in this wonderful fishing haven.

As indicated by the data that we collected on the Valenzuela government's official website, Barangay Tagalag is geographically surrounded by water. The local government of Valenzuela City came up with an effort to reestablish the barangay's fishing tradition in order to maximize the benefits of their untapped resources. The researcher has devoted their knowledge to learning this kind of topic, sustaining eco-tourism zone since it will help not only the locals but the country to have more convenient places to go to, and will make a big impact in terms of the community income.

With its commitment to preserving natural aquatic resources and local livelihood,[7] the Tagalag Fishing Village is a gem that provides a taste of rural bliss within an urbanized setting. Its traditional fishing practices, natural beauty, and serene atmosphere provide a unique and

authentic travel experience that is pe However, most of the fishing village tourism projects are planned to improve the basic lives of the local residents, so infrastructure continues to be created that is irrelevant to the purpose of the project, which is to emphasize the specialization of fishing villages. As to reference [5] maximize the effectiveness of the development of fishing village tourism, it is necessary to both expand infrastructure and discover unique assets such as natural landscapes, cultural heritage sites, and local specialties. In addition, for fishing village tourism to serve as a sustainable means of revitalizing the region, it is essential to have systematic diagnosis and strategies to verify the environmental analysis and development direction. In academic fields, prior studies on fishing village tourism have mainly focused on the characteristics and experiences of tourists, with a recent focus on topics such as residents' attitudes and environmental issues reflect for those seeking a glimpse into the locals' way of life.

This research aims to assess tourism stakeholders' assessment of the Sustainable Development of Tagalag Fishing Village as Ecotourism in Valenzuela City, Philippines identifies the internal and external environmental factors in fishing village tourism in Tagalag and presents objectives and specific strategies and development measures for revitalizing fishing village tourism in terms of sustainability.

## 2. Theoretical framework

### 2.1. The evolution process of SD theory

This research is grounded in the SD theory, [8] which has been developed through practical application. Therefore, it is essential to consider the implementation of relevant policies when studying SD. The process of sustainable development (SD) has witnessed the emergence of various ideas, followed by the implementation of SD practices, such as the United Nations Sustainable Development Summit. Over time, numerous transformations have occurred within the field of sustainable development (SD), leading to its shift from primarily addressing environmental concerns to encompassing a broader scope of global strategic issues. This paper examines the evolution and development of sustainable development (SD) theory, drawing insights from the research conducted by Lele, Mebratu, Zhang, and other scholars. The study categorizes the evolution of SD theory into three distinct periods: the embryonic period (prior to 1972), the molding period (1972-1987), and the developing period (since 1987). By analyzing the contributions made during each period, this research aims to provide a comprehensive understanding of the evolution of SD theory.

The analysis conducted by researchers aimed to provide an overview of the current state of research on sustainable development (SD) and examine the prevailing research trends in this field. The ISI Web of Science (WOS) was selected as the data source due to its extensive use in related scholarly articles. The Core Collection database was chosen to ensure the quality of literature. During the search process, the terms "sustainability" and "sustainable development" were used interchangeably to ensure that no relevant literature was overlooked, as these terms were not strictly differentiated. In order to prioritize content pertaining to theory or practice, we employed the "NEAR/3" technique to regulate the proximity between the subject domain (SD) and either theory or practice, ensuring that the distance does not exceed three words. In order to examine the current trajectory of SD theory and practice, a retrieval time frame spanning from 2000 to 2019 was established.

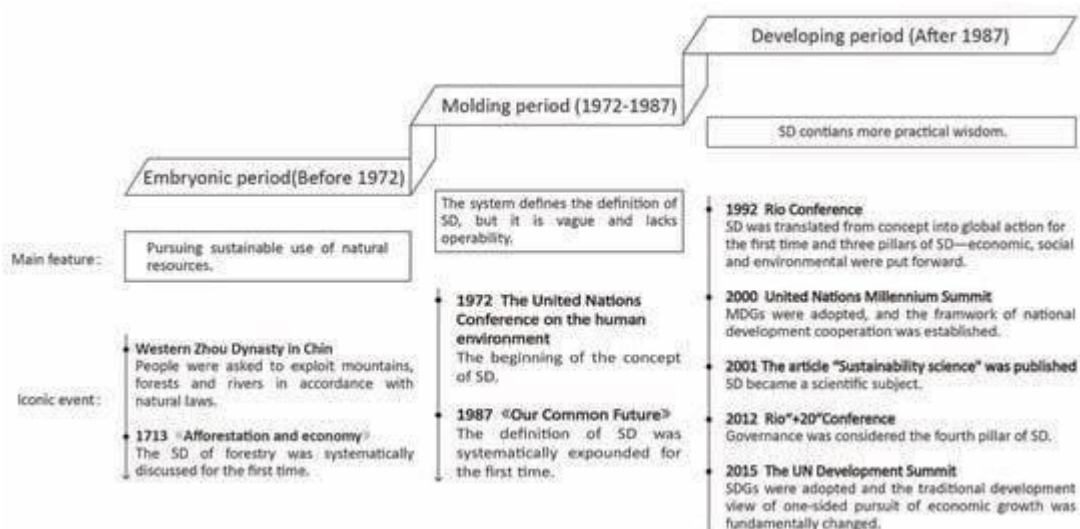


Figure 1. Evolution stages and symbolic events of SD theory

## 2.2. Sustainable fishing village tourism

The United Nations presented the Sustainable Development Goals (SDGs) as a set of common goals for the international community to achieve together. These goals include elements of sound economic growth, social engagement, and sustainable development, and they emphasize central values such as harmony between humans and the environment, dignity, and equality. Among them, 'Decent Work and Economic Growth' (Goal 8), 'Responsible Consumption and Production' (Goal 12), and 'Preservation and sustainable use of ocean, sea, and marine resources' (Goal 14) are directly related to tourism. Accordingly, the World Tourism Organization (UNWTO) has applied the United Nations' Sustainable Development Goals (SDGs) to tourism to encourage sustainable tourism, fair tourism, green tourism, etc. According to the UNWTO, sustainable tourism is tourism that fully considers its own current, social, and environmental impacts, such as meeting the needs of visitors and communities, preserving natural cultural resources, and minimizing environmental damage.

It is important for the local communities to be involved in sustainable tourism. This is because the independent participation of residents in decision-making related to the tourism development process plays a role in controlling the positive and negative impacts on the local community, CBT has been proposed to overcome the problems of large-scale tourism development in which communities were excluded; as a sustainable tourism practice, it emphasizes community participation in the development process. CBT refers to the development of tourism in a way that is harmless to the local culture, tradition, and daily life while satisfying the needs of the community, rather than emphasizing economic aspects alone.

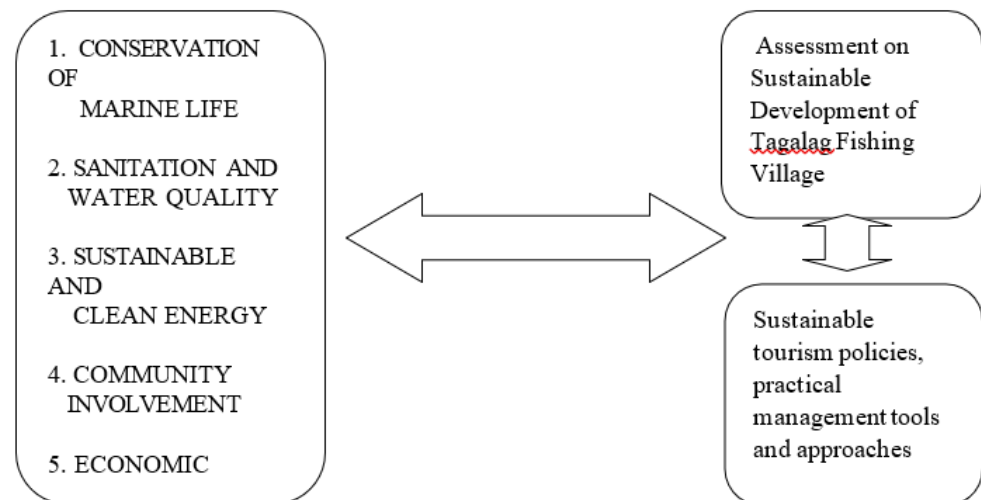
In fishing villages, the subject of this study, fishery income has been gradually decreasing over the past few decades due to various factors, such as urbanization, climate change, pollution of coastal fisheries, overfishing, and reduced catch. Combined with accelerated fishing and the aging population, traditional fishing communities are on the verge of extinct. As the majority of fishing communities which previously led this traditional lifestyle can no longer rely on fishing activities as their primary industry, there is a growing movement to seek additional income-generating measures other than fishing. A fishing village also serves as a cultural heritage location in that it has a unique natural environment and a rich fishing village's traditional culture. In other words, fishing heritage can be used as a tourist product by combining nature with the traditional coastal culture. Combining fishing and tourism in this context is an important way to ensure the viability of fishing communities and promote fishing culture and enhance the sustainability of the traditional culture.

However, these policies are not being systematically implemented with a long-term perspective.[ It is difficult to proceed in a continuous and collective manner due to the

existence of individual business- oriented policies, and the top-down policies do not reflect regional characteristics because they rely on a uniform central government policy, supporting policies are not implemented properly despite the abundance of natural and cultural resources in fishing villages, due to the aging population, exclusivity of fishing village residents, restrictions on fishing and marine resource utilization, and a general lack of understanding. If the policies continue to be implemented in this way, support from the central and local governments is likely to become useless.

### 3. Research simulacrum

The framework shown above indicates the assessment of sustainable development of the Tagalag fishing village as an ecotourism zone, of Valenzuela City Philippines which is the focus of this research study. This paradigm also establishes the framework for how the study will be conducted and how it executed to come up with good results and reliability of the study for the benefit of the Tagalag Fishing Village Community. The assessment of sustainable development of the Tagalag fishing village is classified into 5 variables: a) conservation of marine life; b) sanitation and water quality; c) sustainable and clean energy; d) community involvement; e) economic growth. This research simulacrum includes the proposed sustainable tourism policies, practical management tools, and approaches based on the findings of the study:



**Figure 2.** Research simulacrum

### 4. Research question

This study aims to assess tourism stakeholders' assessment on the Sustainable Development of Tagalag Fishing Village as Ecotourism in Valenzuela City, Philippines. It specifically sought to answer the questions:

- a. How tourism stakeholders assessed the Sustainable Development of Tagalag Fishing Village as Ecotourism Zone in Valenzuela City, Philippines in terms of:
  - i. Conservation of Marine Life
  - ii. Sanitation and Water Quality
  - iii. Sustainable and Clean Energy
  - iv. Community Involvement Economic Growth
- b. Is there any significant difference on the assessment of the tourism stakeholders in terms of Sustainable Development of Tagalag Fishing Village.
- c. Based on the findings of the study, what sustainable tourism policies, practical management tools, and approaches may be proposed.

## 5. Hypothesis

The hypothesis used in this research is: Ho1- Is there any significant difference on the assessment of the tourism stakeholders in terms of Sustainable Development of Tagalag Fishing Village.

## 6. Research methodology

This study utilized Quantitative-Descriptive Research Design. A descriptive method of research is a fact-finding study that involves adequate and accurate interpretation of findings and describes a certain present condition. Survey research design is the method of conducting research using paper questionnaires that participants must fill out and return. Stratified Purposive Sampling was used to capture respondents as major variations rather than to identify a common core, although the latter may also emerge in the analysis. Each strata constitute a fairly homogeneous sample. The population is composed of 50 respondents; Tourism Stakeholders in Tagalag Fishing Village; 10 Government Agency, 10 Visitor/Tourist, 10 Locals, 10 Service Providers, and 10 Fishermen Tagalag Fishing Village, Valenzuela City. The secondary data for this research were gathered from various related agencies, which were supplemented by direct field observations. These methods were employed to acquire both internal and external data pertaining to the tourist area of Tagalag, a fishing village. In order to ascertain the tourism potential of the fishing settlement area of Tagalag, it is imperative to undertake a comprehensive analysis through strategic planning and reorganization. The objective of this endeavor is to establish a fishing village that prioritizes environmental friendliness and sustainability. The instrument utilized in the study was custom-designed by the researcher.

## 7. Result and discussion

### 7.1. Assessment of tourism stakeholders in the sustainable development of Tagalag fishing village as ecotourism zone in Valenzuela City, Philippines

#### 7.1.1. Conservation of marine life.

Table 1 shows the assessment of Tourism Stakeholders in the Sustainable Development of Tagalag Fishing Village in terms of the Conservation of Marine Life. It received a composite weighted mean of 3.67 and a verbal Interpretation of "Above Standards". The indicator that received the highest WM=3.9 are "Fishermen are committed to sustainable fishing practices and strive to avoid methods that may cause harm to the environment." and "Efforts to restore marine life habitat are crucial in ensuring the sustainable management and protection of our valuable marine and coastal ecosystems." Followed by, "Restoring and maintaining fish populations through scientifically-based management programs in the shortest time possible." WM=3.86, "The regulatory bodies are proficiently managing the harvesting procedures to avert overfishing, while simultaneously tackling concerns associated with illicit, undeclared, and unregulated fishing, and detrimental fishing methodologies." WM=3.80. Lastly, the indicator that received the lowest weighted mean of 2.90 and verbal interpretation of Meets Standards is "There are regulations governing the use of plastic products. It has been observed that plastic waste often finds its way into bodies of water, which unfortunately has a negative impact on the habitat of marine animals."

**Table 1.** Assessment of tourism stakeholders in the sustainable development of tagalag fishing village as ecotourism zone in Valenzuela City, Philippines in terms of conservation of marine life

Indicators	Weighted Mean	Verbal Interpretation	Ranking
1 The regulatory bodies are proficiently managing the harvesting procedures to avert overfishing, while simultaneously tackling concerns associated with illicit, undeclared, and unregulated fishing and detrimental fishing methodologies.	3.80	Above Standards	4
2 There are regulations governing the use of plastic products. It has been observed that plastic waste often finds its way into bodies of water, which unfortunately has a negative impact on the habitat of marine animals.	2.90	Meets Standards	5
3 Fishermen are committed to sustainable fishing practices and strive to avoid methods that may cause harm to the environment.	3.90	Above	1
4 Efforts to restore marine life habitat are crucial in ensuring the sustainable management and protection of our valuable marine and coastal ecosystems.	3.90	Above	1
5 Restoring and maintaining fish populations through scientifically-based management programs in the shortest time possible	3.86	Above	3
<b>Composite Mean</b>	<b>3.67</b>	<b>Above Standard</b>	

\* Note: 1.00-1.79 Far below Standards; 1.80-2.59 Below Standards; 2.60-3.39 Meets Standards; 3.40-4.19 Above Standards; 4.20-5.00 Far above Standards

Based on the result, the preservation of the maritime environment in the fishing village of Tagalag is clearly protected by the respondents. We are all aware how crucial it is to maintain fishing communities in order to support their particular efforts to protect marine species. Especially in the current climate, fishing villages should be preserved for the benefit of all local residents. Residents in Tagalag fishing village value marine species preservation because it supports them by creating jobs. In the fishing village of Tagalag in waters close to a marine protected area, and it has affected the reserve's ability to lessen the effects of overfishing.

According to [9] increased resilience in preserving marine ecosystems is another benefit of marine conservation. Protecting geological features and processes that have been deemed special or unusual can be done with the use of marine protected zones. Fish, coral reefs, and other marine life can all be protected. Marine species preservation has significant cultural importance. Maintaining a healthy marine ecosystem can have a positive impact on human life and marine life, such as increasing food production, maintaining good water quality, and protecting the coast from events such as storms. This protects marine areas that have cultural values so that future generations can enjoy them.

#### 7.1.2. Sanitation and clean water

Table 2 shows the assessment of Tourism Stakeholders in the Sustainable Development of Tagalag Fishing Village in terms of Sanitation and Clean Water. It received a composite weighted mean of 2.92 and a verbal Interpretation of "Meets Standards". The indicator that received the highest weighted mean of 3.40 and verbal interpretation of the Above Standards is "The provision of safe, potable and affordable drinking water is universally and equitably accessible to all individuals." Followed by, "Water management initiatives involve a variety of strategies and interventions, including water harvesting, wastewater treatment, recycling, and reuse technologies, etc." WM=3.10, "Enhancing the quality of water can be achieved through the mitigation of pollution, reduction of dumping activities, and the minimization of the discharge of hazardous materials, chemicals, and toxins." WM=3.00, "The conservation of water resources and reduction of surface runoff. The objective is to decrease the amount of untreated waste while simultaneously improving recycling efforts and guaranteeing safe reuse practices." WM=2.60. Lastly, the indicator that received the lowest weighted mean of 2.50 and verbal interpretation of Below Standards is "Providing everyone with equal access to clean restrooms and other facilities for personal hygiene. Ensuring access to equitable sanitation and hygiene infrastructure."

Based on the result of table 2-3, it is clear from the responses of the respondents that they do believe that the benefits of keeping Tagalag as an eco-tourism zone in Valenzuela City provide financial benefits by increasing the income in their community. Due to the fact that fishing is their primary source of income in the city's agricultural sector, preserving the Tagalag fishing village has an additional advantage in the economic development of the place.

**Table 2.** Assessment of tourism stakeholders in the sustainable development of tagalag fishing village as ecotourism zone in Valenzuela City, Philippines in terms of sanitation and clean water

	Indicators	Weighted Mean	Verbal Interpretation	Ranking
1	The provision of safe, potable and affordable drinking water is universally and equitably accessible to all individuals.	3.40	Above Standards	1
2	Providing everyone with equal access to clean restrooms and other facilities for personal hygiene. Ensuring access to equitable sanitation and hygiene infrastructure.	2.50	Below Standards	5
3	Enhancing the quality of water can be achieved through the mitigation of pollution, reduction of dumping activities, and the minimization of the discharge of hazardous materials, chemicals, and toxins.	3.00	Meets Standards	3
4	The conservation of water resources and reduction of surface runoff. The objective is to decrease the amount of untreated waste while simultaneously improving recycling efforts and guaranteeing safe reuse practices.	2.60	Meets Standards	4
5	Water management initiatives involve a variety of strategies and interventions, including water harvesting, wastewater treatment, recycling, and reuse technologies etc.	3.10	Meets Standards	2
<b>Composite Mean</b>		<b>2.92</b>	<b>Meets Standards</b>	

Note: 1.00-1.79 Far below Standards; 1.80-2.59 Below Standards; 2.60-3.39 Meets Standards; 3.40-4.19. Above Standards; 4.20-5.00 Far above Standards

The linkages between fishery productivity and income [10] as well as the role of fisheries in local food security and poverty reduction, are vital for policy development that supports the industry in the long term. [3-5] This statement only indicates that fishery does really help in adding additional income in the community, that is one of the benefits when preserving the fishing village in Tagalag, Valenzuela City.

### 7.1.3. Sustainable and clean energy

Table 3 shows the assessment of Assessment of Tourism Stakeholders in the Sustainable Development of Tagalag Fishing Village in terms of Sustainable and Energy. It received a composite weighted mean of 3.90 and verbal interpretation of Above Standards. The indicators that received the highest weighted mean of 4.40 and verbal interpretation of Far above Standards is "The mode of transportation in question exhibits sustainability by utilizing cleaner energy sources and avoiding the emission of greenhouse gases." Followed by, "The local government is actively involved in the expansion of infrastructure and the implementation of advanced technology to offer modern and sustainable energy services in the area." WM=4.22, "The Tagalag Fishing Village benefits from access to a sustainable, dependable, and cost-effective source of energy." WM=3.86, "Transitioning towards sustainable energy consumption and mitigating carbon emissions." WM=3.70. Lastly, the indicator that received the lowest weighted mean of 3.32 and verbal interpretation of Meets Standards is "Advocating for the advancement of energy infrastructure and the adoption of clean energy technology."

Based on the result, it is clear that the respondents protect the biodiversity of the place. We are all aware that biodiversity is important due to the fact that without biodiversity, animal life would collapse. It is critical in today's society to understand how to protect biodiversity because we humans rely on it. According to [11] Biodiversity is crucial to your health, safety, and, most likely, your business or life. It ensures our health and food security, offers



employment, and, most importantly, defends us [12]. This basically indicates that biodiversity is the foundation of prosperity, health, and economic development.

**Table 3** Assessment of tourism stakeholders in the sustainable development of tagalag fishing village as ecotourism zone in Valenzuela City, Philippines in terms of sustainable and clean energy

Indicators	Weighted Mean	Verbal Interpretation	Ranking
1. The Tagalag Fishing Village benefits from access to a sustainable, dependable, and cost-effective source of energy.	3.86	Above Standards	3
2. The mode of transportation in question exhibits sustainability by utilizing cleaner energy sources and avoiding the emission of greenhouse gases.	4.40	Far above Standards	1
3. The local government is actively involved in the expansion of infrastructure and the implementation of advanced technology to offer modern and sustainable energy services in the area.	4.22	Far above Standards	2
4. Transitioning towards sustainable energy consumption and mitigating carbon emissions.	3.70	Above Standards	4
5. Advocating for the advancement of energy infrastructure and the adoption of clean energy technology.	3.32	Meets Standards	5
<b>Composite Mean</b>	<b>3.90</b>	<b>Above Standards</b>	

\* Note: 1.00-1.79 Far below Standards; 1.80-2.59 Below Standards; 2.60-3.39 Meets Standards; 3.40-4.19 Above Standards; 4.20-5.00 Far above Standards

#### 7.1.4. Community involvement

I Table 4 shows the assessment of Tourism Stakeholders in the Sustainable Development of Tagalag Fishing Village in terms of Sustainable and Energy. It received a composite weighted mean of 3.95 and verbal interpretation of the Above Standards. The indicator that received the highest weighted mean of 4.22 and verbal interpretation of Far above Standards is "Ensure equitable availability of environmentally-friendly and publicly accessible green spaces that are safe and inclusive for all individuals." Followed by, "Intensify endeavors to preserve and uphold the cultural and ecological legacy of Tagalag Fishing Village." WM=4.04, "Enhancing the urbanization process in a sustainable and inclusive manner while simultaneously developing the ability to engage in collaborative, integrated, and sustainable development and administration of human settlements." WM=3.90, "The preservation of marine life and conservation [3] initiatives in Tagalag Fishing Village involves active participation from the local community." WM=3.84. Lastly, the indicator that received the lowest weighted mean of 3.76 is "Community involvement is observed in activities such as cleanup campaigns, educational sessions and workshops, and sustainable tourism practices."

**Table 4** Assessment of tourism stakeholders in the sustainable development of tagalag fishing village as ecotourism zone in Valenzuela City, Philippines in terms of community involvement

Indicators	Weighted Mean	Verbal Interpretation	Ranking
1. Enhancing the urbanization process in a sustainable and inclusive manner while simultaneously developing the ability to engage in collaborative, integrated, and sustainable development and administration of human settlements	3.90	Above Standards	3
2. The preservation of marine life and conservation initiatives in Tagalag Fishing Village involves active participation from the local community.	3.84	Above Standards	4
3. Community involvement is observed in activities such as cleanup campaigns, educational sessions and workshops, and sustainable tourism practices.	3.76	Above Standards	5
4. Intensify endeavors to preserve and uphold the cultural and ecological legacy of Tagalag Fishing Village.	4.04	Above Standards	2

5. Ensure equitable availability of environmentally friendly and publicly accessible green spaces that are safe and inclusive for all individuals.	4.22	Far above Standards	1
<b>Composite Mean</b>	<b>3.95</b>	<b>Above Standards</b>	

\* Note: 1.00-1.79 Far below Standards; 1.80-2.59 Below Standards; 2.60-3.39 Meets Standards; 3.40-4.19 Above Standards; 4.20-5.00 Far above Standards

#### 7.1.5. Economic growth

Table 5 shows the assessment of Tourism Stakeholders in the Sustainable Development of Tagalag Fishing Village in terms of Economic Growth. It received a composite weighted mean of 3.62 and verbal interpretation of the Above Standards. The indicator that received the highest weighted mean of 4.04 and verbal interpretation of the Above Standards is "Advocating for policies that are geared towards fostering development by facilitating productive activities, generating employment opportunities that meet decent work standards, promoting entrepreneurship, as well as encouraging creativity and innovation." Followed by, "The implementation of sustainable tourism policies has been observed to facilitate the generation of employment opportunities while also promoting the preservation and promotion of local culture and products." WM=3.96, "Enhance the capabilities of local financial establishments to promote and broaden the reach of banking, insurance, and financial services to encompass all individuals" WM=3.70, "Promote the formalization and expansion of micro, small, and medium-sized enterprises (MSMEs), which may include facilitating their access to financial services." WM=3.44. Lastly, the indicator that received the lowest weighted mean of 2.96 and verbal interpretation of Meets Standards is "Attaining comprehensive and efficient employment opportunities and satisfactory labor conditions for all individuals, encompassing both genders, youth, and individuals with disabilities, while also ensuring equitable compensation for work of comparable worth."

Based on the result, the preservation of the maritime environment in the fishing village of Tagalag is clearly protected by the respondents. We are all aware how crucial it is to maintain fishing communities in order to support their particular efforts to protect marine species. Especially in the current climate, fishing villages should be preserved for the benefit of all local residents [7]. Residents in Tagalag fishing village value marine species preservation because it supports them by creating jobs. In the fishing village of Tagalag in waters close to a marine protected area, and it has affected the reserve's ability to lessen the effects of overfishing

## 8. Conclusions

Based on our results, this study reveals that sustainable development of the Tagalag fishing village are beneficial to the community because it provides locals with alternative sources of income and the community knows its role on how to protect its primary agriculture. Findings also conclude that locals understand the value of biodiversity of the place since they protect the area of marine species or conserve the maritime environment and are excellent at maintaining the neighbourhood clean, which protects the fishing village.

To the community in the fishing village, we conclude that they are aware of how to conserve marine life and protect its natural habitat. But however, some people are just simply unaware of the Tagalag fishing village's policies and of what should be avoided and what can cause harm to the place or environment. Additionally, locals had the lowest ranking in terms of preventing water contamination and avoiding destructive fishing methods. They have no knowledge about the best way or actions that they should do in order to protect their main agriculture. Moreover, in the variable, maintaining fisheries economic growth, providing employment got the lowest score since most of the respondents are self-employed. As for the standard of living, it also received the lowest ranking by having the second to highest proportion of respondents in terms of employment status who are unemployed.

Furthermore, according to the general findings of the researchers, the Tagalag fishing village contributes or maintains the economic growth of the fishery since it is a source of income for them, and / or a supplemental income for some people. And with the data gathered the

researchers, able to determine the method used in getting the data, we used frequency and percentage to get the result for the demographic profile. The average weighted mean is used in getting the result in each question in every variable of the study. Analysis of Variance (ANOVA) is used to get the summary of the variables indicated in the study, and the significant difference in terms of demographic profile.

### Author Contributions

**P T Clemente:** Data Curation, Formal Analysis, Software, Validation; **R D Santos:** Funding acquisition, Resources, Project Administration; **M A Donato:** Investigation, Methodology, Supervision; **and E Lago:** Conceptualization, Visualization, Writing – original draft, Writing-review and editing

### Conflicts of interest

There are no conflicts to declare.

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### References

1. Botha, M. J. *Collective Ownership in The South African Small-Scale Fishing Sector: A Framework for Sustained Economic Growth*, Doctoral Theses University of Cape Town, **2018**, Online: <http://hdl.handle.net/11427/29329>.
2. Shi, L.; Han, L.; Yang, F.; Gao, L. The Evolution of Sustainable Development Theory: Types, Goals, and Research Prospects. *Sustainability*, **2019**, 11(24), 7158.
3. He F.; Jähnig, S.C.; Wetzig, A.; Langhans, S.D. More Exposure Opportunities for Promoting Freshwater Conservation. *Aquat. Conserv. Mar. Freshw. Ecosyst.*, **2021**, 31(12): 3626–3635.
4. Rahman, M.K.; Masud, M.M.; Akhtar, R.; Hossain, M.M. Impact of Community Participation on Sustainable Development of Marine Protected Areas: Assessment of Ecotourism Development. *Int. J. Tour. Res.*, **2022**, 24, 33–43.
5. Sánchez-Rodríguez, A.; Aburto-Oropeza, O.; Erisman, B.; Jiménez-Esquivel, V. M.; Hinojosa- Arango, G. *Rocky reefs: preserving biodiversity for the benefit of the communities in the aquarium of the world Ethnobiology of Corals and Coral Reefs eds N Narchi and L Price*, Switzerland, Springer International Publishing, **2015**, 177–208.
6. Wake, A. A. Impacts of Fishing on The Rural Household Income; Evidence From Ethiopian Rift-Valley, *Cogent Economics & Finance*, **2022**, 10(1), 57-61, doi.org/10.1080/23322039.2022.2124737.
7. Herbert-Read, J.E.; et al. A Global Horizon Scan of Issues Impacting Marine and Coastal Biodiversity Conservation. *Nat. Ecol. Evol.*, **2022**, 6, 1262–1270.
8. Dobson, A.; Cattadori, I.; Holt, R. D.; Ostfeld, R. S.; Keesing, F.; et al. Sacred Cows and Sympathetic Squirrels: The Importance of Biological Diversity to Human Health. *PLOS Medicine*, **2006**, 3(6): e231. <https://doi.org/10.1371/journal.pmed.0030231>.
9. Prastyo, N. The Bad Impact of Plastic Waste on The Conservation of Marine Animals as Source of Inspiration of Vector Artwork. *Arty: Jurnal Seni Rupa*, **2020**, 9(3), 253 - 266.
10. Eriksson, B.; Johansson, F.; Blicharska, M. Socio-economic impacts of marine conservation efforts in three Indonesian fishing communities. *Mar. Policy*, **2019**, 103 59-67, doi:10.1016/j.marpol.2019.02.007.
11. Shasha, Z. T.; Geng, Y.; Sun, H.P.; Musakwa, W.; Sun, L. Past, Current, and Future Perspectives on Eco-Tourism: A

- Bibliometric Review Between 2001 and 2018. *Environmental Science and Pollution Research*, **2020**, 27(19), 23514–23528, doi: 10.1007/s11356-020-08584-9.
12. González, R.C.L.; Piñeiro Antelo, M.D.L.Á. Fishing Tourism as an Opportunity for Sustainable Rural Development – The Case of Galicia. *Spain. Land*, **2020**, 9, 437.
  13. Dodds, R.; Ali, A.; Galaski, K. Mobilizing Knowledge: Determining Key Elements for Success and Pitfalls in Developing Community-Based Tourism. *Current Issues in Tourism*, **2018**, 21(13), 1547–1568. <https://doi.org/10.1080/13683500.2016.11502578>.